



ADVANCED TECHNOLOGY. PROVEN PERFORMANCE.



**WENDT CORPORATION**  
2555 Walden Avenue  
Buffalo, NY 14225-4737  
USA

Toll-Free: 1.888.WENDTCO  
Tel: 716.391.1200  
Fax: 716.393.3444  
Email: [sales@wendtcorp.com](mailto:sales@wendtcorp.com)

[wendtcorp.com](http://wendtcorp.com)



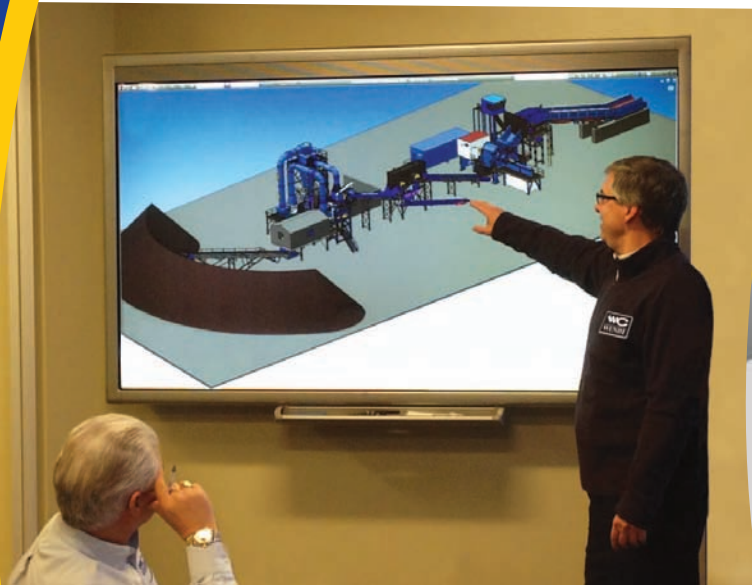
## AUTOMOBILE SHREDDER PLANTS

## Plant Design Services

For more than 35 years, WENDT has been known for designing and implementing innovative solutions to meet the needs of the scrap metal industry.

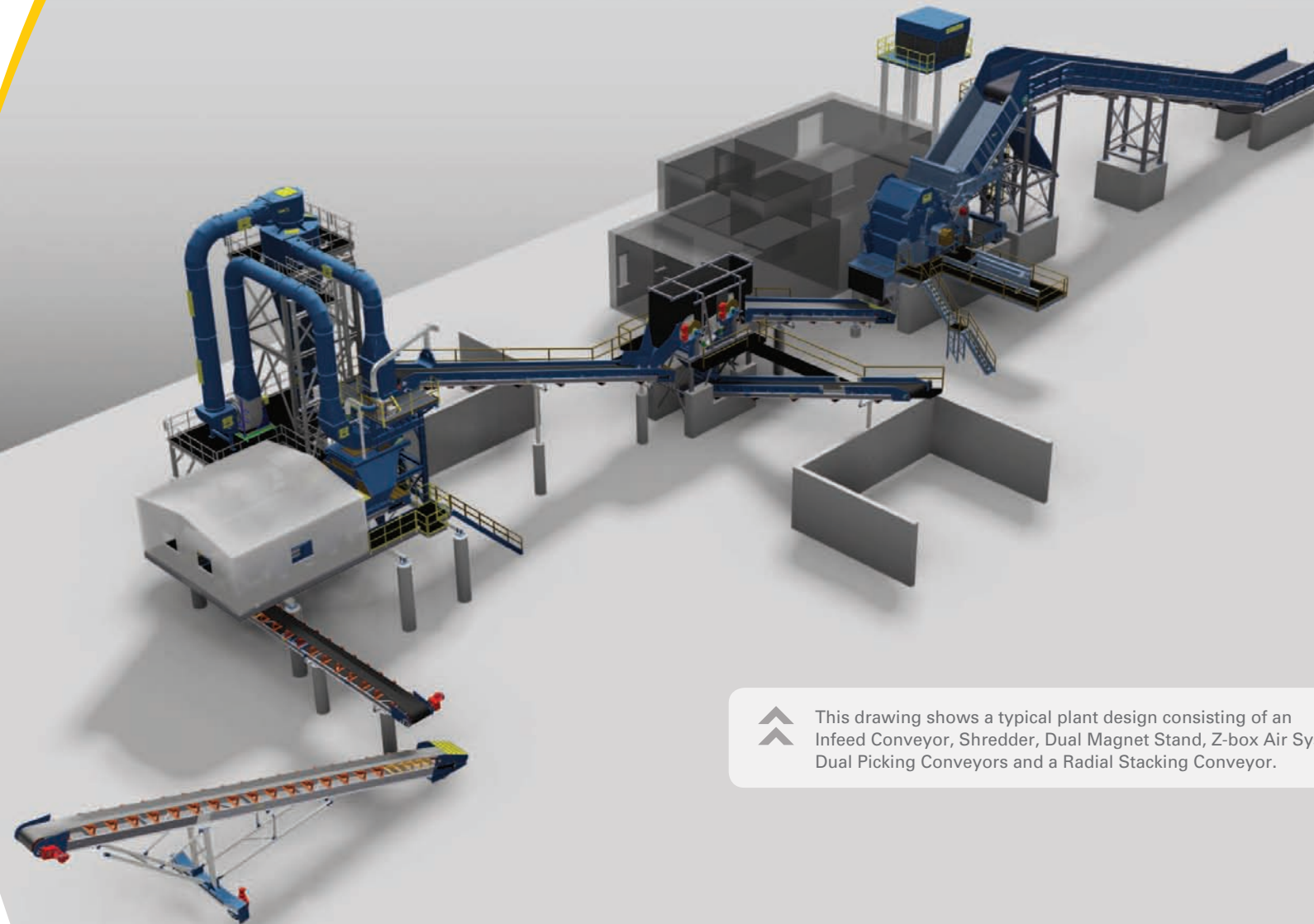
Our solutions encompass all aspects of shredder plant design, from infeed equipment to the latest in ferrous and non-ferrous downstream processing plants.

WENDT CORPORATION provides scrap metal processors with a comprehensive line of automobile shredders ranging from 60" to 130" mills. The shredder line is capable of processing 10 to 400 tons per hour of automobiles, industrial scrap, appliances and white goods.



As a single-source supplier we can assist from concept through feasibility study to project development to the installation and commissioning of a custom-built plant. At WENDT, we employ a team of engineering experts, including electrical, mechanical, and hydraulic, who use the latest software to create products and solutions from start to finish. Their practical experience and process know-how allow us to customize equipment based on individual customer needs and specific customer requirements.

Once an initial concept is agreed upon our engineers work with customers to develop a detailed breakdown of the project scope. From this scope, layout drawings which serve as the roadmap for the entire project are created using AutoCad and AutoDesk Inventor 3D design software. Plant design information can then be reviewed further with customers in an interactive 3D representation to ensure satisfaction.



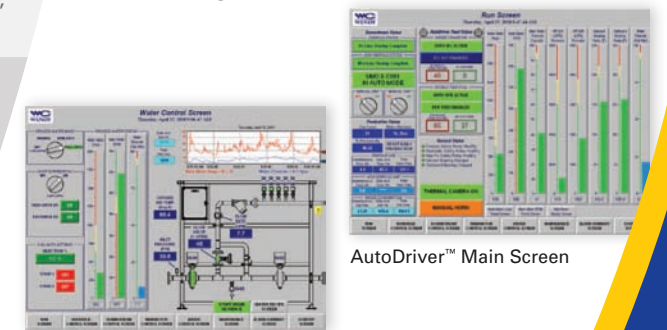
↑ This drawing shows a typical plant design consisting of an Infeed Conveyor, Shredder, Dual Magnet Stand, Z-box Air System, Dual Picking Conveyors and a Radial Stacking Conveyor.

## Shredder Automation

Shredder Enhancements and process controls include a variety of hardware and software systems designed to control equipment. The benefits of an advanced process control system include: increased material throughput, improved energy management and conservation, safer plant operation, remote diagnostic and troubleshooting capabilities as well as advanced data collection and reporting.

**AutoDriver™** AutoDriver™ controls fully automate the shredding process. It incorporates automatic double-feed roll lift and float to improve feeding, as well as independent variable-speed control of the infeed conveyor and double-feed roll to maximize main motor HP and maintain full box shredding. The AutoDriver™ Recipe Screen allows the end user to alter key operating parameters to customize performance and maximize throughput.

**Intelligent Water Injection** Computer-controlled water injection is critical to the safe performance and environmental compliance of a shredder operation. Through production of steam within the shredder, emissions of dust and smoke are reduced as the airborne particles are entrapped and precipitated back to the scrap to be cleaned in the separation system. Steam also displaces air within the shredder, reducing the intensity of explosions and the possibility of sustained burning.



Water Control Screen

AutoDriver™ Main Screen

### True View™ Report Generation

Customized reports can be generated in graphical or text formats to show system delays, equipment availability, and productivity for a current operation or from historical data.

## WENDT HEAVY™ Shredders

WENDT CORPORATION'S automobile shredders are designed to offer reduced energy consumption while producing clean, high-density scrap at optimum tonnages. The WENDT HEAVY™ shredder is designed to be the most durable, efficient, reliable, and serviceable automobile shredder in the industry.

### Durability

- Built for "Steel Mill Duty" Service
- Heavy Plate Construction
- Reinforcing Gussets
- Interlocking Fabrication
- Weld Joints are Double Beveled and Pre-Heated for Full Penetration Welds

### Efficiency

- Construction and Controls Ensure:
  - Highest Production Levels Per Kilowatt Hour
  - Lowest Wear Part Consumption and Cost Per Shredded Ton



### Geometry

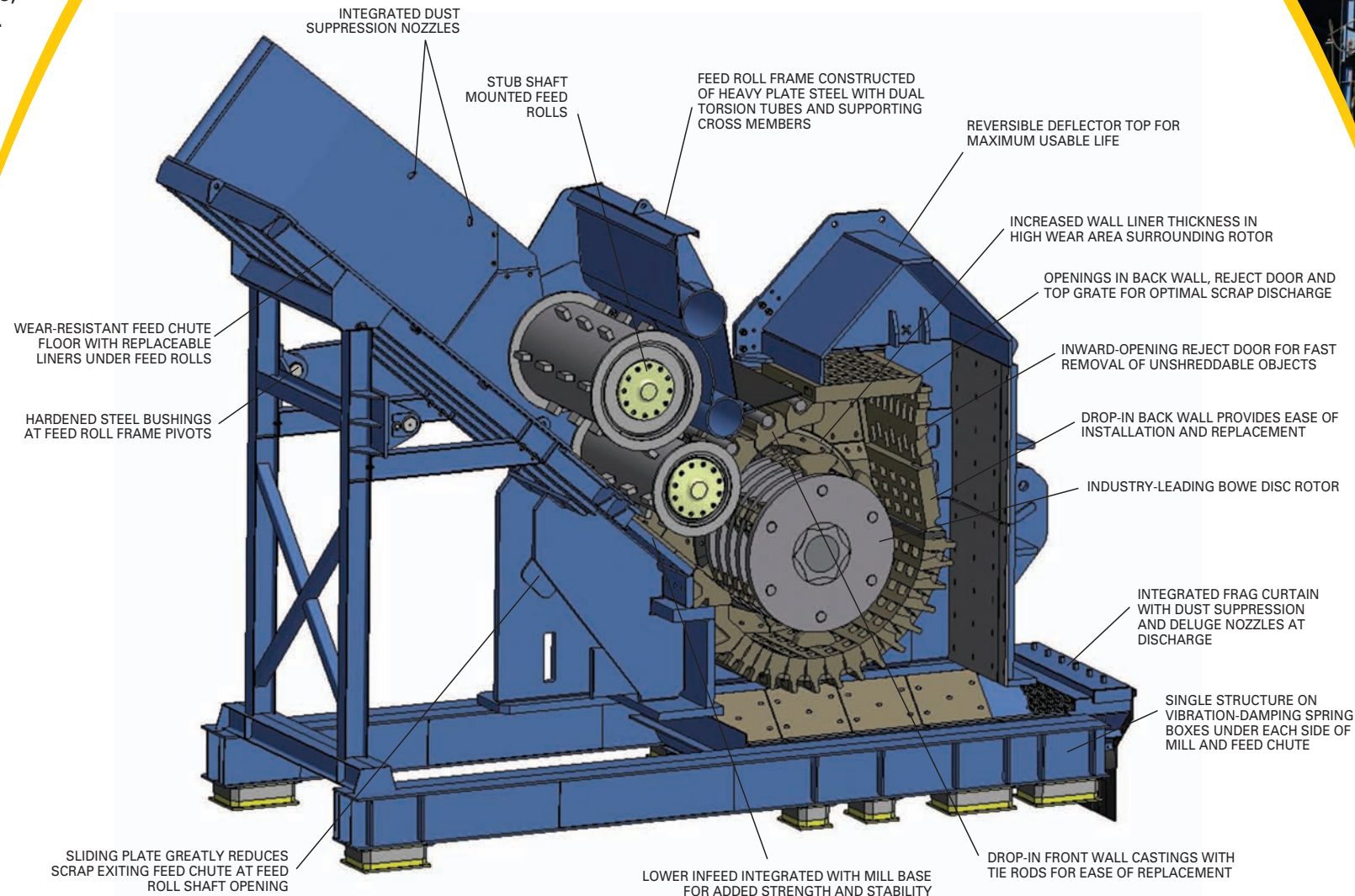
- Designed for "Full Box Shredding"
  - Non-Tangential Feed Points
  - Drop-In Back Wall
  - Curved Front Wall with Tie Rods
- Advanced Geometry Design Allows for Increased Throughput, Higher Efficiency and Greater Product Density

### Reliability

- Combine Robust Construction with the Most Advanced Design Innovations to Perform Under the Toughest Shredding Applications, Maximizing Uptime

### Rotors

- All WENDT Shredders are Equipped with a Bowe Rotor
  - Precision-Engineered for Performance, Quality and Increased Durability
  - Longest-Lasting Rotors with Lowest Operational Cost Per Ton



HEAVY™ SHREDDERS		
SIZE	HP	TPH
82 x 115	3000-4000	90-120
106 x 115	6000-7000	210-245
130 x 115	8000-10000	320-400

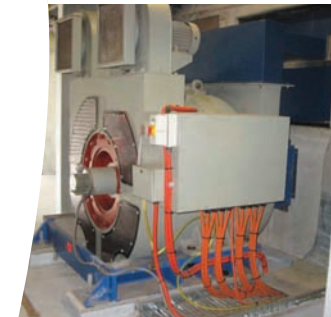
TRADITIONAL SHREDDERS		
SIZE	HP	TPH
80 x 104	2500-3000	75-90
98 x 104	4000-5000	120-150

TPH is conservatively stated at net tons/hour of typical input into the shredder consisting of roughly 75% ferrous and 25% non-ferrous residue.

## Traditional Sized Shredders



WENDT is the industry's only custom manufacturer of automobile shredders. This is ideal for operators of multiple shredding facilities who want the HEAVY™ shredder design featuring the latest technology but also require interchangeable components with their existing shredders. Some common sizes we can supply include 80 x 104 and 98 x 104.



2,500 HP DC Motor



5,000 HP AC Wound Rotor Motor

## Motors & Drive Systems

WENDT provides a comprehensive drive system integration service. Our engineers will design, install, program, and integrate the motor package with your new shredder plant. In addition, we have the expertise to review existing shredder installations and provide recommendations for improvement to take advantage of modern technology for better production and lower utility cost.



## Shredder Infeed

### Infeed Conveyor

The Infeed Conveyor maximizes shredder throughput by feeding cars and loose sheet metal more efficiently. They can be supplied in a variety of configurations, lengths and discharge heights to service any new or existing shredder.

- Modular design with heavy steel plate bridge girder type construction
- Four impact rails in the loading section, two rails on remainder of conveyor
- D-4 Chain, idlers, segmented drive sprockets, and curved or straight-back grousers
- Hydraulic drive motor with variable high speed power unit or mechanical drive with VFD control
- Optional three chain design with two rail configuration



Infeed Conveyor

## Ferrous Separation & Cleaning Equipment

WENDT offers complete ferrous downstreams which incorporate the most advanced technology available. Downstreams are designed based on individual customer need and can include: Dual Magnet Assembly, Z-Box and Air System, Closed Loop Air System and Mill De-Dusting equipment.

Electro-agitating scrap drums are provided with multiple alternating magnetic coils to flip the material and release entrapped waste.



Dual Magnet Assembly

Entrapped waste and magnetic dirt carried by the drums can be separated by the Z-Box Air System. The latest generation of air separation system incorporates a lined abrasion-resistant Z-Box with integral conveyor seals and full recirculation of process air to prevent airborne particulate escape.

Our Closed Loop option provides for full recirculation of the Z-Box air through use of air knives at the conveyor interfaces. The high-velocity air curtain created prevents particulate escape from the system without relying on pressure differentials.



Z-Box and Air System

## Non-Ferrous Equipment

The demand to recover and recycle a greater percentage of the auto shredder residue stream is increasing for both economic and environmental reasons.

Our on-line or batch-fed modular-designed systems can be provided to handle any flow while maintaining high metal quality with minimal metal loss.

Some examples of our purpose-built products include:

- Volume-controlling **Tumbleback Feeder** with an 8', 12' or 16' long hopper absorbs and controls material surges to allow batch or on-line feeding.
- **Creep Feeder** for larger capacities will volumetrically control material surges and deliver a uniform continuous feed to the plant.
- Multistage **Trommel** available in traditional round design or with square cross-section for improved tumbling action and better product screening.
- **bivi-TEC** flip flow screens for efficient screening of smaller material.
- **Sensor Sorters** and **Eddy Current Separators** for ultra-fine, fine, and coarse material.
- **ASR Windsifter** for efficient removal of light waste.
- Clean system layouts with minimal supports and transitions to ease maintenance and housekeeping duties.



Tumbleback Feeder



Trommel & bivi-TEC Flip Flow Screen



ASR Windsifter



WENDT/TITECH finder