



American Recycler

NewsVoice of Salvage, Waste and Recycling

AmericanRecycler.com

Celebrating Our



Recycled tire market steady with new applications for rubber

by MAURA KELLER

mkeller@americanrecycler.com

For decades, the U.S. scrap tire industry has worked diligently to improve the consumption of scrap tires throughout the country. According to the U.S. Tire Manufacturers Association (USTMA), in 1990 only 11 percent of annually generated scrap tires were consumed in beneficial end use markets.

The rest went into stockpiles. But by 2017, approximately 81.4 percent of scrap tires generated in the U.S. were consumed and recycled in such ways as tire derived fuel, ground rubber and civil engineering applications.

Crumb rubber, a component of ground rubber, is a growing application for scrap tires being used in new rubber products, landscaping mulch, sports turf fields and rubber-modified asphalt.

According to the USTMA, in 2017, the ground rubber market consumed over 25 percent of the nation's scrap tires, approximately 62 million tires, with playground, landscaping, mulch and molded and extruded products as the most prolific segments. Today's crumb rubber is the result of removing metal and fabric from old tires and grinding the scrap tires into different sized pieces for specific applications.

According to J.D. Wang, chief executive officer and president of reRubber, tires are scrapped at a rate of 1.1 tire per person per year leading to over 300 million tires



Synthetic turf allows athletic fields to be all-weather and to be used for a larger percentage of the year, making the surface more valuable for a variety of sports.

scrapped per year. Landfill space is becoming more limited as tires do not biodegrade and have significant negative space – leading the way to improving and enhancing crumb rubber applications, with the hope that it will garner more attention and use.

“While there has been no significant evolution in recent years as crumb rubber is not a highly technical raw material, some new processing technology has come to the market, but the final material has not evolved much,” Wang said. “Crumb rubber markets in certain areas have been flat or declining due to demand. The supply of scrap tires far outweighs the demand for tire derived products (TDP).”

A single production line at reRubber can recycle up to 1,000,000 passenger tire equivalents per year, with the capability to scale easily as supply and demand increases. Therefore one line can produce 7,200 tons of rubber, 3,250 tons of nylon and 1,650 tons of steel per year.

The biggest issues facing the tire recycling and crumb rubber markets today include the high cost associated with processing scrap tires into crumb rubber coupled with the low demand.

“The low price of crumb rubber – out of state or out of country subsidized crumb rubber – continues to depress the crumb rubber market price,” Wang said.

Wang stressed that a high-tech approach must be applied to the crumb rubber market, otherwise, there will continue to be an over-supply of scrap tires contributing to landfilling issues.

One area that crumb rubber has made its mark is in athletic turf and playgrounds. According to the Synthetic Turf Council, crumb rubber infill is a durable, high performance and low cost infill that provides traction, shock absorption and foot stability. It also extends the life of synthetic turf systems, allowing continuous play throughout the year and in virtually all weather conditions. In fact, 98 percent of all synthetic turf sports fields in the world use crumb rubber for the infill.

But the presence of this crumb rubber product is seeing some controversy as studies are being conducted about the health and safety aspect of crumb rubber. In March 2019 it was announced that a bill before the Maryland General assembly would set strict standards for recycling crumb rubber modified turf. Proponents of the bill, including several environmental and health advocacy

See RUBBER, Page 4

FOCUS: C&D

LEED certification drives C&D recycling



WHAT'S INSIDE

Events Calendar.....	4
Industry Profile.....	9
Scrap Metals MarketWatch.....	15
Salvaging Millions.....	16
Classified Advertisements.....	20
Equipment Spotlight.....	B4
New Product Showcase.....	B6

PRSR STD
U.S. Postage
PAID
Columbia, MO
Permit No. 353

07.2019

CHANGE SERVICE REQUESTED



6546 Weatherfield Court, Ste C-2
Maumee, OH 43537



The City of Glendale, California uses tree wells made by United Sports Surfacing of America from recycled tire rubber. They are low cost and avoid metal grates that cut into growing trunks. The tree wells allow the surface to be cut to accommodate tree expansion.

PHOTOS COURTESY OF THE CALIFORNIA DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY

HIGH-SPEED BALER/LOGGER



HEAT & A/C UNIT



3/8 AR400 REPLACEABLE WEAR PLATES

- 20' Charge Box
- Heavy-Duty Knuckle Boom
- Superior Lift and Reach



OVERHEAD CONTROLS

“WHAT OUR CUSTOMERS SAY”

We have been using our new OverBuilt baler for a little over 2 years now and continue to be impressed. It has been dependable and much more efficient than our balers in the past. This has been a durable machine with little down time other than routine maintenance. We recently replaced the grapple with their new and improved version and couldn't be more pleased. The OverBuilt design is simply easy to operate and makes a quality bale that is easy to load. Thank you for making a quality and dependable baler that we can count on and enjoy operating.

—Kevin Stroebel

Manager, Pacific Steel & Recycling
Rock Springs, WY

Operates 5 OverBuilt Balers

We purchased our OverBuilt Car Crusher new in early 2012. This is the best crusher we have ever owned. The Sales and Service Staff have been great to follow up making sure we have all our filter and maintenance items needed to keep our machine running smoothly and efficiently.

—Doug Butler

Owner, Butler Salvage
Torrington, WY

**#1 SELLING
CRUSHER!**

HIGH-SPEED CAR CRUSHER



- Largest Opening on the Market
- Advanced Oil Recovery System with Sludge Traps and Large Clean-outs
- State-of-the-Art Automation System
- 400-gallon Fuel Cell and Optional Lockable Auxiliary Fuel Pump
- Optional High-speed Oil Bypass System
- 22' & 24' Crusher Chambers Also Available
- Twin Lid Safety Lock System Engaged from the Ground
- Ground-accessible gang grease stations.

★ **THE ONLY TRUE HIGH-SPEED SYSTEM AVAILABLE** ★



OverBuilt

Huron, South Dakota

800-548-6469
605-352-6469
www.OverBuilt.com
sales@overbuilt.com

View our
USED & NEW

**INVENTORY
ON OUR SITE!**

New York DEC collects 90,000 lbs. of chemicals

New York State Department of Environmental Conservation (DEC) Commissioner Basil Seggos announced that a successful CleanSweepNY collection was held this spring in Gowanda, Warsaw and Lockport as part of a targeted initiative in DEC's Region 9 office, which includes Allegany, Chautauqua, Cattaraugus, Erie, Niagara and Wyoming counties. CleanSweepNY events promote a healthy and sustainable New York by providing opportunities for proper disposal of unwanted or obsolete pesticides and other chemicals.

The spring CleanSweepNY event resulted in the collection of 93,633 lbs. of chemicals from 112 participants. CleanSweepNY staff collected 66,327 lbs. of pesticides, 3,005 lbs. of chemicals used and stored by school districts, 12,431 lbs. of paint, more than 5,000 mercury-containing devices and 342 aerosol containers.

DEC schedules and organizes CleanSweepNY events in collaboration with the New York State Department of Transportation (DOT); the collection events were held at three DOT facilities.

The Western New York CleanSweepNY collection event was the first event paid for with funds provided by the State's Environmental Protection Fund and the 27th since the program's creation in 2002. Under this program, more than 1.83 million lbs. of chemicals and over 908 lbs. of elemental mercury have been collected and properly disposed. Approximately 6,000 plastic pesticide containers have been collected for recycling that may otherwise have been disposed of in landfills.

Blocker joins NWRA as VP, state affairs

The National Waste and Recycling Association (NWRA) has added Abby Blocker to its state government affairs team where she will work to identify trends impacting the waste and recycling industry across various states and steer policy in a favorable direction.

Blocker is an experienced lobbyist with a demonstrated history of working in state politics, grassroots lobbying and environmental compliance. She comes to NWRA from the Madison Coalition where she was the director of political relations.

Minnesota governor celebrates safety law with ceremonial bill signing

Minnesota Governor Tim Walz held a ceremonial bill signing in June to celebrate the work that went into the passage of HF 1188 legislation that requires motorists to slow down and move over as they approach certain vehicles including waste and recycling collection trucks.

This legislation, commonly known as Slow Down to Get Around (SDTGA), is a priority for the National Waste and Recycling Association (NWRA), which represents America's private waste and recycling industry.

"Safety for our waste and recycling employees and for the community members we serve in Minnesota is our single highest priority. This bill shines a spotlight on the dedicated workers who are at risk while simply doing their job," said Bill Keegan, president of Dem Con Companies, and the Minnesota Chapter Chair of the National Waste and Recycling Association.

NWRA member companies have been diligent in providing advanced



safety training for drivers and those who hop off the trucks to make collections. But, drivers who are distracted – or just

going too fast – are a major hazard for waste collection workers.

DEP accepting nominations to honor those with extraordinary commitment to recycling

Nominations are being accepted in 10 categories for an annual recognition program to celebrate excellence in recycling, and inspiring others to the same commitment, New Jersey Department of Environmental Protection Commissioner Catherine R. McCabe announced.

The DEP, in conjunction with the Association of New Jersey Recyclers, annually recognizes excellence in recycling in order to highlight program successes achieved by agencies, businesses, individuals and others who help keep New Jersey communities clean and healthy.

"While the worldwide recycling community currently faces significant recycling market challenges, there are still plenty of great things happening in recycling and waste reduction in New Jersey," Commissioner McCabe said. "This awards program recognizes those achievements, and helps showcase why New Jersey is a national leader in recycling."

Applications may be submitted in these categories: Institution, Business, Retail Merchant, Government, Leadership, Rising Star, Recycling Industry, Outstanding Educator/Educational Program, Volunteer Citizen and Source Reduction/Resource Management/Sustainability.

Nominations are due Friday, July 26 and awardees will be notified in September. Award winners will be honored at the Association of New Jersey Recyclers Symposium and Awards Luncheon to be held on October 10, 2019 in Neptune, Monmouth County.

"We encourage the many people and organizations throughout New Jersey to nominate those in their communities who make recycling a priority, have helped educate residents and businesses on the importance of keeping our recycling stream free of unacceptable items and are committed to keeping our environment clean and healthy," said Paul Baldauf, assistant commissioner for air quality, energy and sustainability. "The results of their efforts should be highlighted to demonstrate to others how they are making a difference across the state."

New Jersey was the first state to require recycling by passing the New Jersey Statewide Mandatory Source Separation and Recycling Act in April 1987. Today, the state continues developing policies to further increase recycling rates, clean up the recycling stream, and to adapt recycling strategies to match current lifestyles.

Kittridge named rookie recycler of the year

New Hampshire the Beautiful, Northeast Resource Recovery Association (NRRRA) and NRRRA's School Recycling CLUB announced that Alex Kittridge, computer technician for the White Mountain Regional School District #36 (WMRSD), was named their Individual Rookie Recycler of the Year. While Kittridge could not attend the ceremony, his name and accolades were presented at the 10th Annual School Recycling Conference Awards Luncheon in Manchester, New Hampshire.

Kittridge was nominated by Tim Phillips of the WMRSD. According to Phillips, Kittridge has been employed as a computer technician for the district for a year and a half. When upgrades resulted in 650 outdated laptops, Kittridge found a way to keep them out of the landfill by recycling them. Each laptop had to be packed in individual boxes, wrapped in plastic and stacked on pallets. The resulting 10 pallets were shipped for recycling and resulted in a small profit for the school district.

Michael Durfor, NRRRA executive director said, "We applaud the outstanding initiative Alex showed in keeping hundreds of laptops out of the landfill, while generating revenue for his school district."

Surveys show that print users who also use digital media with certain regularity:

Over 55% of those consumers trust print marketing more than any other advertising method.



ADVERTISE IN THE NEXT ISSUE

877-777-0043 www.AmericanRecycler.com

Rubber

■Continued from Page 1

organizations, insist the bill is necessary to protect earth, water and people from the toxic chemicals contained in synthetic turf. However, opponents – including the Tire Industry Association, the Synthetic Turf Council and the Chesapeake Automotive Business Association – said the bill would reduce recycling options while attempting to fix a problem that does not exist.

According to Dan Bond, president and chief executive officer of the Synthetic Turf Council, when tire reprocessors first recycled tires into crumb rubber infill, U.S. and European agencies applauded diverting millions of tires from landfills, incinerators and illegal dumping sites.

Opinion began to shift when the media first started reporting stories that questioned the safety of crumb rubber infill in synthetic turf fields. At that point the Synthetic Turf Council (STC) wanted to determine whether there was anything behind the media reports.

“In our research, we have compiled over 100 third party, peer reviewed studies that have shown no elevated risk for people of all ages that play on these surfaces,” Bond said. “At the same time, some end users are choosing alternative and organic infills over crumb rubber in their turf fields, and market share has grown.”

The industry is facing difficult regulatory and legislative environments, given the ongoing chemical characterization and risk assessment studies being lead by the U.S. Environmental Protection Agency (EPA), California Office of Environmental Health Hazard Assessment (Cal OEHHA) and European Chemicals Agency (ECHA).

“It is unfortunate, but many of the studies have been delayed by years or are being described as incomplete studies into crumb rubber in turf fields and playgrounds,” Bond said. “Given the delays and uncertainty, we have seen bills in state legislatures that ban all synthetic turf fields, not just ones with crumb rubber infill. As we have publicly stated on multiple occasions, the STC is fully committed to working with any scientific based research to quickly develop conclusions that provide certainty in the marketplace.”

The Tire Industry Associations (TIA) Environmental Advisory Council also conducted an extensive review of the testing performed in the U.S. and overseas regarding the health and environmental effects of using crumb rubber. TIA’s EAC found that in every evaluation, researchers reached the same conclusion – crumb rubber used

in artificial turf or as a playground surface poses no significant health or environmental risk.

The research conducted by the EAC included more than 60 technical studies, field testing performed by the EPA, tests conducted by state departments in New York, Connecticut and California as well as laboratory evaluations at the University of California at Berkeley.

Each of these studies validated the position that crumb rubber poses no significant health or environmental risk. For these reasons, the EAC and TIA support the continued use of crumb rubber in synthetic turf, athletic fields and playgrounds as well as other product applications.

In late 2016, STC’s tire reprocessors voluntarily agreed to ensure that all synthetic turf and playground infills meet ASTM F3188 toy standards for heavy metals. This built on the voluntary agreement to comply with EN-71, the European product standard for heavy metals in toys.

“We are working closely with the EPA, Cal OEHHA and ECHA in their studies and continue to provide access to fields and playgrounds for testing,” Bond said.

The market for replacing and building synthetic turf fields across the U.S. and world continues to grow based on their increased playability and environmental benefits over natural grass fields.

“At the same time, over 250 million tires in the U.S. need to be recycled or disposed of each year and there continues to be a need to create opportunities for beneficial reuse,” Bond said. “Synthetic turf fields and playgrounds have provided an avenue to do so.”

While synthetic turf fields have gained the most attention for crumb rubber uses, there is an increasing emphasis on crumb rubber in floor mats, railroad ties, portable speed bumps, vehicle mudguards and in asphalt for roads. In fact, according to Liberty Tire, crumb rubber can comprise 15 to 22 percent of the mix in rubberized asphalt for today’s highway construction.

So what does the future hold for crumb rubber within the scrap tire recycling market? Wang said a material science or chemical engineering approach must be applied to better utilize the great physical properties inherent in tire rubber. “A circular economy model should be the future with many stakeholders in the supply chain working together,” Wang said. “reRubber is working on several new technologies to be a key cog in the circular economy model.”

NERC accepts applications for awards

The Northeast Recycling Council (NERC) will present an award recognizing an individual or organization for their contribution to growing an environmentally sustainable economy within the NERC 11 state region.

Applications for the 2019 NERC Environmental Sustainability Leadership Award are due September 10, 2019.

To be eligible, an organization or individual must be located within one or more of NERC’s 11 member states.

Awards will be given in recognition of demonstrated change supporting an environmentally sustainable economy as the result of a project that furthers NERC’s mission. Awards will be given in three categories:

- NERC Advisory Member
- Public Sector
- Private Sector

The award presentation will take place at NERC’s Fall Conference, October 29, 2019, Providence, Rhode Island.

Getting away from their high stress jobs, a couple spends relaxing weekends in their motor home. When they found their peace and quiet disturbed by well-meaning, but unwelcome visits from other campers, they devised a plan to assure themselves some privacy.

Now, when they set up camp, they place this sign on the door of their RV: “Insurance agent. Ask about our term-life package.”

Events Calendar

September 23rd-25th

Missouri Recycling Association Conference. Sheraton Westport Chalet Hotel, St. Louis, Missouri.
573-491-4255 | www.moraconference.org

October 7th-12th

ARA (Automotive Recyclers Association) Annual Convention and Expo. Charlotte Convention Center, Charlotte, North Carolina.
615-223-6656 | www.a-r-a.org

October 9th-10th

Waste & Recycling Expo, CANADA. Enercare Centre, Downtown Toronto, Ontario, Canada.
770-984-8016 | waste-recycling-expo-canada.us.messefrankfurt.com

October 20th-22nd

West Virginia Educational Conference on Litter Control & Solid Waste Management. Canaan Valley Resort and Conference Center, Davis, West Virginia.
304-926-0448 | www.awvswa.org

October 21st-24th

SWANA WASTECON. Phoenix Convention Center, Phoenix, Arizona.
800-467-9262 | www.swana.org

October 29th-30th

The Northeast Recycling Council (NERC) Fall Conference, The Graduate Providence Hotel, Providence, Rhode Island, 802-254-3636 www.nerc.org

Moving soon?

To ensure you continue receiving your copy of American Recycler, please notify us as soon as you have your new address!

Send changes to donna@AmericanRecycler.com or call us at 877-777-0043.



American Recycler

NewsVoice of Salvage, Waste and Recycling

877-777-0043 Fax 419-931-0740

Owner, Publisher and Editor

ESTHER G. FOURNIER
news@AmericanRecycler.com

Production and Layout

MARY E. HILL
mary@AmericanRecycler.com

Editorial Focus Section Production and Layout

LINDSAY FOURNIER
lindsay@AmericanRecycler.com

Marketing Representatives

MARY M. COX
maryc@AmericanRecycler.com
MARY E. HILL
mary@AmericanRecycler.com

Circulation Manager

DONNA L. MCMANUS
donna@AmericanRecycler.com

Writers and Contributors

DONNA CURRIE
dcurrie@AmericanRecycler.com
MARK HENRICKS
mhenricks@AmericanRecycler.com
MAURA KELLER
mkeller@AmericanRecycler.com
RON STURGEON
rons@rdsinvestments.com

Production Offices

6546 Weatherfield Court, Ste C-2
Maumee, OH 43537
877-777-0043 fax 419-931-0740
www.AmericanRecycler.com

American Recycler is published 12 times per year, postage paid at Columbia, Missouri.

SUBSCRIPTIONS: Call our offices at 877-777-0043 or visit www.AmericanRecycler.com. US 1 year \$48; 2 years \$72.

© COPYRIGHT 2019 by American Recycler News, Inc. All rights are strictly reserved and reproduction in whole or in part is prohibited without prior written permission from the publisher.

Submission of articles, artwork and all photography must be accompanied by a self-addressed stamped envelope if a return of materials is wanted. Byline contributors’ views should not be construed as representing the opinion of the publisher.

American Recycler reserves the right to edit any and all material submitted for publication. All Letters to the Editor must be signed and include a telephone number for verification. The editor of this publication does not accept responsibility for statements made by advertisers herein.

SWACO's diversion efforts yield positive results in Ohio

Central Ohio's efforts to divert waste from the Franklin County Sanitary Landfill are paying off in more ways than one.

According to SWACO's 2018 Community Impact Report, Central Ohio's recycling rate reached a record 49.17 percent. That means people and businesses in the region are recycling almost half of the waste they produce.

Recycling benefits more than just the environment, however. With roughly 372 businesses that generate \$1.3 billion in revenue and employ more than 5,000 people, the recycling industry also supports Central Ohio's economy.

This is just one of many interesting pieces of information contained in the Community Impact Report, which SWACO publishes annually to illustrate the impact it had on Central Ohio the previous year.

"As a solid waste authority, SWACO has a primary goal of helping communities in Central Ohio increase their recycling and reduce their reliance on the landfill," said Ty Marsh, executive director of SWACO. "We have several programs, services and initiatives aimed at diverting waste from the landfill, and we're proud of the difference they are making in our community."

The report covers SWACO's activities in 2018, including the launch of

"Recycle Right," a community education campaign that uses paid advertising and direct mail to reach Franklin County residents with information about the right way to recycle. The report also covers the Central Ohio Food Waste Initiative, SWACO's efforts to help schools reduce food waste, the construction of a new cell at the landfill and much more.

SWACO published the report in a digital format rather than a printed

piece. The digital version uses fewer resources to produce, allows SWACO to present more information in an easy-to-read format, and ensures it won't end up in the landfill when people are finished reading it.

For a direct link to the 2018 Community Impact Report, view this article on www.AmericanRecycler.com.

Bunge joins Ship Recycling Transparency Initiative

Bunge, a leader in agriculture, food and ingredients, became the first in its industry to join the Ship Recycling Transparency Initiative (SRTI), a coalition aimed at increasing transparency to create a new norm for responsible ship recycling. The SRTI uses an online platform to gather information from shipowners on key disclosures related to social and environmental measures, allowing cargo owners and financial stakeholders to make decisions based on companies' ship recycling reporting and approaches.

"Bunge is focused on building 21st century value chains that are transparent, verified sustainable and create positive impact on the ground," said Marcio Valentim Moura, director of global logistics for Bunge, and who represents Bunge in the SRTI and its parent organization, the Sustainable Shipping Initiative.

Recognizing the important role Bunge plays in encouraging a broader transition to a more sustainable ship recycling industry, the company intends to work with partners and stakeholders across sectors in the value chain to advance leading standards and develop practical approaches to realize them at scale.

The goals of the SRTI include:

- Improving transparency in the ship recycling value chain;
- Increasing shipowners' disclosure of ship recycling policies and practices;
- Helping cargo owners, investors and other stakeholders to make informed decisions when using shipping companies and to support improved performance; and
- Creating a level playing field for shipowners on ship recycling, covering the entire vessel lifespan.

By pursuing these goals, the SRTI and its members will help to tackle challenges in parts of the ship recycling industry, including pollution in the environment and occupational health and safety risks.

WE HAVE THE **STAINLESS STEEL SEPARATION SOLUTIONS** YOU NEED

The Patented SSSC® Stainless Steel Separation Conveyor Maximizes Your Rate of Recovery.

Remove up to 95% of the stainless steel fragments and ferrous dust contaminating your product flow.

- Ferrous dust can be difficult to remove from wire streams when it becomes embedded in foam and fabric, risking damage to wire choppers. The SSSC® removes this material simply and efficiently, allowing for increased production rates, higher purity, and considerably less knife damage and down time.



Recover valuable stainless steel at an estimated purity level of up to 98% with the SSSC®.

- The patented magnetic circuit design of high-intensity neodymium magnets allows for recovery of up to 98% of small and mid-fraction 300 series stainless steel. Higher purity of material and a greater rate of recovery results in drastically improved profitability.

The First of Its Kind in the Industry: The High Intensity Separation Conveyor

The HISC® is combining extremely high gauss fields, neodymium rare earth magnets, and field-tested design for maximum separation.

- Tackle the unique challenge of separating waste electronic and electrical equipment by using the HISC® to efficiently remove circuit boards and stainless steel from the product stream.



We use our Magnetic Finite Element Design software to develop technology specifically matched to your industry needs.

- Taking the unique challenges of the auto shredder recovery industry into account, we've developed technology for attracting, recovering, and purification of Zurik small fraction stainless, as well as cleaning the stainless steel and ferrous dirt from insulated copper wire in pre-chopping applications.

Visit www.buntingmagnetics.com for more information or call 316-284-2020



YOUR TRUSTED SOURCE



Solutions For Any Application

Whether you need a comprehensive system or single machine solution, Granutech-Saturn Systems has been a leading developer and continuous innovator to the scrap recycling industry for more than 50 years.



Experience Granutech-Saturn difference!

Contact us
877.582.7800
www.granutech.com



Ohio solid waste district restarts glass recycling program

Three years after removing glass from their acceptable recycling list, Hancock County Ohio Solid Waste Management District (SWMD) is resuming its glass recycling program.

“When glass was dropped three years ago, residents were not happy with the decision. Getting glass back as an acceptable material was important and we are glad it’s back,” said Courtney Comstock, director of recycling operations.

With the support of the Hancock County commissioners, the SWMD purchased roll-off containers and a truck to rebuild the glass program collection at their material recovery facility and at satellite drop-off locations.

Hancock County’s decision to add glass back into their recycling list provides a closed loop model for glass recycling through the value chain. Collected glass bottles and jars are transported to the Rumpke Glass Plant in Dayton, Ohio where it is cleaned and sized for use as a feedstock for fiberglass manufacturing.

“Glass recycled through the Hancock County recycling program supports a significant recycling infrastructure in

Ohio,” Molly Yeager, corporate communications manager for Rumpke Recycling said. “Rumpke Dayton Glass Plant prepares glass for use at the Johns Manville fiberglass plant in Defiance, Ohio about an hour from Hancock County. This is truly a closed-loop recycling success story that Hancock residents can be proud of.”

Glass is an important component of recycling and has room for growth. “Glass bottles and jars are 100 percent recyclable and can be recycled infinitely with no degradation on material quality,” said Richard Hoch with Diageo and leader in Glass Recycling Coalition (GRC). A recent study conducted by the GRC found that 93 percent of consumers and residents expect to be able to recycle their glass containers.

“Recycling glass containers helps U.S. glass container and fiberglass manufacturing plants remain competitive and protect U.S. jobs,” said Hoch.

For additional information, view this article on www.AmericanRecycler.com.

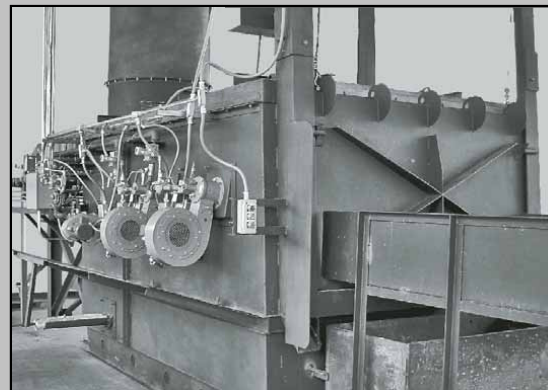
METAL RECYCLERS

Raise Profits!

INVEST IN A QUALITY-BUILT SWEAT FURNACE

With a US Furnace’s **MAX-4000 Hi Efficiency Sweat Furnace**, get the lowest fuel cost per lb to process than any other furnace manufacturer — **GUARANTEED!**

The lowest melt loss rate than any other manufacturer — **GUARANTEED!** On-site installation, training & service.



FULL EPA compliance GUARANTEED.



Recycling Services International
518-424-1168

www.RecyclingFurnaces.com

Permit assistance available • Large hearth opening for automotive scrap



Advertise.
877-777-0043

Tell the world about it!

Municipalities, ecomaine pilot program to increase public awareness about recycling correctly

With the markets for some recyclable materials in flux, and the focus on reducing the amount of contamination, or trash, in recycling streams, four southern Maine communities are embarking on a new way of getting out the word about proper recycling – pounding the pavement.

The cities and towns of Falmouth, Scarborough, South Portland and Windham, as part of a group of municipal sustainability managers, have hired summer interns to tour recycling and trash collection routes, review residents' bins, and provide educational feedback on the importance of recycling – and recycling properly. Interns will work in a portion of each municipality during the summer; residents living in these areas will receive mailed notification about the program.

During interns' inspections, they will tag carts with green tags for a job well done, yellow tags for carts that have one or two items that are not recyclable, and red tags for bins with too many items that cannot be recycled. These bins are considered contaminated and increase costs for the municipality. The tags will identify items that do not

belong in the recycling cart; Pine Tree Waste will not collect the carts with red tags on them, and the unacceptable items must be removed from the cart before collection the next week.

"By partnering on this pilot project, our hope is to decrease the amount of contamination in our recycling streams, first and foremost," said ecomaine's communications manager, Matt Grondin. "We know that recycling is broadly supported by almost 90 percent of Americans, who want to do the right thing, but sometimes just aren't quite sure where to put their waste. By combining education and a small amount of enforcement, we hope to fulfill our mission to increase public awareness about sustainable solid waste management."

In order to process recycling, ecomaine enforces a fee structure that can charge as much as \$73 per ton for loads that contain 26 percent contamination or more. Loads that are not contaminated incur no extra fee.

In addition to tagging bins, interns will also have information about municipal contacts, additional resources on recycling and trash, and how to dispose of particular items.

I bought one of those tapes to teach you Spanish in your sleep. During the night, the tape skipped. Now I can only stutter in Spanish.

—Steven Wright

NWRA unveils program to help members grow exports

The National Waste and Recycling Association (NWRA) created the NWRA Export Expansion Program to provide its member companies with the tools and resources required to access new and increase existing overseas markets for their recyclables, equipment and services. NWRA's partnership with Whitmer & Worrall will assist member companies' efforts to navigate the complexities of federal agencies governing trade as well as provide opportunities to participate in trade missions.

"As China closes its doors to foreign recyclables and our member companies continue to seek markets elsewhere, we recognized an opportunity to help our member companies make the right connections with federal agencies that have

export-related services," NWRA president and chief executive officer Darrell Smith stated.

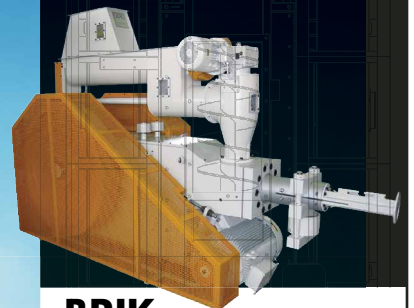
Gabe Pellathy, who chairs the trade practice at Whitmer & Worrall, will lead the initiative. Prior to joining Whitmer and Worrall, he served in senior management positions at three global fortune 500 companies, focused on international markets, and has proven experience interacting at the highest levels of federal and state government. He served in senior positions at the U.S. Department of Commerce and the International Trade Administration, leading country-specific export promotion services. In addition, Pellathy was an attorney in the Office of the U.S. Trade Representative within the Executive Office of the president.

Turn your waste into revenue

At CPM Di Più, we're helping our customers turn millions of tons of industrial waste and metal swarf into millions of dollars of new revenue streams—**not to mention saving the planet.**

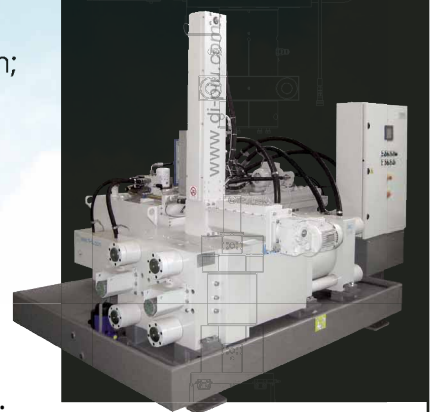
Whether it's recovering metal and wood waste from industrial production; reducing volume, transport, and storage costs; or simply recycling waste into energy, with CPM Di Più, you get a powerhouse of briquetting technology.

CPM Di Più customers have access to our complete and combined solutions, our world-class equipment, and our enviable aftermarket support.



BRIK Series

Our Mechanical (MB) machines use low energy and are designed for applications in biomass, plastics, agricultural waste, and more.



METALBRIK Series

Our Hydraulic (HB) presses are designed for metal waste densification.



For more information, visit cpm.net or call 1-800-428-0846



DI PIÙ SYSTEMS
Your Partner in Productivity

1114 East Wabash Ave. | Crawfordsville, IN 47933 - USA



Manufacturer of tire reduction systems since 1991.



TIRE DERIMMERS

The Eagle Car Tire Derimmer is designed to separate waste rims from waste tires.

The Truck Tire Derimmer separates the rim from the tire of any semi-truck tire. Portable models available.



SIDEWALL CUTTER

The Eagle Sidewall Cutter is designed to remove the side walls of truck and car tires.



TUF-CUT

The Eagle Tuf-Cut adds flexibility to your total tire-cutting system by accepting tires up to 23.5/25, 12 ply.

VIEW OUR FULL LINE OF TIRE-RECYCLING EQUIPMENT AT

WWW.EAGLE-EQUIPMENT.COM

800-755-8473 | EAGLE@BREHMER.COM

INTERNATIONAL

Corona Canada joins initiative to clean up oceans

It's estimated that 8 million metric tonnes of plastic enter the world's oceans each year. Canada has the longest ocean coastline in the world and is home to thousands of lakes and rivers, with 20 percent of the world's freshwater supply. Corona Canada will dedicate its entire summer to protect paradise from marine plastic pollution. As part of the global Corona x Parley initiative, Canada will join eight other countries, including Mexico, Brazil, United Kingdom, Italy and Spain in the effort.

"The pristine beaches long associated with Corona are at risk. Marine plastic pollution is a well-documented urgent threat to our shoreline paradise, which is why we decided to dedicate our busiest season with a pledge to address this crisis," said Todd Allen, vice president, marketing, Labatt Breweries of Canada.

As part of Corona's global partnership with Parley for the Oceans, an organization dedicated to addressing threats toward the world's oceans, Corona seeks to enable Canadians this summer, in a variety of ways to be part of a global movement. This begins with co-hosting a Walrus Talks expert panel discussion in Toronto, with the goal of making Canadians aware of this urgent crisis and explaining how they have the power to make a difference.

This summer, for every specially marked Corona case sold in Canada, and for every bucket of Corona sold in

participating bars and restaurants, one square meter of Canadian shoreline will be cleaned, with the goal of cleaning 850,000 square meters this summer.

Corona and Parley for the Oceans have partnered to clean up Canada's shorelines, encouraging Canadians to get involved in the 50 beach clean-ups happening from coast to coast throughout the summer, including five elevated beach clean-up experiences in Toronto, Montreal, Vancouver, Calgary and Halifax. At these experiences, Corona will be turning plastic waste into payment at the 'Pay with Plastic' Beach Bar. Beach clean-up volunteers will be instantly rewarded for protecting paradise as they hand-in a piece of plastic or debris collected. Corona and Parley for the Oceans are not only ensuring the plastic received is upcycled and given a second life, but also taking the opportunity to incentivize participants to avoid plastic altogether with educational messaging on-site.

Starting in October 2019, Corona is replacing all plastic packaging on its cans on Canadian store shelves with new compostable cardboard packaging. This will reduce a substantial amount of single-use plastic, as Canada is the second largest consumption market of Corona beer cans (Mexico is the first.) In 2018, Corona tested 100 percent plastic-free six pack rings in Mexico, the first global beer brand to do so.

ELECTRONICS

NC Senate continues to review e-waste landfill ban

According to the Carolina Recycling Association (CRA), the North Carolina Agriculture Environment Natural Resources Senate Committee approved the Regulatory Reform Act of 2019 (Senate Bill 553). Part II of the bill calls for the Repeal of Landfill Bans For Discarded Computers and Televisions Section 5. This repeal would allow both the disposal and incineration of:

(14) Discarded computer equipment, as defined in G.S. 130A-309.131. 17

(15) Discarded televisions, as defined in G.S. 130A-309.131.

The bill is slated for review by the Senate Rules Committee, and is expected to move to the floor of the Senate afterwards for a vote. If approved by the Senate it will then be assigned to a House Committee for review.

This action puts North Carolina's environmental quality and electronics recycling industry in jeopardy. The premise for the repeal is based on the assumption that there are not many CRTs left in the waste stream and that modern landfills are able to provide protection from heavy metal leachate entering the water supply.

The many benefits the electronics landfill ban provides this state:

•E-waste is an important part of North Carolina's \$4 billion recycling industry; electronics feed other parts of the industry with copper, aluminum, precious metals and plastics that are made into many new products, as well as a strong market for refurbished electronics.

•E-waste recycling supports 600 direct and indirect jobs, and represents a \$55 million dollar investment in the state.

•North Carolina is a national leader, with over 99 percent access, in providing e-waste recycling to communities; repealing the ban sets an unfortunate precedent for other states to follow suit

•CRTs will continue to require management for at least the next five years based on the latest collection trends and estimates

•Toxins including lead, mercury, beryllium, cadmium and brominated flame retardants are present in CRTs, flat screen and LCD monitors, and other electronics. These toxins cannot be completely contained or removed from landfill water treatment systems.

•Toxic heavy metals leach out of e-waste and create an additional burden on landfills related to water treatment processes.

CRA understands that this ban's funding mechanism has been problematic for some collection programs, but they are strongly encouraging an examination of how to improve that funding mechanism and ways to provide additional support to e-cycling programs, rather than a lift of the ban. It is imperative to contact members of the NC Legislature immediately in order to educate them on why they should maintain the ban on electronic waste in landfills to reduce toxicity, conserve natural resources and support the established electronics recycling industry.

*"Don't buy a copycat,
buy the original!"*



SUPERSHEAR

www.supershears.com

800-999-8100
480.789.3893
(Outside USA)

**SAFE
POWERFUL
EFFICIENT**

**THREE
DIFFERENT
MODELS**



12-Volt



110/220-Volt



Gas Supershear

We have a Shear to Fit Your Needs ... CALL US TODAY!



**Check Out Our
De-Canning Shear**

As the maker of the leading **Catalytic Remover Tool** for over 20 years, we make harvesting catalytic converters profitable!

ELECTRONICS

Vizio receives e-Stewards Enterprise Designation

Vizio, a leading manufacturer of high definition televisions, joined the elite list of e-Stewards® Enterprise companies. e-Stewards Enterprises are corporations and institutions committed to using the world's most globally responsible electronics recycling companies that are certified to the e-Stewards Standard. The e-Stewards standard is the only electronic waste recycling and refurbishment standard that disallows exporting hazardous electronic waste to developing countries and employs the most rigorous criteria to prevent data breaches from discarded hardware.

Besides being one of the leading manufacturers of consumer electronic products, Vizio is a company known to be passionate about reducing the industry's overall environmental impact. They have committed to the green design of their product lines, including ensuring easy and responsible ways to refurbish, reuse and recycle their electronics. In the past five years, Vizio has recycled more

than 200 million pounds of electronic waste.

"Vizio has had a long-standing commitment to using third-party certified recyclers and collaborating with other organizations to protect the environment through the responsible recycling of electronic waste," said Caitlin Sanchez, senior counsel of social responsibility and regulatory affairs for Vizio. "Joining e-Stewards as an enterprise organization aligns perfectly with Vizio's goal of improving the overall global landscape for responsible recycling by working in tandem with other brands and stakeholders who are equally as environmentally conscious."

In addition, e-Stewards announced that Vizio's Sanchez has been elected to serve on the e-Stewards Leadership Council. Other e-Stewards Enterprise companies serving on the prestigious advisory body include Iron Mountain, Bank of America, Wells Fargo, Samsung, LG and Sony.

State of Utah awards five year electronic recycling contract

Advanced Technology Recycling (ATR) has been awarded a five year contract to provide electronic recycling and secure data destruction services to the State of Utah departments, agencies, institutions and political subdivisions.

ATR was only one of two companies that successfully met the requirements. The scoring algorithm placed a high emphasis on cost making up a total of 835.7 points available or 30 percent of the overall score. ATR is the clear choice in this category scoring all 835.7 points while the other qualifying bidder received 472.4 which converts to nearly double the cost. Additional selection criteria included logistics and transportation, regulatory compliance, processing and service offerings.

This is an important region for the nationwide Information Technology Asset Disposition (ITAD) and electronics recycling company who recently announced they relocated the nearby Tooele location to a new updated facility in Salt Lake City, Utah.

The new facility is part of a major expansion currently underway to provide improved logistics and material management capabilities throughout the entire West coast regions. In addition to the SLC relocation ATR also announced the opening of their 9th location in nearby Las Vegas Nevada which has been approved through this contract to manage materials coming out of the Southern regions of Utah.

Q: What is red and smells just like blue paint?

A: Red paint.

Call John Monaghan, CPA, CVA for your expert financial advice.

EXPERIENCED IN SOLID WASTE & RECYCLING BUSINESS VALUATIONS

What's Your Business Worth?



VZN Group, LLC

419-882-1886

www.vzncpa.com

- Accurate Business Valuation
- Financial Forecasting
- Consulting
- Tax Preparation & Planning

John Monaghan, CPA, CVA

INDUSTRY PROFILE

A Closer Look

by Donna Currie

TerraCycle

Emel Simpson • 866-967-6766

TerraCycle had a glimmer of a start when Tom Szaky, then a 19 year old university student, decided to drop out of school so he could build a company. His first company made "organic fertilizer from worm poop," according to Emel Simpson, TerraCycle's vice president of research and development. While that certainly wasn't a recycling company, there was a re-use component since he started getting bottles from major soda companies which he used to bottle his fertilizer.

He sold that business and created a new business that made upcycled products. That turned into a recycling business which he built to over \$30 million in sales, with nearly 300 employees, globally. TerraCycle isn't a typical recycling company, since they specialize in recycling products that are particularly difficult. Simpson said that they're really more of a "boutique recycler."

When they work with a company, they're more than happy to pick up metals that are sent directly to a smelter, and they'll handle industrial glass and plastic as well, but they're much more interested in the odd and complicated items, like baby diapers, juice pouches and cigarette filters.

While diapers might seem like an odd thing to recycle, Simpson said that about six percent of the material in landfills is disposable diapers, so removing them from the waste stream saves a lot of space and salvages a lot of usable material. To recycle those diapers, first they're sterilized, then the outer plastic is separated from the absorbent material. The plastic is washed again, shredded and can be used for things like plastic tiles or plastic lumber. Meanwhile, the absorbent material ends up as a fertilizer.

Chewing gum can also be recycled, according to Simpson. Today's chewing gum, unlike the original, is plastic based rather than plant based. It may be hard to imagine where large quantities of used chewing gum might be collected to make recycling worthwhile, but Simpson said that in Mexico there are municipalities that have containers where people can dispose of the gum, which is eventually shipped for recycling.

TerraCycle recently introduced a new platform for consumers called Loop, where people can sign on to buy a reusable tote filled with products they choose such as shampoo, spices, oils and even ice cream. Consumers use the products, toss the empty bottles and packages into the tote, and ship it back to TerraCycle. This has only been rolled out in a few areas of the country, but they expect it to be available nationwide soon.

Simpson, a "polymer scientist," might not be the usual recycling employee. Before TerraCycle, he had worked for a number of large companies doing research, until he retired in 2007. He wasn't ready to quit working, though, so he helped a few friends with their startups, then joined TerraCycle in 2010 to help them develop a recycling process. Now, he spends his time analyzing materials from all over the globe to figure out how it can be recycled.

He works along with the company's outstanding marketing team who help sell the company's capabilities and who get samples for analysis to see if recycling is actually possible before "we can take their material en masse for recycling."

Besides working with large companies and their industrial products, TerraCycle also works with household items that come from schools or arrive via UPS from customers who purchase the zero waste boxes for materials they can't recycle locally.

Much of the difficult to recycle products are plastics, which are eventually converted to granules that are sold to companies who make plastic products. "We pay people to produce granules," Simpson explained. TerraCycle writes the processes, and those are handled by companies "who can perform the processes that we write."

Potato chip bags, made from multi-layered films, generally aren't considered recyclable, but TerraCycle has a process to handle them and other #7 plastics that no one else can handle. "Our logo is on millions of packages," Simpson said, which means they can recycle those items. While it makes no sense to put a single

See A CLOSER LOOK, Page 20



—Emel Simpson

PAPER

Packaging provider DS Smith expands in North America

DS Smith plc, a provider of sustainable packaging, is further expanding in North America with the opening of its new headquarters in Atlanta, Georgia. Its growth into the North American market follows its acquisition of Interstate Resources and Corrugated Container Corporation, and The Display Connection.

The company's momentum and leadership in environmental and sustainability stewardship in Europe offers a launch pad for its expansion in North America, and comes at a time when consumers seek more options for sustainable packaging.

DS Smith's closed-loop recycling model – where paper and corrugated is collected, recycled and then used again to make packaging materials – has proven successful in Europe, helping the company to manage more than five million tons of recyclable materials every year. The company's expansion into

North America is a response to global and local customer requests for similar sustainable packaging solutions in North America.

DS Smith recently reinforced its commitment to the circular economy when it announced a global partnership with the Ellen MacArthur Foundation, a global thought leader in accelerating the transition to a circular economy. The partnership will advance DS Smith's influence in the circular economy and support innovation across the business, including pilots focusing on urban recycling and carbon-efficiency in e-commerce.

As part of the expansion in North America, the company is also growing its U.S. based team. In the first half of 2019, DS Smith added a number of new leaders to its North America Packaging and Paper team, and has plans to continue to grow.

AF&PA releases updated paper reports for May 2019

The American Forest & Paper Association released its May 2019 U.S. paper reports.

Containerboard

Containerboard production in May 2019 decreased 6 percent compared to May 2018 and was down 4.5 percent year-to-date. The average daily production compared to April 2019 was 0.9 percent higher. The containerboard operating rate increased slightly from 91.5 percent in April to 91.9 percent, as the total linerboard rate rose above 90 percent for the first time since January.

In spite of the bounce back in the last couple of months, the May operating rate was 6.7 points lower than the same month last year and the year-to-date operating rate was down six points compared to last year. Production for export, most of which is liner, was down nearly 18 percent year-over-year and nearly 20 percent year-to-date.

Printing-Writing Paper Report

Total printing-writing paper shipments decreased 11 percent in May compared to May 2018. U.S. purchases of total printing-writing papers declined eight percent in May compared to the same month last year. Total printing-writing paper inventory levels increased one percent from April 2019.

•U.S. shipments of uncoated free sheet (UFS) paper decreased 13 percent in May from the same month one year ago. The inventory level of UFS papers increased two percent in May compared to April. UFS imports in April 2019 increased 39 percent year-over-year while exports decreased 29 percent.

•U.S. purchases of coated free sheet (CFS) papers decreased five percent in

May when compared to May 2018. Inventories decreased two percent compared to last month. Imports of CFS papers in April 2019 increased 6 percent while exports decreased 10 percent.

•U.S. shipments of coated mechanical (CM) papers decreased four percent year-over-year in May. U.S. purchases of uncoated mechanical (UM) paper decreased 10 percent in May. Inventory levels at the end of May when compared to April increased for CM and decreased for UM, both by three percent. Both imports and exports of CM increased year-over-year in April, while UM imports and exports were both up.

Boxboard Report

Total boxboard monthly production decreased 4.6 percent when compared to May 2018. The total boxboard operating rate was 91.1 percent for May. Total Solid Bleached Boxboard and Liner production was up 0.2 percent year to date; Recycled Boxboard production rose 0.2 year to date; and Unbleached Kraft & Gypsum declined 1.2 percent year to date.

U.S. Packaging Papers & Specialty Packaging

Total packaging papers shipments were down 7.2 percent from May 2018 and down 2.4 percent year-to-date. Bag and sack shipments were down 0.6 percent year-to-date; multiwall shipments were down 7.5 percent; food wrapping shipments were essentially flat; and converting shipments were down 2.8 percent. The operating rate for May decreased to 85.2 percent compared to 88.4 percent in April. Inventory levels decreased 2.3 percent from April.

Heidi Brock to head AF&PA

The American Forest & Paper Association (AF&PA) announced that Heidi Brock, president and chief executive officer (chief executive officer) of the Aluminum Association, will join AF&PA as its new president and chief executive officer. Brock is succeeding Donna Harman, who announced her intention to retire earlier this year after 12 years serving as AF&PA's president and chief executive officer.

Brock will bring to AF&PA extensive experience, serving as the chief executive officer of a prominent manufacturing association for almost eight years and having worked for nearly 20 years as a senior executive for one of the paper and wood products industry's largest companies.

Under Brock's leadership, the Aluminum Association strengthened its advocacy mission and role as the key policy voice for the aluminum value chain in the U.S. The organization launched the Aluminum PAC, collaborated with Congress on the creation of the Aluminum Caucus and significantly increased the engagement of member

companies with government stakeholders. In addition, the association recently led two significant and successful trade enforcement cases for the industry while also achieving record membership levels.

Before joining the Aluminum Association in 2011, Brock served as vice-president of Federal and International Affairs for Weyerhaeuser, where she was an active member on AF&PA committees.

During Brock's 18 years at Weyerhaeuser, she worked as vice president for e-business, director of strategic planning and manager for government affairs. Brock sits on the American Society of Association Executives (ASAE) and ASAE Foundation Boards of directors, the U.S. Chamber's Committee of 100, as well as the board for DC Central Kitchen. In 2018, she was awarded the CMA Leadership Award to recognize her work to promote sustainability and manufacturing while chairing the National Association of Manufacturers' Council of Manufacturing Associations.

INTERNET PERKS

Remember... Our
CLASSIFIED AD
rates **INCLUDE** a unique value—
All ads are also posted ONLINE!



Place your ad now!

Call Today!

877-777-0043

To place your ad 24/7, visit
www.americanrecycler.com

LEADING THE WAY.



Precision Husky Corporation leads the forest products industry, building the highest quality, most rugged equipment available since 1964.

Our Progrind 5200-T track mounted tub grinder is the most powerful, easiest to use grinder in the industry. It is designed with innovative

features and advanced technologies to give you the power and production needed to tackle the most demanding grinding operations.

You can invest in our equipment with confidence, and know it will do the job for many years to come. Call us today to discuss your needs and learn more about our high-performance products.

- Remote controlled thrown object shield
- Caterpillar C32, 1200 HP Diesel Engine
- Sauer Plus 1 control system
- Full 60" wide discharge conveyor
- Tub Size:
 - Inside Width 10'-0" [3 m]
 - Flare Width 13' [3.96 m]
 - Depth 56" [1.4 m]
- Weight: 98,000 lbs. [44,452 kg]



PROGRIND 5200-T

ENGINEERED FOR PERFORMANCE. BUILT FOR ENDURANCE.



P.O. Drawer 507, Leeds, AL 35094 • 205-640-5181 • www.precisionhusky.com • sales@precisionhusky.com

See complete equipment listings



WOLVERINE TIRE DEBEADER

Light truck and passenger tires.



2014 100 x 72 EIDAL ROTARY SHEAR

(2) 150 HP motors. Very good condition.



2014 ELDAN TIRE RASPER SYSTEM

Includes magnets, baghouse and deluge system.



MOSLEY 330T SHEAR

Good working condition. Maintenance records available.



NEW AMSCO HAMMERS AND PIN PROTECTORS

For 60 x 104 hammermills.



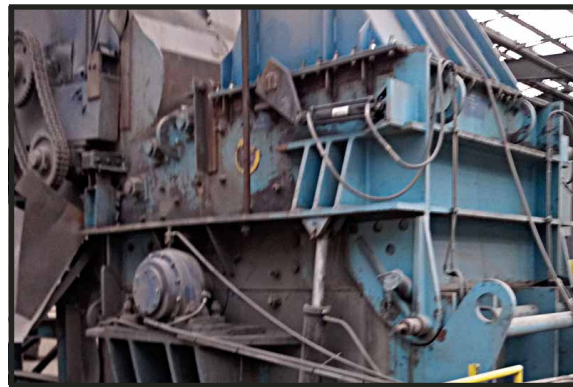
SIEMENS 1500 HP SHREDDER MOTOR

900 rpm, 3-phase, 4,000 volt.



2006 AL-JON 580CL AUTO LOGGER

Needs some TLC.



MAGNATECH 72 X 72 SHREDDER

Includes UMO, cyclone, bag house and spare parts!



2011 SIERRA 656 SLB SHEAR BALER

Rebuilt main cylinder and control panel.



2011 CM LIBERATOR 2R

Rebuilt and ready to run. The best machine for wire separation and wire free rubber material.



48" HURON VALLEY EDDY CURRENT

Model MK-V-48.



AL-JON/UNITED F-466 ALUMINUM FURNACE

Mid-1980s aluminum smelter.



48" SGM EDDY CURRENT

Model VIS-48-TS



1997 MAGNATECH 66X60 SHREDDER

Includes conveyance & ECS.



WENDT TUMBLEBACK FEEDER

28' high. Excellent condition!

Financing available at DADECapital.com

at www.DADEAuctions.com today!



CUMBERLAND MODEL 30 TIRE GRANULATOR
Recently rebuilt, 100 hp.



2015 WENDT TOMRA X-TRACT
Dismantled and ready to ship!



UNITED 990 ALUMINUM FURNACE
Start earning more for your aluminum!



2012 AL-JON 580 CL BALER
Only 1,800 hours on the engine!



WILLIAMS 60 X 90 HAMMERMILL SHREDDER
Tons of spare parts and conveyance!



60" SGM EDDY CURRENT
Model VIS-60-TS



1981 HARRIS 500-TON SHEAR BALER
Includes conveyance!



BARCLAY 6" CLASSIFIER
Good condition. Daisy wheel tire shred classifier.



2012 DOOSAN DX255 WITH SHEAR
With Genesis GXP 400 R shear. Runs every day.



2006 MAC 5200 BALER
16" x 16" x variable bale size.



2015 WENDT TROMMEL
In very good condition!



RUBBER MULCH PAINT LINE
Dual drum batch painting line.



2007 E-Z A+ CAR CRUSHER
10,500 hours. Great shape!

DADE Auctions

844-222-2020

www.DADEAuctions.com

METALS

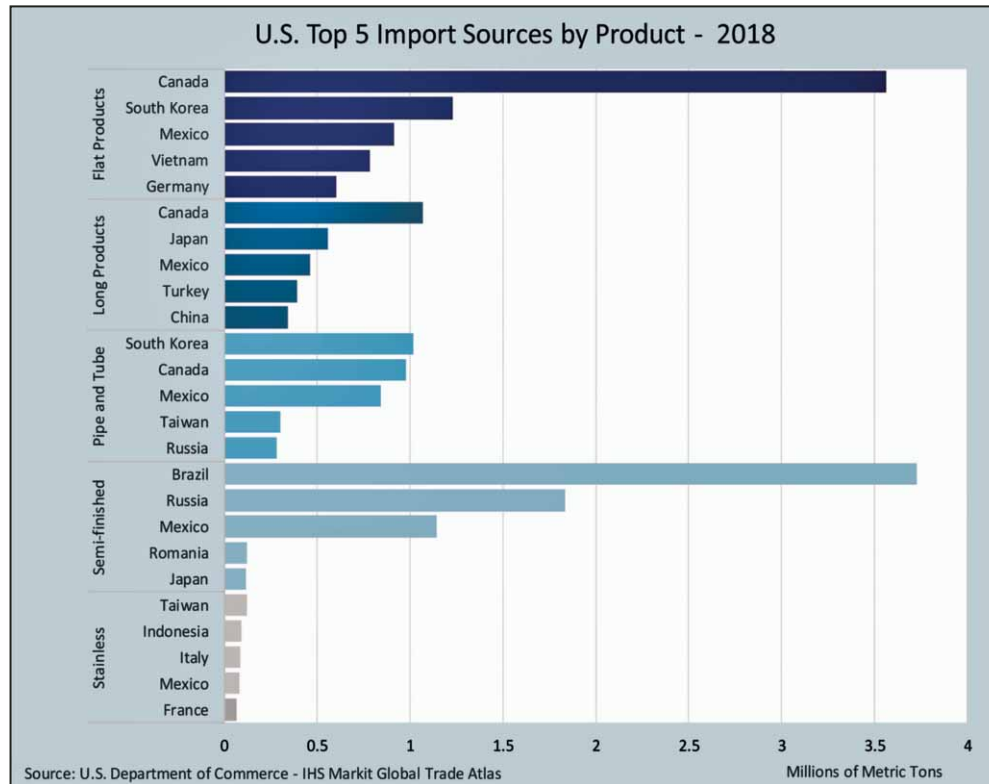
Steel imports dropped in 2018

According to the U.S. Department of Commerce, in 2018 the U.S. imported 30.8 million metric tons of steel, an 11 percent decrease from 34.5 million metric tons in 2017. U.S. imports in 2017 represented about 9 percent of all steel imported globally, based on available data. The volume of U.S. steel imports in 2017 was more than 25 percent larger than that of the world's second-largest importer, Germany in 2017. In value terms, steel represented just 1.2 percent of the total goods imported into the U.S. in 2018.

The United States' deficit in steel products has persisted for over a decade. Since 2009, imports have returned to average levels seen prior to the 2008 global recession while exports have remained relatively flat in comparison, and the trade deficit has widened accordingly. Since their most recent low year, imports have grown by 109 percent between 2009 and 2018, while exports have decreased by 7 percent. In 2018, the U.S. steel trade deficit amounted to 23.0 million metric tons, a 6 percent decrease from 24.4 million metric tons in 2017.

Imports by Top Source

The top 10 source countries for U.S. steel imports represented 77 percent of the total steel import volume in 2018 at 23.8 million metric tons (mmt). Canada accounted for the largest share of U.S. imports at 19 percent (5.7 mmt), followed by Brazil at 14 percent (4.2 mmt), Mexico at 11 percent (3.4 mmt), South



Korea at 8 percent (2.5 mmt), and Russia at 7 percent (2.3 mmt).

Trends in Imports

From 2017 to 2018, the volume of U.S. imports decreased from 8 of the U.S.' top 10 import sources. Imports from Turkey (-47 percent), showed the largest volume decline in 2018, followed by South Korea (-26 percent), Japan (-20 percent), Russia (-18 percent), Taiwan (-15 percent), Brazil (-11 percent), Germany (-6 percent), and Canada (-1 percent). The volume of U.S. imports

only increased from Vietnam (45 percent) and Mexico (9 percent).

The overall value of U.S. imports increased from 5 of the top 10 sources. The value of imports from Vietnam increased the most in 2018 (59 percent), followed by Mexico (20 percent), Canada (8 percent), Brazil (6 percent) and Germany (6 percent). Turkey (-35 percent), South Korea (-15 percent), Taiwan (-8 percent), Russia (-2 percent), and Japan (-0.1 percent) decreased in value in 2018.

U.S. lifts tariffs on Canada and Mexico

The U.S. announced an agreement with Canada and Mexico to remove the Section 232 tariffs for steel and aluminum imports from those countries and for the removal of all retaliatory tariffs imposed on American goods by those countries.

The agreement provides for aggressive monitoring and a mechanism to prevent surges in imports of steel and aluminum. If surges in imports of specific steel and aluminum products occur, the U.S. may re-impose Section 232 tariffs on those products.

Any retaliation by Canada and Mexico would then be limited to steel and aluminum products.

April 2019 steel shipments down

The American Iron and Steel Institute (AISI) reported that for the month of April 2019, U.S. steel mills shipped 8,210,425 net tons, a 1.4 percent decrease from the 8,327,990 net tons shipped in the previous month, March 2019, and a 5.3 percent increase from the 7,798,326 net tons shipped in April 2018. Shipments year-to-date in 2019 are 32,362,476 net tons, a 3.5 percent increase vs. 2018 shipments of 31,259,675 net tons for four months.



CELEBRATING TEN YEARS OF EXCELLENCE

TELL US THAT YOU SAW US IN AMERICAN RECYCLER



MULTI-PURPOSE TIRE SHREDDER

- Made to Shred Tires and Many Other Materials Including Plastics, Wood, Cables, Electrical Waste and More
- Adjustable Blades Control Output

GRAPPLES

- Orange Peel Grapples Come With or Without Magnet
- HARDOX Steel Built
- Two-Year Warranty

MOLEY MAG 24V MAGNET

- Low Cost
- No Generator Needed
- Easy Install
- Sizes Available From 26" - 48"

TIRE KING XL

- Quickly Deflates Tire and Removes Rim in 20 Seconds
- Processes Steel or Aluminum Rims
- 7 KW Power
- 2,646 lbs.

HYDRAULIC SCRAP MAGNET

- Easy Installation
- Sizes 28"-72" Available
- Complete Enclosed System (Pump, Generator, Control Box)

METALS

Steel import permit applications decreased

Based on the Commerce Department's most recent Steel Import Monitoring and Analysis (SIMA) data, the American Iron and Steel Institute (AISI) reported that steel import permit applications for the month of May totaled 2,582,000 net tons (NT). This was a 10.8 percent decrease from the 2,895,000 permit tons recorded in April and a 21.9 percent decrease from the April preliminary imports total of 3,304,000. Import permit tonnage for finished steel in May was 1,809,000, down 10.1 percent from the preliminary imports total of 2,011,000 in April. For the first five months of 2019 (including May SIMA permits and April preliminary imports), total and finished steel imports were 14,071,000 NT and 9,875,000 NT, down 8.6 percent and 18.8 percent, respectively, from the same period in 2018. The estimated finished steel import market share in May was 18 percent and is 21 percent year-to-date (YTD).

Finished steel imports with large increases in May permits vs. April

preliminary imports included sheets and strip all other metallic coatings (up 113 percent), heavy structural shapes (up 90 percent), reinforcing bars (up 69 percent), hot rolled bars (up 20 percent), standard pipe (up 12 percent), and tin plate (up 12 percent). A product with a significant year-to-date (YTD) increase vs. the same period in 2018 was line pipe (up 11 percent).

In May, the largest finished steel import permit applications for offshore countries were for South Korea (296,000 NT, up 8 percent from April preliminary), Japan (123,000 NT, down 22 percent), Germany (77,000 NT, down 46 percent), Taiwan (76,000 NT, up 8 percent) and Vietnam (60,000 NT, down 24 percent). Through the first five months of 2019, the largest offshore suppliers were South Korea (1,291,000 NT, down 16 percent from the same period last year), Japan (610,000 NT, no change) and Germany (530,000 NT, down 4 percent).

Liberty acquires Johnstown Wire

Sanjeev Gupta's Liberty Steel, part of the global GFG Alliance, further expanded its footprint in the U.S. steel downstream products market with the acquisition of Johnstown Wire Technologies (JWT) in Johnstown, Pennsylvania, the largest producer of carbon and alloy wire in North America.

The 638,000 sq.ft. Johnstown site has been a high profile steel manufacturing facility for over 100 years and is a

top three U.S. producer of CHQ, electro-galvanized, aluminized and spring wire. JWT currently holds the number one market position in the electro-galvanized and aluminized sectors.

Liberty Steel intends to drive growth at JWT as the U.S. updates its infrastructure and electricity networks, increasing demand for products such as support cables and guard rails for bridges and for electrical power lines.

AUTOMOTIVE

Volkswagen settlement funds electric vehicles in New Jersey

Demonstrating its commitment to clean transportation and improving urban air quality, the Department of Environmental Protection announced that it is requesting approval from the Volkswagen Environmental Mitigation Trustee to disburse \$16 million for the deployment of electric heavy duty garbage trucks, school buses and port related vehicles.

This is the DEP's second round of requests for funding from the state's \$72.2 million share of federal settlements to resolve claims that Volkswagen installed emissions defeat devices in vehicles it manufactures to emit air pollutants without being detected by emissions-testing programs across the nation.

"The projects to be funded by this second round of grants will improve air quality in environmental justice communities that have for too long have had to bear a disproportionate burden of air pollution and its health consequences," commissioner Catherine R. McCabe said. "These projects also demonstrate the viability of using electric heavy-duty vehicles to improve air quality in urban areas and throughout the state."

The projects include:

- Red Hook Terminals LLC, Port Newark, 10 electric yard tractors;
- United Airlines, Newark Airport, 39 electric ground support equipment;
- City of Jersey City, five electric garbage trucks;

•IKEA Distribution Services North America, four electric terminal tractors and five last mile electric delivery trucks in Westampton, Camden, Jersey City, Hoboken, and Cherry Hill;

•Best Transportation, Port Newark, four electric yard tractors;

•Regional Industries LLC, Elizabeth, five electric garbage trucks;

•Student Transportation of America Inc., Trenton, five electric school buses;

•International Motor Freight, Port Newark, one electric drayage (short-distance shipping) truck;

•Hudson County Motors Inc., Essex and Hudson counties, four electric drayage trucks.

As part of its first round of funding from the Volkswagen Mitigation Trust, the DEP earlier this year requested \$11.2 million for charging stations and electric transit buses for NJ Transit's use in Camden. The trustee has approved those funds for immediate release to New Jersey.

Two partial consent decrees approved in 2016 and 2017 established a \$2.93 billion environmental mitigation trust to provide funds to all 50 states, the District of Columbia, Puerto Rico and federally recognized tribes to implement actions to counter the air quality impacts of excess nitrogen oxide emissions resulting from the emissions defeat devices.

Nucor Corporation named GM supplier of the year

Nucor Corporation was recognized as a General Motors Supplier of the Year for non-fabricated steel at the automotive company's 27th annual Supplier of the Year awards ceremony held in Detroit, Michigan.

The Supplier of the Year award winners were chosen by a global team of GM purchasing, engineering, quality,

manufacturing and logistics executives. Winners were selected based on performance criteria in product purchasing, global purchasing and manufacturing services, customer care and aftersales and logistics. GM also highlighted the excellent customer service and responsiveness to their account provided by the Nucor team.



Commodity		Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
#1 Bushelings	per gross ton	\$279.00	265.00	298.00	308.00	305.00
#1 Bundles	per gross ton	278.00	245.00	292.00	308.00	296.00
Plate and Structural	per gross ton	289.00	261.00	269.00	300.00	280.00
#1 & 2 Mixed Steel	per gross ton	215.00	249.00	232.00	263.00	265.00
Shredder Bundles (tin)	per gross ton	150.00	160.00	168.00	165.00	179.00
Crushed Auto Bodies	per gross ton	150.00	160.00	168.00	165.00	179.00
Steel Turnings	per gross ton	85.00	89.00	96.00	154.00	157.00
#1 Copper	per pound	2.49	2.58	2.49	2.50	2.45
#2 Copper	per pound	2.38	2.49	2.25	2.34	2.21
Aluminum Cans	per pound	0.67	0.69	0.57	0.57	0.48
Auto Radiators	per pound	1.48	1.48	1.49	1.59	1.65
Aluminum Core Radiators	per pound	0.63	0.56	0.44	0.43	0.41
Heater Cores	per pound	1.08	1.12	1.13	1.17	1.15
Stainless Steel	per pound	0.55	0.55	0.50	0.51	0.49

All prices are expressed in USD. Printed as a reader service only.

DISCLAIMER: American Recycler (AR) collects pricing and other information from experienced buyers, sellers and facilitators of scrap metal transactions throughout the industry. All figures are believed to be reliable and represent approximate pricing based on information obtained by AR (if applicable) prior to publication. Factors such as grades, quality, volumes and other considerations will invariably affect actual transaction prices. Figures shown may not be consistent with pricing for commodities associated with a futures market. While the objective is to provide credible information, there is always a chance for human error or unforeseen circumstances leading to error or omission. As such, AR is not responsible for the accuracy or completeness of the information provided, or for outcomes arising from use of this information. American Recycler disclaims any liability to any person or entity for loss or damage resulting from errors or omissions, including those resulting from negligence of AR, its employees, agents or other representatives.



Testimonial



I received your publication by mail. I can confirm I have never seen it before in its hard copy version. I like the layout and it is very informative, in a league of its own in terms of quality information. No wonder it is the only recycling publication quoted on Lumistar's blog. I look forward to upcoming issues.



I have read issues of your publication in the past by accessing digital archives at one of two libraries I am a member of. Your website is also fantastic.

—Paul Angel, LUMISTAR CORPORATION

CALL 877-777-0043 or visit

www.AmericanRecycler.com!

AUTOMOTIVE

Report shows feasible market for recycled auto plastic bumpers

The results of the final two phases of the End-of-Life Vehicle (ELV) Recycling Demonstration Project were released by the Plastics Industry Association (PLASTICS). Phases II and III of the ELV Project demonstrated that recovering valuable thermoplastic polyolefin (TPO) from ELV bumpers is feasible.

Launched in 2015, the ELV Project was designed to study the viability of collecting and recycling plastic car parts, including car bumpers, to eventually be broken down and used as materials to make new products.

“Finding innovative ways to recycle and reuse plastics has a direct impact on the amount of plastic that ends up in landfills,” said PLASTICS interim president and chief executive officer Patty Long. “By developing lasting, sustainable end markets for these materials, even those extracted from scrap cars and trucks, PLAS-

TICS is giving scrap materials new life through recycling.”

Over the course of the three phases of research for the ELV Project, four plastic bales from four different sources were processed by three plastics recyclers across the U.S. and each bale sample met the range of quality that would make it eligible for use in a wide range of applications. From these findings, they were able to create a directory of automotive recyclers who specialize in using ELV materials.

Following phases II and III, PLASTICS will share case studies from the ELV Project. There is a vested interest from brand owners in using recycled ELV bumpers in their manufacturing and design process.

“The results from the ELV Project indicate that there is technology and a market to recycle plastic from vehicles,” said PLASTICS’ vice president of industry affairs Kendra

Martin. “Organizations have been able to make new parts from car bumpers. Refocus proved to be a wonderful platform to share ideas and brainstorm about these sustainability efforts.”

Involved in the ELV Project were the following organizations: ACI Plastics, Asahi Kasei, Automotive Recyclers Association (ARA), Boston Auto Wreckers, Canadian Plastics Industry Association (CPIA), Erema North America, Fenix Parts, Gary’s U-Pull It, Geo-Tech Polymers, Innovative Injection Technologies (i2Tech), Institute of Scrap Recycling Industries (ISRI), John Deere, Kal Trading, Manar Inc., Metro Recycling, Midland Compounding & Consulting, Milliken, Noble Polymers, Padnos, Post Plastics, Ravago Recycling Group, Series One, Standard Auto Wreckers, Toyota, TPEI, and Ultra-Poly Corporation.

Detroit Brownfield Authority awarded \$1 million EGLE Grant

The Detroit Brownfield Redevelopment Authority was awarded a \$1 million grant from the Michigan Department of Environment, Great Lakes, and Energy (EGLE). The grant will help revitalize and safely reuse 200 acres on Detroit’s east side. Fiat Chrysler Automobiles will expand its Mack Engine Plant and Jefferson North Assembly Plant to increase production of Jeeps. The \$1.2 billion redevelopment will create 5,000 new jobs.

Dozens of properties in the 200 acre development area were contaminated by businesses like machine shops, a scrap yard and a foundry. The brownfield grant will be used for environmental investigations; to remove contaminated soil, underground storage tanks and asbestos; and to install barriers and a ventilation system to prevent exposure to harmful vapors in the soil. The EGLE grant may pay for demolition of vacant buildings so contamination beneath them can be addressed. The grant will be increased to \$2 million if the brownfield authority meets project benchmarks.

EGLE partners with communities to revitalize contaminated property. EGLE grants and loans pay for investigation and cleanup on properties with known or suspected environmental contamination.

SALVAGING Millions

by Ron Sturgeon
Autosalvageconsultant.com

My Memory Trick

The first article in this series listed more than 25 tactics to increase your business success, all of them based on my experience. I started with nothing and didn’t attend college, so I know you can achieve maximum success, regardless of your education.

Everyone thinks I never forget or miss anything. Boy, do I have them fooled.

I have a terrible memory. In the earlier days, I propped it up with a pocket notepad. Today, it’s my iPhone. I send myself an email every time I think of something that needs a look, an action or a follow up. I send myself, on average, 10 emails per day.

Now it’s important to point out that I don’t send myself a text. Everything revolves around my email and the way I manage my inbox. If it’s in my inbox, it’s not handled. So every time I open my inbox, I get all my little reminders. If there’s a common thread to my stories and success, it’s the evolving use of technology and constant learning. You will find stories about how I have adopted and adapted the tools of technology to reach my goals in many of my articles.

Sometimes, I use my iPhone to take a picture of something, like an advertisement for something I am interested in, or I send myself a web link when I find an article on a business topic that I want to read later. Sometimes I point my phone’s camera at a clothing tag for a shirt I want to research or buy or I grab a picture of a marketing piece that I want to copy.

I might send a dozen emails of things from a trade show, including pics of business cards to save. Today, I use an app that reads the picture of the card and puts all of the information in my contacts, after I add key words so that I can access the card when I need it.

I forget when or where I stumbled on this little trick, but I am sure it was at a seminar or convention. You simply must have a mantra of openness to using technology to improve the processes that are part of making you a successful businessperson.

Even if your memory isn’t perfect, a good system and good tech can make you the guy or gal who seems to never miss or forget anything.

DTE Energy launches program to drive electric vehicle infrastructure and adoption

DTE Energy plans to bring the benefits of electric vehicles (EVs) to more Michigan residents and businesses through its new “Charging Forward” program of incentives, customer education and charging infrastructure growth.

Michigan is the nation’s automotive center, but it lags many other states in EV adoption. Limited consumer awareness and range anxiety – the fear of running out of power before reaching a destination – are two factors suppressing increased EV acceptance. DTE’s Charging Forward initiative takes both concerns head-on with increased customer education campaigns as well as incentives that will foster the development of an expanded infrastructure of EV chargers.

DTE will provide a rebate of up to \$500 to a residential customer who purchases or leases a new or used EV, installs a qualified Level 2 charger and enrolls in a special rate beneficial for EV charging. DTE’s business customers can also receive incentives of \$2,500 per port and \$20,000 per charger when they install Level 2 or DC Fast Chargers.

“We’re thankful for the support of the Michigan Public Service Commission as well as auto industry partners and environmental advocacy groups, all of whom share our goal of expanding EV use in Michigan,” said Camilo Serna, DTE’s vice president of corporate strategy. “Customer surveys tell us that more people are likely to use EVs if they can easily obtain chargers and feel confident that they will find locations to charge along their routes. Charging Forward will provide the infrastructure to make drivers

feel more secure by removing both these obstacles.”

The program will encourage DTE customers to charge their EVs during off-peak hours, which will help spread the demand on the electric grid. The distributed demand is expected to add efficiencies to DTE’s electric distribution and put downward pressure on prices, creating a win-win-win opportunity for DTE customers, local economies, and the environment.

The Charging Forward program will also help DTE further its understanding of the EV market and its customers, as well as learn how EV increased demand can be used as a tool to provide benefits to all of DTE’s customers.

Increasing the number of EVs on the road – including in DTE’s own fleet – is part of the company’s comprehensive vision for clean energy in Michigan. DTE has committed to reducing its carbon emissions by at least 80 percent by 2040, advanced with increased EV adoption.

Additionally, DTE has formed partnerships in the public and private sectors to extend charging stations to public areas. As part of the Detroit Mobility Innovation Initiative, DTE will install chargers in public areas such as Detroit’s Beacon Park, with future sites under consideration. In addition, DTE has partnered with both GM and Ford in testing tools to enable EV charging features that are grid-friendly.

Remember, only you can make BUSINESS GREAT!

This article was provided by autosalvageconsultant.com, which was formed in 2001 by recyclers for recyclers, to help them improve their businesses.

For additional information,
view this article on
www.AmericanRecycler.com.

AUTOMOTIVE

Responsible Battery Coalition, Backhaul Alaska partner to support battery retrieval from remote Alaskan communities

An estimated 3.5 million pounds of used vehicle batteries may exist across remote Alaska

Pledging to support the retrieval and recycling of used vehicle batteries from more than 180 remote communities across Alaska, the U.S.-based nonprofit Responsible Battery Coalition (RBC) and the Solid Waste Alaska Taskforce (SWAT), which oversees the Backhaul Alaska program, have signed an agreement to join forces in managing used vehicle batteries in an environmentally responsible manner.

The initiative brings together the RBC's 2 Million Battery Challenge and Backhaul Alaska's education, training and battery retrieval efforts, and it was formalized in a Memorandum of Understanding (MOU) between the two organizations.

The SWAT executive board, a group of representatives from entities that provide solid waste assistance programs throughout rural Alaska, including the Alaska Department of Environmental Conservation, the Alaska Native Tribal Health Consortium, Kawerak and Zender Environmental Health, unanimously endorsed the MOU.

Backhaul Alaska is a statewide program designed to provide centralized shipping and other logistics to remove solid waste and materials from rural, isolated Alaska Native villages and other small communities, including used vehicle and equipment batteries. The

program is primarily funded by the U.S. Environmental Protection Agency, the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration and the Bureau of Indian Affairs.

"The villages and rural communities that make up about one-fifth of Alaska's population are culturally, geographically and linguistically diverse, but they all face the challenge of waste removal, including used lead-acid batteries," Sen. Lisa Murkowski (R-AK) said.

"The Backhaul Alaska program deserves our support, and I'm pleased to see the Responsible Battery Coalition joining forces with Alaskans. This is good news that will help us recover and recycle the over three million pounds of used vehicle batteries in our remote communities."

Lynn Zender of Zender Environmental Health and Research Group, which administers numerous Backhaul Alaska initiatives, said she was pleased to have SWAT join forces with RBC and expand its ability to support rural Alaskan communities in responsible vehicle battery management.

"There are over 200 remote Alaska Native and other small communities across Alaska's vast geography that all rely heavily on hunting and fishing. We need the kind of support RBC can

provide in protecting those environments by retrieving used vehicle batteries and transporting them to recycling centers," Zender said.

She said Backhaul Alaska expects to recover approximately 42,000 lbs. of lead acid batteries this summer from the first 12 of 35 communities participating in the 2 year pilot program. That number

is expected to increase as the program expands.

Zender noted that removing batteries from remote communities is challenging due to the long winter season and limited or nonexistent road access to many. Most targeted communities have no road access and only limited barge or small plane access.



800-472-0453
303-699-7766



FINANCING AVAILABLE



Our machines pull engines, copper wire, harnesses, aluminum + any extras off your car bodies before you ship.

The Right Equipment at Competitive Prices

Used Excavators with NEW Attachments*

**New 2-tine tilting/rotating engine pulling grapples, new hold down clamps that go up/down + open/close.*

Separation Solutions Engineered for Tonnage

VIBRA-SNAP® Screen



The **VIBRA-SNAP® Screen** is an effective alternative to rigid screening systems for processing materials with inherent blinding characteristics and is ideally suited for efficient screening of moist, sticky, fibrous, wet bulk materials with a high percentage of fines or near size particles.



www.actionconveyors.com

sales@actionconveyors.com | 503.537.1111

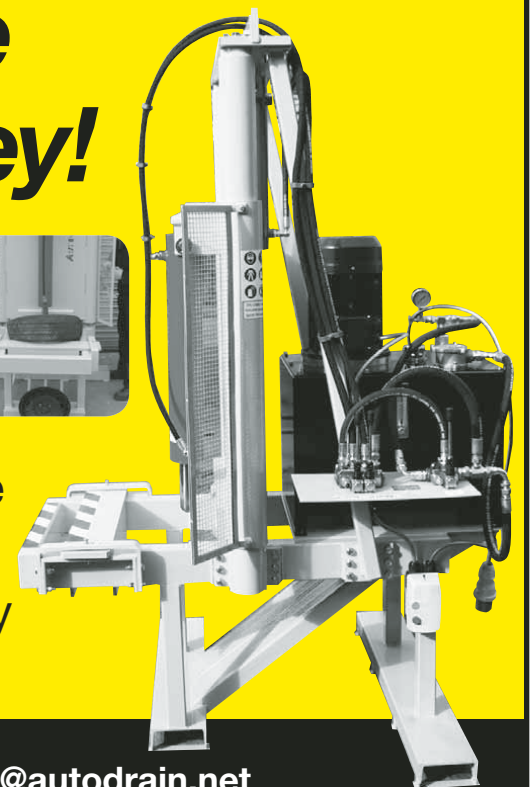
WheelPopper

Separates scrap tires from steel & alloy wheels in seconds

Save time and money!



- Buy direct from the manufacturer
- World wide delivery to your door



AutoDrain
Experts in vehicle depollution

sales@autodrain.net

www.autodrain.net

PLASTICS

Aaron Industries launches high melt flow recycled PP

Aaron Industries Corp., a leader in recycled plastic innovation, has launched JET-FLO™ Polypro, its new high melt flow recycled polypropylene (PP) compound. JET-FLO Polypro, which features DeltaMax™ Performance Modifier from Milliken & Company, is among the first recycled PP materials to combine two properties that are normally mutually exclusive – extremely high melt flow index (MFI of 50-70 g/10 min.) and good impact performance (Notched Izod of 1.5-2.0). High MFI and good impact strength make JET-FLO Polypro an excellent choice for economical, highly durable thin-wall parts, such as housewares. By adding significant value to recycled PP, Aaron Industries is helping to encourage broader use of sustainable alternatives to virgin PP resin.

“Our new JET-FLO PP is a major step forward toward expanding the use of recycled plastics,” said Robert M. Tocci, vice president of Aaron Industries Corp. “Manufacturers no longer have to sacrifice impact performance to achieve the high melt flow, which is essential for thin wall molding and faster throughput. Our collaboration with Milliken to leverage DeltaMax technology has been a great success. Milliken is one of the few suppliers with the knowledge, enthusiasm and technical resources we needed to help us develop this new compound and

drive true innovation in the recycling industry.”

The product, which is regionally available in eastern parts of the U.S. and Canada, is supplied as pellets in black and gray colors.

Although many manufacturers want to incorporate recycled PP into their applications to increase sustainability and reduce costs, they may face challenges in sourcing materials with the needed properties. This is particularly true when molding thin-wall parts requiring good impact resistance. A key issue facing recyclers is the large proportion of recycled content that comes from single use applications like packaging. These material streams may lack the more-robust physical properties required for typical recycled PP applications like durable goods. Recyclers must also contend with variability in their feedstocks.

Historically, Aaron Industries used peroxide to increase the MFI of its recycled PP. However, peroxide reduces impact strength. Seeking a better solution, the company worked with Milliken to leverage its DeltaMax Performance Modifiers, which can increase MFI by as much as five times while maintaining impact strength. The DeltaMax technology enables recycled PP to deliver equal or better performance and processability compared to virgin resins.

Poland Spring to incorporate 100 percent recycled plastic

First major bottled water brand in the U.S. to convert its portfolio to recycled plastic

Poland Spring® Brand 100 percent Natural Spring Water, America’s leading spring water brand, has started transitioning its packaging to recycled plastic (rPET), and plans to be the first major bottled water brand to reach 100 percent recycled plastic across its still water portfolio by 2022. The brand’s one liter bottles are currently being made using 100 percent rPET. In April, the brand launched a premium offering, Poland Spring® ORIGIN in 900mL bottles, which are also made entirely of recycled plastic.

This initiative comes just months after Poland Spring’s parent company, Nestlé Waters North America, announced that it will achieve 25 percent recycled plastic across its U.S. domestic portfolio by 2021. The company plans to continue expanding its use of recycled materials in the coming years, further setting an ambition to reach 50 percent recycled plastic by 2025.

Poland Spring’s current packaging, which is predominantly made using PET plastic, is already 100 percent recyclable, and the company views its push toward using more recycled materials to be the next phase in making its packaging more sustainable and addressing the issue of plastic waste. Using recycled

plastic helps keep plastic out of landfills and oceans, and reduces greenhouse gas emissions compared to using virgin plastic.

However, as recycling rates in the U.S. still hover around 30 percent, Poland Spring recognizes that in order to fulfill its commitment to use recycled plastic in its packaging, it must also invest in initiatives that help plastic bottles get back in the recycling bin in the first place. That’s why Poland Spring, along with its parent company, is collaborating with organizations like Closed Loop Fund to help increase recycling infrastructure. The brand is also expanding How2Recycle labels across all of its packaging, to remind consumers to empty the bottle, replace the cap and recycle when they’re done.

“To achieve a circular economy, we, as brand owners, need to inspire people to think and act differently when it comes to plastic,” said David Tulauskas, vice president and chief sustainability officer at Nestlé Waters North America. “I cannot think of a more meaningful way to connect with our consumers than to bring to market a more sustainable bottle that they themselves helped to create simply by recycling.”

FINANCING

LOW BANK RATES

DADE

Capital Corp.



800-823-9688

Maumee, OH

www.DADECapital.com

FINANCING the
SALVAGE, RECYCLING & WASTE INDUSTRIES
for Over 32 Years.

WASTE

Orlando firm launches zero waste program

MSW Consultants, a management consulting firm specializing in the waste and recycling industry, is utilizing a TerraCycle recycling solution in order to minimize the overall waste sent to landfills at MSW's Orlando headquarters. Since MSW Consultants is in the business of analyzing the composition of landfilled waste, they know first-hand the positive impact that the removal of hard to recycle materials, like certain plastics, can have. The benefits of diminishing this landfilled waste are amplified since the collected material is recycled into a variety of new products.

By placing the Zero Waste Boxes in their work vans, the company makes it convenient for field operations staff to recycle materials that are otherwise unrecyclable through curbside recycling programs. By recycling personal protective equipment, such as Tyvek suits or disposable gloves, the company is not only diverting waste from landfills but is also demonstrating their commitment to sustainability.

MSW employees and subcontractors use a variety of personal protective equipment which historically has been discarded at the conclusion of each job. TerraCycle's Zero Waste Box program offers a convenient means for recovering these traditionally non-recyclable items and recycling them into practical products.

Lion Electric and Boivin Évolution join forces for first all-electric waste collection truck

At the Impulsion MTL event, The Lion Electric Co. and Boivin Évolution (BEV) unveiled the world's first Class 8 truck with a powertrain and automated collection hopper, which are 100 percent electric.

For the first time, a zero emission truck with a fully electric waste collection hopper and automated arm will be put into service.

By combining their expertise, Quebec companies Lion and BEV have been able to push the limits of innovation and the electrification of heavy duty vehicles even further. Conceived, designed, and manufactured for the electric market, the Lion8 chassis and the BEV all-electric automated side-loading hopper will be used to collect household waste, recycling, and organic material.

The advantages of the Lion8 with BEV side-loading hopper include:

- Range of up to 400 km or a full day of operation (1,200 homes) on a single charge.
- No noise pollution.
- Optimal visibility and turning radius
- Zero greenhouse gas (GHG) emissions.
- No hydraulic fluid needed for pumps, pipes and hoses. All hopper and arm movements are powered by the battery that drives electric motors for each function.
- Overnight recharging when the



Lion's all-electric urban truck has a 250 mile range.

PHOTO BY JACK ROBERTS

truck is not in operation and when demand for electricity is lower, which reduces energy costs.

•Savings of up to 80 percent on total energy costs.

•60 percent lower service costs thanks to the simple, low-maintenance electric powertrain that has few components.

•Oil free operation with very few moving parts.

•Longer lasting brakes due to regenerative braking system.

•Custom built in Quebec to withstand North American weather and road conditions.

For a direct link to additional information, view this article on www.AmericanRecycler.com.

SNAG Economical Compliance with **CAR-Go-Net**®

- Fused joints won't unravel
- Easy to apply in a single pass
- Multiple sizes in stock for immediate shipment



INDUSTRIAL NETTING

800-328-8456

industrialnetting.com

M10 Can Densifier In Stock Now!



- Process drink cans**
- Up to 880 lbs/hr
 - Compacts cans into 11 x 11" bales of various lengths

NOW AVAILABLE from **VORTEX!**

McIntyre Alligator Shears

The Gold Standard in Recycling Systems



VORTEX
De-pollution & recycling equipment

303-900-4040
vortexdepollution.com

WASTE

Kroger celebrates zero waste achievements

The Kroger Co. announced its latest milestones and results for Zero Hunger/Zero Waste, the company's bold vision to end hunger in the communities it serves and eliminate waste across the company by 2025.

Kroger announced Zero Hunger/Zero Waste in September 2017. Since then, the retailer has worked relentlessly to drive change and conversations inside and outside the company regarding this issue. Last year, Kroger was named sixth on Fortune magazine's Change the World 2018 list, joining 50 big companies around the world that are also using their resources to solve society's most complex issues.

Through leadership, engagement and commitment, Kroger continues to make progress in its journey to achieve Zero Hunger/Zero Waste. Notable 2018 milestones include:

Zero Hunger

- Kroger donated \$328 million to local communities in 2018, including more than \$192 million in food and funds to end hunger.

- Kroger provided 316 million meals to communities nationwide.

- Kroger rescued 100 million pounds of safe nutritious food that could no longer be sold in its retail stores, or shipped from its distribution centers and manufacturing plants, for Feeding America® food banks.

- Kroger increased meal donations by 10 percent.

- Kroger partnered with Oprah Winfrey to donate one million meals to Feeding America. Together with Winfrey's food line O, That's Good! Kroger pledged an additional one million meals to Feeding America to help feed families across the country.

Zero Waste

- Kroger accomplished 76 percent waste diversion, redirecting 2 million tons from landfills across its 35-state footprint.

- Kroger increased year-over-year food waste diversion by 37 percent.

- Kroger achieved zero waste operations in 34 of its 36 manufacturing plants.

- Kroger increased total recycling by 19 percent.

- Kroger committed to eliminating single use plastic grocery bags from its family of stores by 2025. As of April 1, Kroger's QFC division in the Pacific Northwest no longer offers customers single use plastic bags.

- Kroger launched the Zero Hunger/Zero Waste Innovation Fund, a program of The Kroger Co. Zero Hunger/Zero Waste Foundation, awarding \$1 million in grants to innovators developing solutions to prevent food waste.

Winners of DSNY's 2019 Zero Waste Schools Awards named

Fifteen schools are winners of this year's Zero Waste Schools Awards, according to the New York City Department of Sanitation (DSNY). Recipients of the awards, which recognize public schools that have created outstanding programs in recycling, sustainability, gardening or cleanup, received up to \$1,500 in cash prizes for their schools and were honored by sanitation department acting commissioner Steven Costas during an awards ceremony in June.

This year's winning programs range from student led cafeteria recycling monitoring to upcycled art projects.

In partnership with the Department of Education, DSNY has created the NYC School Guide to Zero Waste that help teachers and students set up recycling areas, collect recyclables and coordinate with their peers on environmental projects.

The competition includes five categories: The DSNY Commissioner's Cup, for outstanding sustainability efforts; GrowNYC Recycling Champions Program's Super Recyclers, which honors model school recycling programs; Materials For the Arts (MFTA) Reuse Challenge, for waste reduction practices; Zero Waste Schools Challenge, which awards participation for the first 100 Zero Waste Schools; and Citizen's Committee for NYC's (CCNYC) Team Up to Clean Up, for the best clean up and beautification projects.

A Closer Look

■Continued from Page 9

potato chip bag in an envelope and mail it in for recycling, if someone collects enough bags, it might make sense to send them in for recycling and keep them out of the local landfill.

Looking forward, Simpson expects they'll always be looking at new technologies because "complex materials need complex processes." He expects there will be increased efforts to develop the new technologies needed to efficiently recycle as many materials as possible.

Another effort might be to figure out how to produce clean materials for the end user when the recycling process starts with food-contaminated products, and without having to wash the materials before recycling.

While TerraCycle seems to have a firm grasp on recycling the impossible, Simpson said that one problem in America is that people can easily put recyclable materials in with their trash and there's no one stopping them. Along with recycling efforts, Simpson would like a mandate established that requires a reduction in materials approved for landfill so more products can get a new life through recycling.

Classified ADVERTISEMENTS



Rates

Text Classifieds

\$65 for up to 50 words.
Add \$1 each additional word.

Display Classifieds

\$70 per column inch depth,
2.5" width.

877-777-0043

—Always Available—

PLACE YOUR TEXT AD ONLINE

www.AmericanRecycler.com

WE ACCEPT CHECKS, MONEY ORDERS,
MASTERCARD, VISA and DISCOVER.

ALL CLASSIFIED ADVERTISEMENTS
MUST BE PAID IN ADVANCE.

Featured Classifieds

OUR SERVICES

- Mergers & Acquisitions Consulting
- Business Valuation & Brokerage
- Specialty Waste Transportation
- Management Consulting and Advisory
- Asset Preservation & Reorganization
- Waste To Energy Consulting
- New Business Opportunities



609.854.3520 tel
609.854.3596 fax
rs@sternerconsulting.com
sternerconsulting.com



GRAPPLES

MAG GRAPPLES

New/Used grapples and magnet grapples available for immediate delivery.

Moley's magnet grapple design offers maximum capacity compared to competitors.



1(844) M-MAGNET

sales@moleymagneticsinc.com
moleymagneticsinc.com

WANTED: Great customers who have things to sell and money to make! Call 877-777-0043 to get started today.

SIERRA
SHEAR / BALER / LOGGERS

SIERRA T900

SIERRA

PROVEN PRODUCTION & VERSATILITY

SIERRAINTL.COM • 800.343.8503

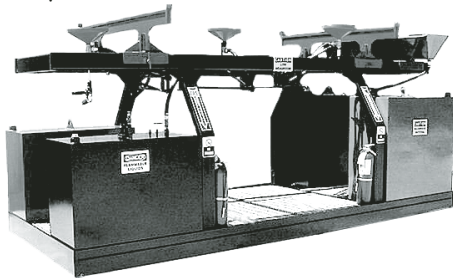
Icons: SHEAR / BALER / LOGGERS, TWO-RAM BALERS, PORTABLE BALER / LOGGERS, MACPRESSED SINGLE-RAM BALERS, MATERIAL HANDLERS, CONVEYORS

Facebook, Instagram, LinkedIn icons

Auto Recycling

IRON AX ENVIRO-RACK

Complete fluid removal in less than 5 minutes!



The Enviro-Rack is the most superior auto fluid removal and dismantling system on the market today.

877-247-6629 • IronAx.com

Businesses

WELL MANAGED, HIGHLY PROFITABLE scrap metal recycling and auto salvage yard for sale, 12 years in business, turn-key operation, 2 buildings on 14 acres, one of the biggest u-pull-it yards in central Florida, with over 1,500 vehicles. All licenses and permits ready, huge potential for growth. Asking \$1.3M for real estate, equipment and parts inventory. Please call Jeff at 646-541-1858.

TWO FEEDER YARDS FOR SALE in Northwestern Pennsylvania, both close to I-80, 15 miles apart, lots of support equipment and inventory, looking for offers over \$2 million. Partial financing considered. Fax for details: 814-772-9735. E-mail: dfk.amr@gmail.com

Balers

First baler in its class built in the USA

ATX AUTO-TIE BALER

- | | |
|------------------------|-------------------------------|
| 10" Main Bore Cylinder | 5,000 PSI System Pressure |
| 10" Tension Cylinder | 392,700 lb. Total Force |
| Roller Platen | 210 PSI Platen Pressure |
| 225 HP Power Unit | Solid Plate Construction |
| 44" x 44" x 72" Bale | Up to 45 Tons per Hour of OCC |
| Jam-Clear Stamper | |

INTERNATIONAL BALER CORP.

1-800-231-9286 | www.intl-baler.com

NEED CASH? TURN YOUR USED EQUIPMENT INTO CASH by selling it in American Recycler's Classifieds Section. Call 877-777-0043 or visit AmericanRecycler.com to place your ad today!

Material Handlers

KUHN EQUIPMENT

FEATURED MACHINES



2011 Caterpillar M322D MH - 44 ft reach, hydraulic elevating cab, heat & A/C, Buto lube, NEW Gen Set, 3/4 yard grapple, 4 outriggers and blade. Call for price!



2008 Sennebogen 835R on Tracks - 52 feet of reach, hydraulic lift cab, heat & A/C, serviced, NEW batteries, expandable U/C, 5 tine grapple. Call for price!

VISIT KuhnEquipment.com TODAY FOR MORE QUALITY MACHINES!
800-225-0623
after hours: 843-324-8487
sales@kuhnequipment.com

NEXT DEADLINE is July 18. Call today! 877-777-0043

Miscellaneous

BUILT TO HANDLE



THE DAILY GRIND. ProGrind Horizontal Grinders

- Dual Shear Protection for Hammernill
- Remote Control
- Magnetic Head Pulley for Metal Separation
- Steel Infeed Belt
- Self-Adjusting Hydraulic Clutch
- Fold Down Infeed Tailgate
- Enclosed Engine Cover with Dual Access Doors

205-640-5181



Miscellaneous

WE BUY PLASTIC \$CRAP!

- BY THE TRUCKLOAD
- ALL GRADES, POST-INDUSTRIAL PLASTIC
- PROMPT PAY & PICK UP IN 48 STATES
- EXCELLENT CREDIT, TRADE REFERENCES
- A+ RATED BBB COMPANY
- 10+ YEARS IN BUSINESS

843-410-0326

SNAG Economical Compliance with

CAR-Go-Net®

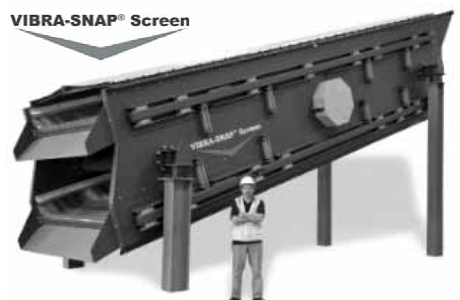
- Fused joints won't unravel
- Easy to apply in a single pass
- Multiple sizes in stock for immediate shipment

INDUSTRIAL NETTING

800-328-8456

www.industrialnetting.com

SEPARATION SOLUTIONS ENGINEERED for TONNAGE



PATENTED FLIP-FLOW TECHNOLOGY

ACTION VIBRATORY EQUIPMENT
Actionconveyors.com
503-537-1111

WE HAVE THE STAINLESS STEEL SEPARATION SOLUTIONS YOU NEED



Remove up to 94% of large fraction stainless steel (5" minus in size)

800-835-2526

BUNTING Magnetics Co.

www.buntingmagnetics.com

Miscellaneous

WE BUY AND SELL USED RECYCLING EQUIPMENT

HOVDE RECYCLING EQUIPMENT
800-617-5219 TEXT 320-760-5688
scrapequip.com steven@scrapequip.com

Hi-efficiency, new technology. INCREASE PROFITS! SWEAT FURNACES



US Furnaces's MAX-4000
Also: PARTS • REPAIR • CUSTOM BUILDS
518-424-1168
www.RecyclingFurnaces.com

THE ORIGINAL CATALYTIC CONVERTOR REMOVAL TOOL: Our powerful and easy-to-use products are unsurpassed and we've been making them for 20 years! Choose from 110 or 12-volt, gas or de-canning models. Our three hydraulic models are fast, safe and effective. Custom applications provided as well! 800-999-8100, www.supershears.com



LET'S BUILD YOUR IDEAL STRUCTURE

www.clearspan.com 1.866.643.1010

Software

U-PULL IT SOFTWARE: Get more from your U-Pull It yard and simplify searches. Our product helps you buy cars, create a detailed inventory and then all ties to a point of sale system designed specifically for your business. View demos at our website. Call today! 801-355-3388 or visit www.s3softwaresolutions.com.

Tire Recycling

Manufacturer of tire reduction systems since 1991.



SIDEWALL CUTTERS DEBEADERS • DERIMMERS

Visit www.eagle-equipment.com to see our full line of tire-recycling equipment.

Lyons, NE | 800-755-8473 | eagle@brehmer.com



NEXT DEADLINE: July 18! Call us at 877-777-0043 or visit us online 24/7 at www.AmericanRecycler.com

BUSINESS BRIEFS

NRRA names Bissonnette as executive director

■ The board of trustees for the Northeast Resource Recovery Association (NRRA) has selected Reagan Bissonnette of Concord, New Hampshire, to serve as the NRRA's next executive director.

Bissonnette is currently the senior director of easement stewardship & counsel at the Society for the Protection of New Hampshire Forests, one of the country's largest and most effective land conservation organizations. Prior to joining the Forest Society, Bissonnette practiced law as a corporate attorney at Ropes & Gray, LLP, a global Boston based law firm.

Bissonnette joins the NRRA with a strong background in non-profit management and the law. While at the Forest Society, Bissonnette has led one of the organization's largest departments, advised the Forest Society on legal matters, and leveraged technology to support the organization's mission. As a corporate attorney at Ropes & Gray, LLP, Bissonnette worked on complex mergers and acquisitions and advised for-profit and non-profit clients on best practices in corporate governance.

The NRRA's outgoing executive director, Mike Durfor, announced earlier this year that he will retire from his position at the NRRA after 10 successful years growing the organization.

Bissonnette received her law degree from Boston College Law School and a degree in Biology from Washington University in St. Louis.

Vortex expands into Czech Republic and Slovakia

■ Vortex Global Limited, a solids and bulk handling components company, announced the appointment of MillTech CZ sro as its representative agent in Czech Republic and Slovakia. This partnership allows Vortex to formally extend its products and services to reach new markets, as the company has not previously held representation in Czech Republic and Slovakia.

MillTech CZ sro is active in many industries, including food, chemicals, pharmaceuticals, and crystalline substances, among others. MillTech CZ sro seeks to establish strong relationships with Vortex customers through outstanding after-sales service and technical support.

PLASTICS names director of industry standards

■ The Plastics Industry Association (PLASTICS) welcomed Jennifer Jones as its new director of industry standards to lead the association work on domestic and international industry codes and standards. In this role, Jones will develop, implement and manage PLASTICS' American National Standards Institute Standards Program.

Jones most recently served as a senior standards associate with the American Petroleum Institute (API). Previously, Jones was a quality associate with API, where she reviewed quality system and manufacturing process audit reports.

Adesa appoints new leaders to two divisions

■ ADESA, a business unit of global vehicle remarketing and technology solutions provider KAR Auction Services, Inc, announced that Matt Laughridge has been named general manager of ADESA Mobile Auctions. Laughridge brings nearly two decades of industry experience to the newly created role.

Laughridge joined the auto remarketing industry in 1999 and has rich experience in both auction management and sales roles. He most recently served as director of mobile auction sales and operations at Manheim.

Sawyer Walker has been promoted from regional to national manager of ADESA UVA, the company's program of dealer-to-dealer sales.

Walker was managing the UVA program for Brasher's Auto Auctions when ADESA purchased the auction group in 2016. He continued in that role until he was promoted to regional UVA manager for ADESA in 2018. He had previously served in a sales role for Brasher's.

ADESA is expanding UVA sales with an additional bi-weekly UVA sale at ADESA Las Vegas and a weekly UVA sale at ADESA Dallas expected to launch this summer.

Vecoplan selected by Brightmark Energy

■ Vecoplan, LLC, a North Carolina-based manufacturer of waste recycling equipment, has been awarded a contract to design and build the front end material processing and preparation system for Brightmark Energy's new plastics-to-fuel plant in Ashley, Indiana. Vecoplan's prep system will incorporate a variety of technologies engineered to deliver feedstock that meets specifications vital to the plant's successful production of transportation fuel.

Slated for completion in mid-2020, Brightmark's Ashley facility will produce more than 18 million gallons of ultra-low-sulfur diesel and naphtha blend products and six million gallons of commercial-grade wax each year. Feedstock for Brightmark's Ashley, Indiana plant will include over 100,000 tons of mixed plastic scrap per year. This landfill diversion material will consist of single use and other post-consumer plastics, residuals from material recovery facilities and plastic waste streams.

Highlights of the system include a Vecoplan VAZ 2000 MFTV pre-shredder to achieve a homogenous aggregate size, induction and optical sortation and a Vecoplan VEZ 2500T re-shredder for final sizing of the feedstock.

Wife: "There's trouble with the car. It has water in the carburetor."

Husband: "Water in the carburetor? That's ridiculous."

Wife: "I tell you the car has water in the carburetor."

Husband: "You don't even know what a carburetor is. Where's the car?"

Wife: "In the swimming pool."

Okada America names LaCorte product manager

■ Okada America, Inc. has announced that Sal LaCorte has been hired to the position of product manager – demolition/recycling/scrap. In his new position, LaCorte will be responsible for the development of the sales activity for the Rotar attachments within Okada's non-impact tools division including demolition, recycling, scrap handling and mobile shear products.

The addition of LaCorte to the Okada sales team will strengthen the Okada and Rotar Distributor networks in their ability to service existing and future customers in the non-impact tools division.

LaCorte is a veteran of the construction equipment industry with over 25 years in the industry which includes previous stints with Allied, LaBounty, NPK and Rotar. His experience at the manufacturing level includes product engineering systems design, territorial field sales management and OEM sales management. LaCorte has served on the Institute of Scrap Recycling Industries, Inc.'s (ISRI) Government Relations and Convention Committee and the Associated Equipment Distributors (AED) Government Relations Committee.

Takeuchi names Western Tri State as new dealer

■ Takeuchi-US, a company in compact equipment, has named Western Tri State Equipment as a new dealer. Western Tri State Equipment, a division of Mesquite Ace Lumber, is located in Nevada and serves customers throughout Southern Nevada, Southern Utah and Northwest Arizona.

Mesquite Ace Lumber Hardware, established in 1987, offers construction rentals, garden and patio, electrical, building supplies and hardware. Over recent years, the dealer has had rising requests for compact equipment. The addition of Takeuchi equipment will fill the void.

The new dealer will carry the full lineup of Takeuchi products, including excavators, skid steer loaders, track loaders and wheel loaders, in addition to stocking parts and performing equipment repair.

Demolition attachment businesses form alliance

■ Okada America, Inc. and Rotar International BV will enter into a joint alliance of their demolition attachment businesses in the North American marketplace effective January 1, 2019.

The joint alliance was created to offer customers more options in demolition, recycling and scrap yard attachments. The joint alliance will strengthen the Okada and Rotar Distributor networks in their ability to service existing and future customers.

Okada will provide sales, service, parts and warranty support for the Rotar products along with continuing to support the existing population of Okada products in the field.



There are MUCH better ways to get new business.

Go on inside, put your feet up and give us a call. We'll design the ads for you, for free. Now *that's* value.

FREE
AD
DESIGN

877-777-0043
www.AmericanRecycler.com

OVER
34,000
READERS

E-Z CRUSHER DEAL

- **2 Year Warranty**
- **Remote Automation**
- **Hydraulic Outriggers**
- **Air Compressor**



PRICED WITH A TIER 3 DIESEL POWER PLANT

\$165,000

**LIST
PRICE**

-10,000

**OFF THE
2018 MODEL**

\$155,000

With only a \$10,000 ORDER DEPOSIT
(which is 5x lower than competitor's deposit!)

**or with approved financing
from DADECapital.com!**



R.M. Johnson Co. • Annandale, Minnesota

800-328-3613 | 320-274-3594 | Fax: 320-274-3859

EZCrusher.com | davev@ezcrusher.com

IRON AX ENVIRO-RACK

ALL ENVIRO-RACKS ARE MADE IN AMERICA WITH AMERICAN STEEL FOR AMERICAN-SIZED CARS.

The Enviro-Rack is the most superior auto fluid removal and dismantling system on the market today!

**Complete fluid removal
in less than 5 minutes!**

Includes a
Gas Separation System



Keep the good gas!



IRON PACK BALER

**Bale a CAR in
ONE minute!**



Remote Control • Automatic Cycle

 **RECYCLING**
EQUIPMENT SALES, INC

Toll-free 877-247-6629

Fax 478-252-9030
Wadley, Georgia

Website: www.ironax.com
E-mail: ironax@ironax.com

**Equipment Ready For
Shipment Today**

Contact us for full details!



IRON AX SHEAR PACKAGES

All shears feature 360° continuous rotation.

You  Tube™

View the Iron Ax YouTube Channel
to see the Iron Pack Baler
In Action Today!

LEED certification drives C&D recycling

by MAURA KELLER

mkeller@americanrecycler.com

Today's construction and demolition (C&D) material handling has evolved from a single stream, disposal only methodology to a multi-stream waste management process that requires more active management.

Using LEED as a primary guide, the green building certification has driven the shift in the awareness and the pursuit of recycled materials, both in terms of waste diversion and in new material recycled content according to Tim Murray, director, sustainability EYP, Inc., a leading architectural firm.

"C&D waste diversion has improved significantly in the past two decades in response to these LEED thresholds," Murray said. "Our LEED building projects typically have a C&D waste diversion rate of about 80 percent. And the evolution continues as the most recent version of LEED has made construction waste planning a prerequisite with anticipated diversion rates. But LEED has stopped short of requiring a certain percentage of waste diversion."

In addition to LEED, increased landfill tipping fees in many areas of the country spurred development of a robust recycling industry. Because of its relative ease, many contractors recycle waste as a standard practice now regardless of whether a project is pursuing certification or not.

"Multiple sources have driven the increase in recycled content in building materials," Murray said. "Green building certification requirements have played a part. But market forces for specific industries make recycling more economical, such as the steel industry using locally sourced waste steel."

Globalization of the building material market has also influenced the U.S. market. As Murray explained, the introduction of materials from Europe where environmental awareness and regulations have been in place for much longer has spurred domestic manufacturers to increase recycled content in



Various methods are being implemented in construction and demolition that utilize recycled or salvaged materials, sometimes including entire buildings that are gutted and repurposed. These practices lessen the need for virgin materials in construction.

PHOTO COURTESY OF NATIONAL DEMOLITION ASSOCIATION

their products or at the very least create documentation of the recycled content.

"Our projects average a total of 20 to 25 percent in recycled content by material cost," Murray said.

According to Andrew Schuster, a partner at Ashley McGraw Architects, a number of different movements, all of which include an increased awareness of the negative impact of construction waste, have converged to change the way waste materials are handled.

As Schuster explained, LEAN construction – an offshoot of LEAN manufacturing methods that focuses on reducing construction cost by reducing material and time waste – has evolved and adjusted design standards to reduce material cutoffs and improve standardization and off-site construction.

"LEAN also emphasizes just-in-time delivery which reduces damage and waste of new materials, thus reducing diversion to the waste stream,"

Schuster said. "At the same time, green building standards such as USGBC's LEEDv4 and ILFI's Living Building Challenge have gained popularity in the design world and these standards require diversion of recyclable waste out of the disposal stream."

Recycled content also has evolved from a stand-alone attribute to part of an overall performance path for specific materials, or entire buildings, through Life Cycle Analysis (LCA).

According to Murray, product LCAs are distilled into Environmental Product Declarations (EPDs) to use as disclosure tools of a product's environmental impact. In the U.S., the certification organization UL has 965 product specific EPDs on its website. In Europe, Envirodec hosts more than 650 EPDs.

"Whole-building LCA is impacted positively with the inclusion of recycled and salvaged materials as they

reduce the use of virgin materials and the associated raw material extraction process," Murray said. Steel has the highest recycled material rates based on typical project building data. According to Murray, it is the only material that has a default recycled value for LEED tracking if no manufacturer's data is available. LEED gives a default recycled content of 25 percent to steel.

"In reality, steel's recycled rates are much higher. Looking at a Nucor 2015 product list, recycled rates in their steel products range from 48.6 percent to 99.8 percent," Murray said. "Glass seems like a natural source of recycled content, and it is for consumer products."

However, the exacting demands of modern glazing to achieve energy efficiency levels requires high purity virgin materials for quality control."

One of the most significant waste streams in demolition is gypsum board. "There is a debate about the wisdom of using old gypsum board as a soil amendment. There are wall taping systems on the market that allow for the removal and reuse of gypsum board, but they have yet to find large scale use," Murray said.

Robert Fish, vice president of the commercial division for Marker Construction Group, says certain materials such as concrete can easily be dumped for a lower cost than mixed materials with wood, drywall or paint.

Composite materials are inherently more challenging to recycle. Manufacturer take back systems fill some of that void. Manufacturers can reuse old materials to create new products with minimal processing.

"Acoustic ceiling tile and carpet manufacturers have readily adopted these programs with some manufacturers even taking back competitors' products," Murray said.

Interior finishes are often wasted because items such as drywall and floor coverings come in large format raw

See LEED, Page B5

STEEL, CARDBOARD, COPPER, ALUMINUM... and TONS MORE!

MAREN
Balers & Shredders
Building customer loyalty since 1962.

THE REASON TO LOOK AT MAREN JUST GOT BIGGER!

The NEW wide-box ProPak 2R350 2-Ram baler delivers maximum performance and speed. Available up to 225hp. and boasting an 80" chamber box. ALSO new to the ProPak line-up are the 2R210, 2R265, and the 2R285.

Achieve Bigger Results...Bigger Bale Weights...Bigger Margins!

ProPAK 2R350
high capacity two ram baler

marenengineering.com
800-875-1038
sales@marenengineering.com

Construction employment increases in metro areas as demand for work outpaces supply of workers



Sixty-nine percent of metro areas have increased their construction employment according to a recent analysis by the Associated General Contractors of America.

PHOTO BY JASON GOH | PIXABAY

Construction employment grew in 250 out of 358 metro areas between April 2018 and April 2019, declined in 53 and was unchanged in 55, according to a new analysis of federal employment data released by the Associated General Contractors of America.

Association officials said construction employment in many parts of the country likely would have been higher if firms could find more qualified workers to hire.

“Demand for construction is steady or rising in most parts of the country, and many contractors are adding workers when they can find them,” said Ken Simonson, the association’s chief economist. “At the same time, many firms report they would have hired even more employees if only they could find enough qualified workers.”

The Phoenix-Mesa-Scottsdale, Arizona metro area added the most construction jobs during the past year (16,600 jobs, 14 percent).

Other metro areas adding a large amount of construction jobs during the past 12 months include Dallas-Plano-Irving, Texas (9,200 jobs, 6 percent); Los Angeles-Long Beach-Glendale, California (8,400 jobs, 6 percent); Atlanta-Sandy Springs-Roswell, Georgia (7,000 jobs, 6 percent) and Las Vegas-Henderson-Paradise, Nevada (6,800 jobs, 11 percent).

The largest percentage gain occurred in Monroe, Michigan (26 percent, 500 jobs) and St. Cloud, Minnesota (26 percent, 1,500 jobs), followed by Auburn-Opelika, Alabama (25 percent, 600 jobs) and Norwich-New London-Westerly, Connecticut-Rhode Island (16 percent, 600 jobs).

The largest job losses between April 2018 and April 2019 occurred in

Charlotte-Concord-Gastonia, North Carolina-South Carolina (-2,600 jobs, -4 percent), followed by Baton Rouge, Louisiana (-1,800 jobs, -3 percent); Hartford-West Hartford-East Hartford, Connecticut (-1,600 jobs, -8 percent) and Longview, Texas (-1,300 jobs, -9 percent).

The largest percentage decrease took place in Gulfport-Biloxi-Pascagoula, Mississippi (-13 percent, -1,200 jobs) and Atlantic City-Hammonton, New Jersey (-13 percent, -800 jobs), followed by Niles-Benton Harbor, Michigan (-12 percent, -300 jobs); Evansville, Indiana-Kentucky (-9 percent, -1,000 jobs) and Longview, Texas.

Association officials said that even though construction employment continues to expand in many parts of the country, workforce shortages remain problematic for many contractors eager to keep pace with strong demand.

They urged federal officials to boost investments in career and technical education and to enact immigration reform that allows more men and women with construction skills to legally enter the country. They also urged state and local education officials to establish more school programs that offer exposure to essential construction skills.

“One reason relatively few young adults choose to pursue rewarding careers in construction is because not many of them are being told it is an option to consider,” said Stephen E. Sandherr, the association’s chief executive officer. “We have a lot of contractors looking for workers so they can keep up with the amount of work that is out there.”

U.S. Green Building Council receives \$500,000 grant for LEED for cities and communities program

The U.S. Green Building Council (USGBC), creators of the Leadership in Energy & Environmental Design (LEED) green building program, announced a new \$500,000 grant from Bank of America. The funding supports the LEED certification of 15 U.S. cities and communities. The grant provides financial assistance, educational resources and technical support throughout the certification process. USGBC and Bank of America launched the LEED for Cities and Communities grant program with six U.S. cities in 2018.

“To realize a sustainable future for all, today’s cities and communities must strive to be green, resilient, inclusive and smart,” said Mahesh Ramanujam, president and chief executive officer, USGBC. “The LEED for Cities and Communities Certification Programs give leaders a framework for planning, designing, measuring and managing the social, economic and environmental performance of the places where they live, work, learn and play. With support from Bank of America, we will empower these grant recipients to deliver a higher living standard for their residents.”

LEED is the world’s most widely used green building rating system, and earlier this year, USGBC released the newest version of the program, LEED v4.1. The U.S. cities and communities that will benefit from the 2019 grants are the first to pursue LEED v4.1 certification and include:

- Albuquerque, New Mexico
- Baltimore, Maryland
- Birmingham, Alabama

- Bloomington, Indiana
- Cincinnati, Ohio
- Greensboro, North Carolina
- Las Vegas, Nevada
- Miami, Florida
- Orange County, New York
- Orlando, Florida
- Pueblo County, Colorado
- Rancho Cucamonga, California
- Royal Oak, Michigan
- Santa Fe, New Mexico
- Shaker Heights, Ohio

LEED helps local governments develop and track plans for a wide variety of factors, including green infrastructure, public health, energy, social equity, transportation and more. More than 90 cities and communities globally have already been certified through the LEED for Cities and Communities programs.

Bank of America is a longtime member of USGBC and has pursued LEED certification for its own operations. Presently, the company has 19 million square feet of LEED certified workspace, including more than 200 LEED certified financial centers.

The bank previously supported USGBC’s Affordable Green Neighborhoods Program, which provided assistance to eligible nonprofit and public-sector developers of affordable housing to ensure that every new unit of affordable housing meets the highest standards of sustainability and offers residents the healthiest communities possible. In total, Bank of America has provided \$2.5 million in grants to USGBC since 2011.

Construction industry groups urge White House to review federal funding of building materials

Several construction industry groups sent a letter to the White House urging Larry Kudlow, director of the National Economic Council, to review the use of taxpayer dollars to projects that promote one building material over others.

The American Concrete Pumping Association, American Institute of Steel Construction, American Iron and Steel Institute, California Construction and Industrial Materials Association, Concrete Reinforcing Steel Institute, National Concrete Masonry Association, National Ready Mixed Concrete Association, Oregon Concrete & Aggregate Producers Association, Portland Cement Association, Steel Framing Industry Association and Steel Manufacturers Association expressed disappointment at the U.S. Department of Agriculture’s awarding of more than \$8.9 million in federal funds for 29 projects designed to expand markets for wood products, particularly mass timber, for building construction.

While acknowledging the increase in cross laminated timber (CLT) projects domestically in recent years, the letter expressed concern about key questions that still exist about the performance of CLT on a large scale. “While it is important to resolve the answers to these concerns, it is not appropriate for the federal government to provide funding to obtain them, nor to provide funding to advance those materials in the marketplace while those questions exist,” the letter claims.

“We hope you agree that these grants unfairly promote, at taxpayer expense, one building material – mass timber – in the construction materials marketplace. This would advance an unbalanced promotional program for only timber products. In any event, the federal government should not be in the business of picking winners and losers among competing materials in the construction marketplace by so blatantly putting its thumb on the scale in favor of wood products,” the letter concluded.

Brokk adds service training center with additional fleet managers in Missouri



Brokk, a manufacturer of remote-controlled demolition machines, has opened the doors to its new Demonstration and Service Center in St. Joseph, Missouri, expanding its North American coverage and bringing the number of Brokk locations to three.

Randy Glidewell and Mike Brott join the Brokk team at the new facility. Glidewell takes on the leadership position as Brokk fleet service manager, with Brott in the role as service technician.

With the acquisition of Aquajet Systems AB in 2016, Brokk realized there was a need for a centralized location in the Midwest to demonstrate machines from both companies.

The 10,000 square foot facility incorporates an outdoor proving ground with various concrete structures to prove out the power and precision of

Brokk and Aquajet products, including simulated Department of Transportation materials and steel reinforcement configurations.

The building houses an extensive inventory for both companies, including a Brokk service fleet of over 20 machines, for demonstrations, purchase or lease, giving customers the opportunity of a hands-on experience to help them choose the Brokk and Aquajet models and attachments best suited to their needs.

In addition to demonstrations, the site offers a complete service complex with a wash bay, workshop and welding station. This feature allows for more convenient access and quicker turnaround on service. Several Brokk customers have already sent in their older machines for refurbishing.

Recycle Colorado challenges contractors

Recycle Colorado, in partnership with GE Johnson Construction Company and supported by the Colorado Department of Public Health and Environment, kicks off the 2019 Colorado Contractors Challenge. The Contractors Challenge is a free program that assists participants with waste-management plans, on-site recycling training, recycling signage, and collaboration with construction and demolition (C&D) recyclers.

"This is a great opportunity for contractors to increase construction and demolition recycling on projects that currently haul most waste to the landfill," said Recycle Colorado program director Heather Miner.

Contractors select a project in Colorado and identify what green practices may already be in place. Contractors are then asked to pledge to improve their sustainability efforts from a list of 15 options. The level of commitment depends on the project selected and is

tailored to each company's size and goals.

"PCL is excited to participate in the Colorado Contractor's Challenge," said PCL Construction Enterprises Inc. director of sustainability Scott Beckman. "Waste diversion is an area where contractors can take a direct role in finding cost-effective ways to reduce the immediate environmental impacts of construction. We look forward to learning and sharing best practices to improve recycling and reuse opportunities in Colorado."

The accomplishments of participants will be highlighted in a recognition ceremony in the first quarter of 2020. Participants are also recognized on the Colorado Contractor's Challenge website.

For a direct link to the challenge, view this article on www.AmericanRecycler.com.

The National Demolition Association commits to safety

According to the U.S. Bureau of Labor Statistics, more than four million workers suffer from serious job-related injuries or illnesses each year, and more than 4,000 Americans die from work-related incidents annually. The National Demolition Association (NDA) has made safety a priority so that all of its workers return home to their families and loved ones safe and sound every day. NDA will participate in Safe + Sound Week, August 12 to 19, 2019.

Safe + Sound Week—co-sponsored by the Occupational Safety and Health Administration (OSHA), the National Safety Council (NSC), the American Industrial Hygiene Association (AIHA), the American Society of Safety Engineers (ASSE) and the National Institute for Occupational Safety and Health (NIOSH) — is a nationwide effort to raise awareness and understanding of the value of safety and health programs that include management leadership, worker participation, and a systematic approach to finding and fixing hazards in workplaces.

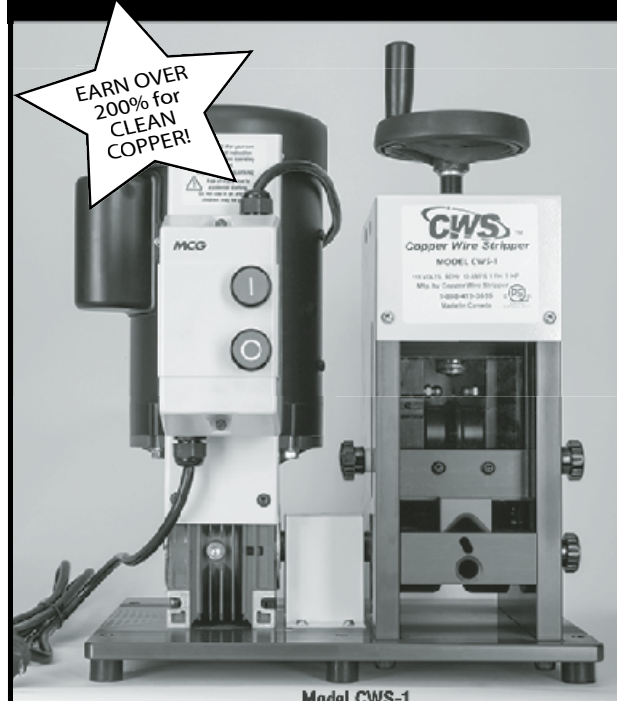
"A strong safety and health program is one of the most effective ways to prevent workplace fatalities, injuries, and illnesses, which not only hurt workers and their families, but also cost businesses money that could be used to grow the organization, create jobs, and improve competitiveness," said Dorothy Dougherty, deputy assistant secretary of labor for Occupational Safety and Health.

During Safe + Sound Week, the National Demolition Association will showcase its commitment to safety and health through management leadership, worker participation, and finding and fixing workplace hazards. Senior leadership and workers will collaborate to identify ways to keep their workplace safe and sustainable for the future, through a series of webinars, podcast and articles.

NDA president Chris Godek stated the importance of the Safe + Sound Campaign, "The National Demolition Association, represents demolition contractors and their associates worldwide. Our customers, partners, and stakeholders, can rest assured, knowing that our members treat safety as our most important priority. It is NDA's unequivocal goal for every person involved in the demolition process, from truck driver to chief executive officer, to return home to his or her families each day."

"Our pledge is to provide the valued resources needed to accomplish this attainable goal. The culture of safety begins at the top. As the leader of NDA, I ask you to join me, and my colleagues, in welcoming this partnership as another step in our task of informing and educating our members. It is our belief that a work place with zero incidences is possible. Programs and strategic alliances will make this a reality. Making a living should not cost a life," Godek concluded.

SAVE \$\$\$!!! SAVE \$\$\$!!! SAVE \$\$\$!!!
QUICK & EASY RECOVERY
of
COPPER & ALUMINUM



- Strips 110 ft/minute
- Self feeding
- Easy to maintain
- Runs on 110 volts
- Adjustable wire guides
- 1 year warranty
- Manufactured by:

CWS
Copper Wire Stripper Limited
 888-419-3555
www.copperwirestripper.com
 Special terms for rental stores Made in Canada

EQUIPMENT SPOTLIGHT

Concrete Crushers

by **MARY M. COX**

maryc@americanrecycler.com

Concrete is typically a ubiquitous material in construction and demolition settings. Concrete is heavy to handle and to transport. If sent to a landfill, concrete can further add to processing costs. Recovery and processing of the material can be aided though the use of concrete crushers.

For nearly 30 years, the IROCK Crushers Company has manufactured mobile and portable crushing and screening plants, conveying equipment and other related products for the demolition, recycling, and aggregate industries. Products are designed and manufactured with both dealer and end user in mind, with a focus on the contractor and recycling market.



IROCK Crushers LLC

“Our robust equipment increases production and profits while also reducing downtime and operational expenses. In addition to a premier product line that is easy to service and operate, IROCK provides expertise and outstanding service and support from a staff of industry experts,” Fred Gross, sales and development director, stated. The IROCK warehouse is stocked with wear and replacement parts, readily available to support dealers and end users. The firm’s after-market sales and service team provides round-the-clock and weekend availability, to support any emergency.

Producers and contractors frequently face the challenge of downtime and lost profits – a result of lengthy setup and takedown times on units. “Unlike most plants, IROCK’s hydraulic setup functions allow the machine to be set up and ready to operate in minutes. This provides a producer with maximum production time and the ultimate user-friendly experience. Our TC-15CC horizontal impact crusher is the ultimate processing machine for the recycling market. The machine’s 37 x 43” inlet opening is the largest in its class. Designed primarily for the small to medium sized contractor, the crusher easily handles C&D recycling challenges with materials such as concrete, asphalt and bricks. Also, it can be

operated in the most demanding recycling applications and with extreme efficiency with pre-screen, under crusher pan feeder and cross-belt magnet operations. The return conveyor can also articulate out perpendicular to the machine, to stockpile oversize and midgrade product,” concluded Gross.

Kinshofer, a manufacturer of high quality excavator and loader crane attachments, manufactures the WS Drum Cutter Series of products. The drum cutters feature an exclusive pick angle and optimal chisel arrangement for high performance and minimal wear, making the attachments ideal for many industries, including demolition. Francois Martin is North America general manager at the company and he said, “Years of engineering and manufacturing have shaped the

WS-Series Drum Cutters into precise rock breaking units that maximize efficiency and outperform the competition. Application specialists work with contractors to choose the best drum and chisel for their specific application, minimizing noise and vibration while optimizing performance. Drum cutters are a quieter alternative to hydraulic breakers and the WS-Series of products are some of the quietest in the industry, making them excellent for use in areas with noise restrictions. They also produce less vibration than breakers, so contractors can use them where there’s a risk of disturbing a nearby structure’s foundation.”



Kinshofer

Martin reports that Kinshofer has a drum to match any application. The rock drum effectively breaks soft to medium-hard rock in with its strategic chisel pattern while the profiling drum’s higher density of chisel shapes and levels soft to medium-hard rock in other applications. The demolition drum offers reduced vibrations due to a wear-protected spiral sheet and is ideal for cutting medium-hard to hard rock as well as concrete.



Metso

Selecting the proper chisel and drum combination is key to optimizing performance and reducing attachment wear. Kinshofer’s application specialists work closely with customers to understand applications and material conditions so they can recommend the best drum and chisel tip for each situation. WS-Series Drum Cutters are available in 7 models for 2 to 60 ton excavators. For added versatility, the attachment can be paired with Kinshofer’s NOX Tiltrotator, which enables 360° continuous rotation and multi-directional tilting up to 55°.

Metso manufactures the Lokotrack® LT1213 and LT1213S mobile crushing and screening plants for recycling applications. The Lokotrack LT1213S is a fully equipped mobile impactor plant with a high capacity, dual-slope screen and return conveyor. The LT1213 has the same features and options without the screen or return conveyor. Both plants can be docked in a few minutes and fine-tuned for top soil, concrete, asphalt, and demolition waste recycling applications with features like vibrating grizzly or pan feeder under the crusher.

“The LT1213 and LT1213S are built around the powerful Caterpillar® C13 diesel engine and Metso’s dependable NP1213M impact crusher. The plants are designed to operate together with other Lokotrack mobile crushing and screening models and can be transported as a single unit on a low-bed trailer. Our advanced gearbox comes standard for either machine. The gearbox provides the most efficient crusher drive system on the market with assisted start and brake. Optimized hydraulic circuit with independent fan and stand-by function reduces noise when idling and saves up to 20 percent on fuel consumption, meaning more power for the crusher. A hydraulic radial return conveyor also makes the LT1213S easy to operate in closed and open circuits. Crusher service rotation is done by 24V hydraulic power pack. Easy-to-use tools are provided to help change blow bars and breaker plates,”

MANUFACTURERS

Eagle Crusher Company, Inc.
Greg Spina
419-468-2288
www.eaglecrusher.com

Genesis Attachments
David Palvere
715-395-5252
www.genesisattachments.com

IROCK Crushers LLC
Fred Gross
866-240-0201
www.irockcrushers.com

Kinshofer
Francois Martin
905-335-2856
www.kinshofer.com

KPI-JCI
Darren Kirby
540-966-3677
www.kpijci.com

McLanahan Corporation
Gerald Mangrich
319-369-5416
www.mclanahan.com

Metso
Stephanie Kaminski
717-843-8671
www.metso.com

Okada America, Inc.
Jim Brown
800-270-0600
www.okadaamerica.com

Sandvik Mining and Construction
Joy Smith
800-826-7625
www.mc.sandvik.com/us

Screen Machine Industries, Inc.
Tim Miller
740-927-3464
www.screenmachine.com

Telsmith, Inc.
Jeff Gray
800-765-6601
www.telsmith.com

Terex Minerals Processing Systems
Ed Sausser
319-363-3511
www.terexmps.com

explained Ben Hansbury, vice president, distribution sales.

OKADA. ON THE JOB.

DOING THE JOB.



www.okadaamerica.com

LEED

■Continued from Page B1

goods that must be cut in the field. “Other sheet goods such as plywood and gypsum sheathing products face similar issues with waste and are often not diverted into the recycling stream even when options for recycling are available,” Schuster said. “Metals, such as steel for framing and studs, are often fabricated off-site and have lower waste levels, and are easy to recycle because of existing recycling infrastructure.”

C&D Recycling Challenges

Recycling rates of construction and demolition waste have always been dependent upon project location and recycling infrastructure in the area, but recycling might be becoming a victim of its success.

“With China’s recent increase in material quality and purity requirements, there is a growing backlog of waste material,” Murray said. “For construction waste diversion, we’ve recently experienced contractors reluctant to commit to LEED’s higher threshold of 75 percent, a level that used to be a given. In some markets, contractor waste loads are being refused simply because the recyclers have too much material.”

Also, as Murray explained, some contractors have had to return to on-site sorting to ensure load purity.

“LEED is edging the industry toward site sorting as it now requires individual waste streams to be considered when creating waste management plans,” Murray said. “If co-mingling is chosen, the facility either has to provide project specific percentages for each

waste component or must use the average facility diversion rate, which is municipally or state regulated. After years of moving toward co-mingling waste and making recycling more convenient for consumers, these new purity demands are causing a shift in processes and policies.”

But with on-site sorting comes purity issues. As Schuster explained, the biggest challenge in proper handling is education and management of the on-site crews. Here’s why: The workers on construction sites often work for multiple different businesses, are dealing with different waste management standards and source separation issues on every project.

“In their own push to get their specific scope done, workers may be less strident in managing their own material waste in efforts to meet scheduling constraints,” Schuster said. “Construction managers also have to deal with varying waste management standards on their projects, and the issues of obtaining accurate pricing from waste haulers to take advantage of multi-stream waste disposal. They may not understand where in the process they can capture value and less sophisticated haulers may not have a clear enough picture of the costs and savings to provide clean bids.”

Long term, Murray said, there needs to be increased demand from product manufacturers for recycled feedstocks and materials. The supply/demand cycle is there, but it has yet to find its balance.

On the Horizon

So what does the future of C&D waste handling look like? Murray said that the future will focus on avoiding and reducing waste in the first place. The



A growing backlog of materials destined for recycling has prevented some areas from properly disposing of C & D waste.

PHOTO BY PHOTOVS | DREAMSTIME

latest version of LEED, version 4.1 has added a new option in the Construction and Demolition Waste credit to reduce total waste material “utilizing on-site waste-minimizing design strategies for new construction activities.”

Fish also stressed that the future of construction is recycling. “It will call for additional segregation of waste into different ‘piles,’ which will require room and manpower to accomplish,” Fish said. “In the end, there will be costs that flow downstream to the owners and consumers.”

“The new criteria limits waste generated to less than 7.5 pounds per square foot – 2.5 pounds per square foot for warehouses. What will these strategies entail? New approaches will be fleshed out over time, but one is modular construction which can offer significant efficiencies,” Murray said.

For Schuster, the future is in deconstructable and demountable building materials that can be refurbished and re-

used in future projects. This will require careful building demolition of components that have future value, but these components will be able to be re-sold as a separate business model.

“This is already happening at small scales in the demolition of historic homes, where items such as doors, railings, trim, floors, and even wall studs are removed and then re-sold for use in restoration projects or new construction that is looking for unique materials,” Schuster said. “In the commercial building world, elements such as curtain wall framing and interior glazing and door systems may evolve into re-useable rather than recyclable products. Even in products that are not designed for re-purposing, I envision that end of life will become a larger part of the material selection process. Compostable building materials are also entering the marketplace where appropriate, and it will be interesting to see how waste handlers adapt to utilize these materials.”

LET'S BUILD

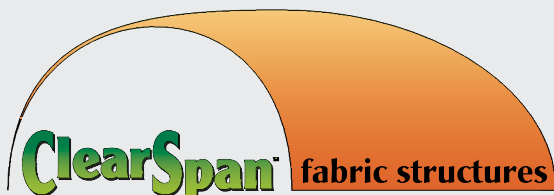
YOUR IDEAL STRUCTURE



Sourcewell
Formerly NJPA

Awarded Contract

Contract # 030117-CSS



To find out how we can help with your structure needs visit or call
www.clearspan.com 1.866.643.1010

FOR NEARLY 40 YEARS CLEARSPAN

has been helping companies maximize profits with superior building solutions



Energy
Efficient



Superior
Warranties



Expert
Project Managers

No Money Down Financing, Terms Up To 7 Yrs and As Low As 5.99% on buildings

NEW PRODUCT SHOWCASE



BOBCAT COMPANY INTRODUCES THE NEW BOB-DOCK™ SYSTEM

A hands-free hydraulic attachment mounting system, the Bob-Dock is designed for strong, easy and repeatable hydraulic connections, without operators leaving the loader cab. The Bob-Dock system will be available for M2-Series compact track loaders; S630, S650, S740 and S770 skid-steer loaders; and the A770 all-wheel steer loader.

The Bob-Dock attachment mounting system's floating coupler block equips loaders with a hands-free connection point, the standard couplers remain ready to use. The full lineup of approved Bobcat attachments can be utilized – with or without the Bob-Dock adapter plate attached.

Bobcat Company
250 E Beatonn Drive
West Fargo, ND 58078
877-745-7814
www.bobcat.com



DOOSAN INTRODUCES 3 NEW MODELS OF MINI EXCAVATORS

Doosan Infracore North America, LLC, is bolstering its mini excavator lineup with the addition of three new models in the 3.5, 4 and 5 ton classes: the Doosan® DX35-5, DX42-5 and DX50-5.

Customers can choose between a standard arm or a long arm option. A blade comes standard with all models, and an angle blade is available to make it easier to perform backfill tasks more efficiently. All three can be equipped with a quick coupler, bucket and thumb attachment package to easily change attachments to match the trenching task to the desired bucket width, minimizing over-digging.

Doosan Infracore, LLC.
2905 Shawnee Industrial Way
Suwanee, GA 30024
678-714-6000
www.doosanequipment.com



HITACHI DELIVERS TOP RANKING ZW550-6 WHEEL LOADER

Hitachi's ZW550-6 loader is a robust piece of production machinery built for the heaviest applications. With its standard Dual Z-Bar linkage, high tipping load, and high breakout force, it's on tough rock handling or loading high volumes of soil and fill.

A full suite of premium features includes joystick steering along with smart technology such as traction control, ride control, auto power-up, and an operator-friendly LCD color monitor. Hitachi's "Global e-Service" telematics and ConSite reporting is now available to provide 24/7 remote monitoring, daily maintenance and operational data plus monthly performance reports.

Hitachi Construction Machinery Loaders America Inc.
60 Amlajack Boulevard
Newnan, Georgia 30265
800-819-5770
www.hitachiwheelloaders.us



JOHNSON SHOWCASES KODIAK PLUS CONE CRUSHER MODEL

Johnson Crushers International, Inc. has expanded its Kodiak® Plus cone crusher series with the new K350+. This mid-range model offers higher production with a smaller footprint. It features increases in drive train, stroke, horsepower, weight, head diameter and hold-down force, resulting in an up to 10% capacity increase. With the same bolt pattern, the new cone can be mounted in most current K300+ applications.

The K350+ features a tramp iron relief system, fully-protected internal counterweights, precision roller bearing design, patented liner retention system and 360° thread locking ring for consistent product quality.

Johnson Crushers International
86470 Franklin Boulevard,
Eugene, Oregon 97405
800-542-9311
www.kpijci.com



KINSHOFER UNVEILS KSB SERIES EXCAVATOR ATTACHMENTS

Kinshofer's introduces its KSB Series, encompassing 8 models for .5 to 12 ton excavators.

All models in the KSB-Series are manufactured in a monobloc design, as a single piece without tie rods, making them extremely resistant to linkage strain during operation, reducing maintenance and increasing productivity. The breakers are equipped with an optimized nitrogen inertial energy recovery system which features 300 percent longer nitrogen charge life.

All KSB Series models are equipped with operator comfort enhancing features, which limit vibrations and noise levels while enhancing visibility and safety.

Kinshofer USA
6420 Inducon Drive
Sanborn, NY 14132
800-268-9525
www.kinshofer.com

Construction official urges senators to protect legal status of over 100,000 construction workers

The chief executive officer of the Associated General Contractors of America, Stephen E. Sandherr, released the following statement in response to the passage in the U.S. House of Representatives of the American Dream and Promise Act of 2019, a measure to offer conditional green cards and extend work authorizations to individuals who are in the U.S. under the Temporary Protected Status (TPS) and Deferred Action for Children Arrivals (DACA – "Dreamers") programs:

"Members of the House of Representatives have wisely chosen to approve a measure that will protect the legal status of over 100,000 people currently working in the U.S. construction industry, among other individuals. The men and women covered by this measure are making essential contributions to economic development and infrastructure projects across the country.

"Moreover, this measure represents an important first step in reforming the nation's broken immigration system. Indeed, this association has long championed, and continues to advocate for,

broader reforms to our immigration system that include enhanced border security measures and market-based guest worker programs.

"We urge senators to also act to protect workers in the country under the TPS and Dreamers programs either in a stand alone measure or as part of broader, and much needed, reforms to our immigration system. Failure to act will remove tens of thousands of men and women from the domestic construction workforce at a time when a vast majority of contractors report difficulty finding qualified workers to hire.

"Without these workers construction projects in many parts of the country, particularly in regions with a large presence of so-called dreamers and individuals with temporary protected status, are likely to be significantly disrupted. That is why this association made the House measure one of its Key Votes and that is why we and our members will take every possible step to ensure that Senators understand how essential immigration reform is to the nation's continued economic growth."

Mary Kay, Inc. Research & Development center earns LEED Silver Certification

Mary Kay Inc., an international leader in corporate and social responsibility, announced its Lewisville, Texas manufacturing facility, the Richard R. Rogers (R3) Manufacturing/R&D Center, has been awarded LEED Silver certification. The 453,000 sq. ft. building, opened in November 2018, features state of the art R&D laboratories, cutting edge manufacturing technology, and an astute focus on sustainable, environmentally-friendly construction.

LEED, or Leadership in Energy and Environmental Design, is the most widely used green building rating system in the world developed by the U.S. Green Building Council. LEED certification is awarded to projects that are designed, constructed, maintained and operated using healthy, highly-efficient and sustainable practices.

Following an exhaustive search of potential locations throughout North Texas, Mary Kay Inc. broke ground on R3 on September 13, 2016, exactly 53 years to the day after Mary Kay Ash launched her dream company from a small Dallas storefront. The project earned LEED Silver certification based

on a number of key elements in design and construction, including:

- Location: Facility located within one-quarter mile walking distance of one or more stops for two or more public, campus or private bus lines usable by building occupants.

- Heat Island: 100 percent of the weighted building roof surface has Solar Reflectance Index of 95.

- Water use: The facility has reduced potable water use by 33.96 percent, which saves approximately 913,480 gallons of potable water per year.

- Energy savings: The facility has achieved an energy cost savings of 13.48 percent by implementing strategies such as energy efficient lighting, thermal controls, and purchasing renewable energy for 100 percent of electricity consumed through 2021.

R3 is the second Mary Kay project to earn the coveted LEED status. In 2018, Mary Kay China was awarded LEED v4 Gold certification for its corporate headquarters building located in Shanghai.

City council wanted to demolish the local clown museum. They couldn't because it's a hysterical landmark!



Construction spending diverges in April as public sector investment surges

Construction spending was unchanged from March to April, with mixed results by project type for the month and for the year to date, according to an analysis today by the Associated General Contractors of America of new federal spending data. Association officials warned that tariffs and countermeasures by U.S. trading partners are adding costs and uncertainty to construction projects and are potentially reducing demand for numerous types of projects.

"Overall spending was flat in April, but that masks significant differences among the various construction sectors for both the latest month and the first four months of 2019 combined," said Ken Simonson, the association's chief economist. "The year to date totals, which are a more reliable indicator of underlying trends than are initial monthly estimates, show activity is still increasing for most project types other than single family homebuilding."

Construction spending totaled \$1.30 trillion at a seasonally adjusted annual rate in both March and April, according to estimates the U.S. Census Bureau released. For the first 4 months of 2019 combined, spending edged up by 0.2 percent from the same period in 2018.

Public construction spending soared 4.8 percent for the month and 11.8 percent year-to-date. Among the 3 largest public categories, highway and street construction spending jumped 17.2 percent, educational construction climbed 8.9 percent and transportation (airports, transit, rail and port) construction increased 6.2 percent.

Private nonresidential spending declined 2.9 percent from March to April but the 4 month total was 2.6 percent

higher than in January to April 2018. Major private nonresidential categories mostly experienced spending increases year to date. The largest, power construction (comprising electric power generation, transmission and distribution, plus oil and gas fields and pipelines), increased by 2.0 percent year to date. Commercial (retail, warehouse and farm) construction decreased by 6.0 percent. Manufacturing construction posted a 10.7 percent gain. Private office construction spending rose 8.0 percent.

Private residential construction spending slipped 0.6 percent for the month and 7.6 percent year to date. Single family homebuilding decreased 7.1 percent in the first four months of the year while spending on multifamily projects increased 7.9 percent. Spending on residential improvements slumped 13.1 percent year to date.

Association officials said that ever-changing tariffs have made it difficult for contractors to estimate project costs accurately, while retaliatory actions by U.S. trading partners cut into demand for construction by exporters, their suppliers and their logistics and transportation partners. The officials urged President Trump to end tariffs that are harming U.S. contractors and other businesses, and to avoid using tariffs as a weapon for immigration or other policies. They added that the latest round of threatened tariffs is coming at time when private sector demand for construction is essentially flat.

"These tariffs are doing much more harm than good," said Stephen E. Sandherr, the association's chief executive officer. "They drive up construction costs, cause uncertainty for businesses that need to know their costs before investing in projects and damage U.S. competitiveness."

Sixty-seven percent of nation's road contractors experienced vehicle crashes at work sites

Sixty-seven percent of highway contractors report that motor vehicles had crashed into their construction work zones during the past year, according to the results of a new highway work zone study conducted by the Associated General Contractors of America. In response, association officials have launched a new radio and media campaign urging drivers to slow down and remain alert in highway work zones.

"There are simply too many cars crashing into too many work zones, putting too many lives at risk," said Brian Turmail, the association's national spokesman. "That is why we are launching a nationwide outreach effort designed to better educate motorists about the need to drive with care in highway work zones."

Turmail said that 70 percent of contractors reported work zone crashes on their projects in which motor vehicle operators or passengers were injured. In addition, 28 percent of those crashes involved a driver or passenger fatality. Highway work zone crashes also pose a significant risk for construction workers, Turmail noted. He said that 28 percent of work zone crashes injure workers and 8 percent of those crashes kill them.

In response, the construction association announced the launch of the new safety education campaign. Association officials noted that 73 percent of contractors report that the risk of highway work zone crashes is greater now

than it was a decade ago. Turmail noted the increased risk was "unacceptable."

Association officials are launching the nationwide outreach campaign to try to improve highway work zone safety for workers and motorists alike. As part of the new effort, association officials will be talking to radio stations around the country about what drivers should do while passing through construction sites. The association will also use social media to urge drivers to be more careful and alert in highway work zones.

The association is also working with construction equipment and technology firms to develop systems to better alert workers when vehicles come too close to job sites. And the association's chapters will continue to work with local and state police and state departments of transportation to ensure adequate highway work zone protections are in place.

"When you see construction signs and orange barrels, obey the posted speed limit, keep your eyes on the road and get off the phone," the association spokesman said. "No amount of saved time, and certainly no social media post or text, is worth the safety of you, your passengers or the men and women working on our roads."

The work zone safety study was based on a nationwide survey of highway construction firms the association conducted this April and May. Nearly 400 contractors completed the survey.

For the best free exposure possible, participate in this feature favorite!

AR EQUIPMENT SPOTLIGHT

To be included in the spotlight, you must **manufacture** the equipment featured. We require a company name, contact person, telephone number and, if applicable, a website address.

To be listed in the appropriate spotlight, please call 877-777-0043.

American Recycler is not responsible for non-inclusion of manufacturers and their equipment. Manufacturers are to contact American Recycler to ensure their company is listed in the Equipment Spotlight.

UPCOMING TOPICS

- AUG Primary Reduction
- SEP Shears & Shredders
- OCT Logger Balers
- NOV Waste to Fuel

2020 Buyer's Guide UPGRADE TODAY! premium ad space available!

Don't pass up your FREE standard listing in the 2020 Buyer's Guide!

Contact us today to learn more about upgrades, and make sure you're included alongside competitors next year!



877-777-0043

www.AmericanRecycler.com
sales@AmericanRecycler.com



Nationwide Opportunities

DADE Auctions Territory Representative Nationwide openings

"Unlimited opportunity for experienced heavy equipment professionals"

The DADE Auctions Territory Representative is an Independent Contractor position, working within an assigned geographic territory, usually a single state. There may be opportunities for a representative to cover more than one state.

Duties:

- You will contact companies and organizations in the waste, salvage, and recycling industries, soliciting equipment listings for the DADE Auctions website (www.dadeauctions.com).
- Using our automated database, software and hardware, you will ask questions, enter data, and take pictures and video of equipment the client wishes to list on the auction site.

Compensation:

- As a DADE Auctions Territory Representative, your compensation is based upon a listing commission, and when the equipment sells, a selling commission. Your total compensation will be based solely on your successful efforts. You will be responsible for your own expenses and taxes, however, DADE Auctions, Inc. will provide access to territory customers, technology tools and software to make your position more efficient.

Training:

- We provide a virtual on-boarding orientation and representative portal with ongoing training and field support, as well as an Auctions Representative Manager to consult.

Requirements:

- The ideal candidate will possess heavy equipment sales or operation experience, and be knowledgeable about the waste, salvage, and recycling industries and equipment needs.
- Possess basic smartphone and tablet technology skills, ability to navigate in a web browser, and enter data on a website.
- Demonstrated ability to effectively manage a large territory.
- The ability to visit prospective clients in person in various locations with your own reliable transportation.
- Secure listings in person at the client's location.



Inquire at:
DADE Auctions, Inc.
sales@DADEAuctions.com
844-222-2020

Featured Buy Now Listings



Granutech Saturn 62 x 40 Tire Shredder
300 HP motor. Includes conveyance!



Mosley Portable Tin Baler
24" x 32" bales. 40 HP motor.



American Pulverizer 60 x 60 Shredder
800 HP Motor, Infeed, UMO.



Williams 60 x 104 Mill and Rotor
Includes a spare rotor!



2004 Hyundai 2250 HP Motor
Never used! Still in the crate!



Granutech Saturn M-50 Shredder
200 HP motor. Includes conveyance!

www.DADEAuctions.com 844-222-2020