

## Eagle Modular Shredder Technical Specifications

The Republic Machine Modular Eagle Series Single Shaft Shredder continues its legacy in the size reduction market with its robust design and proven history. These low-speed high-torque shredders are available in 42" thru 72" widths and are powered by 40 thru 300 HP electric motors. Republic Machine cutting systems are afforded the Ultimate in protection with the Over-Torque Limiting Clutch Assembly which removes all inertial energy from the gear drive and rotor in a catastrophic metal contamination incident common in recycling. The Eagle Series can be configured with both the square "Hawksbill" Cutting System for Rigid Plastics and the Trape"Zoidal" Non-Wrapping Cutting System for Film, Fiber materials. Sophisticated Allen Bradley MicroLogix PLC Control and a large HMI color touchscreen provide all the necessary settings required to run difficult industry applications.



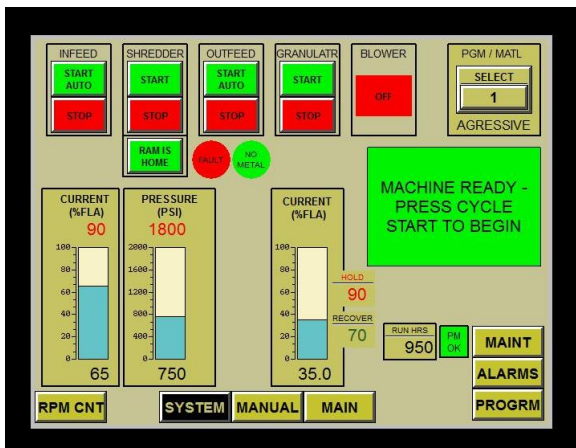
Specifications	42	54	66	54	66	78
Rotor Diameter	15"			20"		
Rotor Motor Size	50 - 100 HP	75 - 200 HP	100 - 250 HP	75 - 200 HP	100 - 250 HP	150 - 250 HP
Rotor Speed	110 - 130 RPM			110 - 130 RPM		
Cutters (1-Row)	Hawksbill	27	35	43	35	43
	Zoidal XL	17	22	27	22	27
Ram Height	11"			16"		
Ram Hydraulic Motor	7.5 HP			7.5 HP		15 HP
Hopper Opening (WxL)	42" x 50"	54" x 60"	66" x 85"	54" x 65"	66" x 90"	78" x 105"
Hopper Volume	73 cu-ft	113 cu-ft	195 cu-ft	140 cu-ft	237 cu-ft	327 cu-ft
Weight Approx. (tons)	5.0	7.0	8.5	7.5	9.0	11.0
Throughput (estimated)	600 - 2500	800 - 3,500	1,000 - 5,000	800 - 4,000	1,000 - 6,000	1,500 - 8,000
Voltage	460V / 3Ph / 60Hz					

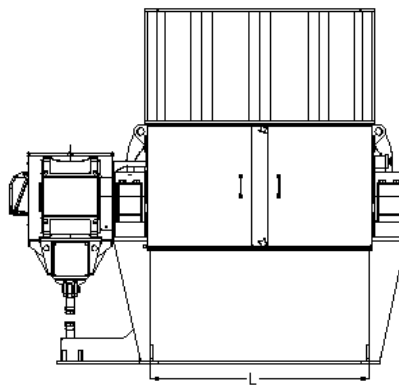
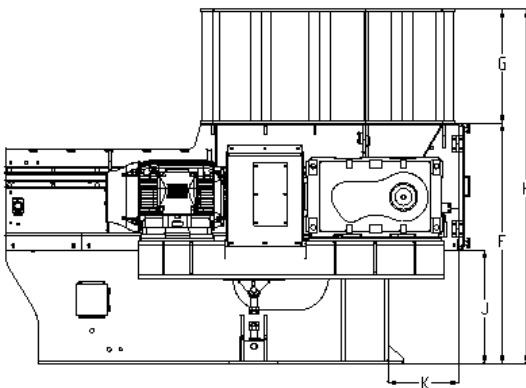
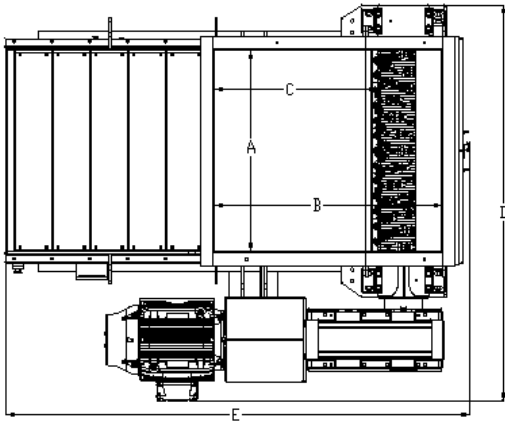
Specifications, appearances, and dimensions are subject to change without notice.



### Standard Features

- Extreme Heavy Duty All Steel Construction
- Single Piece Solid Forged Rotor Heat Treated for Strength
  - Self-Cleaning Non-contaminating Rotor Seals
- Rigid Product (Hawksbill) Film/Fiber (Zoidal) Cutting Systems [US Patent](#)
  - Direct Hot Swap Rotor Modules between cutting systems
- Common Base for Split-a-Part installation ease
- Flippable & Sharpenable Counter Knives
- Oversized Outboard Pillow Block Bearings
- Oversized Discharge Width to capture all shredded fines
- Right Angle Direct Coupled Drive with Over-Torque Limiting Clutch Assembly provide the Ultimate in Drive Train and Rotor Protection
  - 100HP to 300HP Standard Drive Systems
  - Removes All Inertial Energy from the Rotor & Gearbox Drive
- Allen-Bradley MicroLogix 1400 PLC & Red Lion Color Touch Screen
  - Electronic Soft Start
  - Motor Amperage and Ram Pressure Control
- Adjustable Knives for tight Counter Knife Clearance
- High Speed Dual Pump Hydraulic Ram System
- Customizable Infeed Hoppers
- Revision Controlled SolidWorks™ 3-D Design
- Warranty Statement
  - One Year Warranty on Manufacturing and Parts
  - Limited Lifetime Warranty on Forged Rotor





	42"	54"	66"	54"	66"	78"
	15" ROTOR			20" ROTOR		
A	41.1	53.1	65.1	53.1	65.1	76.1
B	50.0	60.0	85.0	65.0	90.0	105.0
C	33.0	43.0	68.0	48.0	73.0	98.0
D	92.5	104.5	116.5	108.5	120.5	131.5
E	103.0	123.0	173.0	133.0	183.0	213.0
F	63.5	63.5	63.5	63.5	63.5	63.5
G	30.0	30.0	30.0	30.0	30.0	30.0
H	93.5	93.5	93.5	93.5	93.5	93.5
J	30.0	30.0	30.0	30.0	30.0	30.0

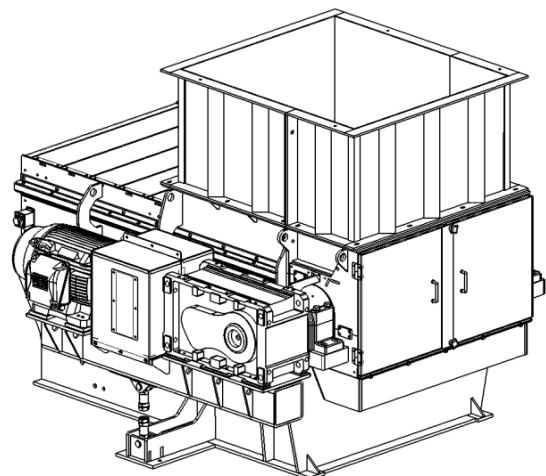
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### Optional Features

- EZ Service Modular Split-a-Part Series Design [US Patent](#)
  - Direct Access to Rotor, Compartment, Cutting System, Drive Train
- Multiple Cutter Rows
  - Rigid (Hawksbill ) & Film/Fiber (Zoidal) Cutting Systems
  - Bolt-In Replaceable Tool Holders
- VFD Motor Control
- Ethernet Module for Remote PLC Access
- Extended Compartment Lengths
- Corrugated Compartment Floor & Top of Ram Plate
- Closed Loop Ram Velocity Speed Control for High Friction Coefficient Materials
- Special High Efficiency Screens
  - Round, Square and Rectangular Holed Close Tolerance Screens
  - Grooved Screen [US Patent](#) with Close Cutting Tolerance
  - Grooved Triple-Cut Screen Providing Granulator Performance from a Shredder down to 3/8"
- Water Cooled Rotor
- Modular Wear Components available in High Abrasion Applications
- Customizable Hoppers
  - Angled Hopper Walls
  - Fork Slot Hopper Openings
  - Enclosed Hoppers with Flap Assembly for Product Containment
- Jib Crane with Hand Hoist for Easy Screen Removal

### Optional Auxiliary Components

- Belt Infeed & Outfeed Conveyor Systems
- Gaylord Box Dumpers
- Auger Outfeed Systems
- Integrated Downstream Granulators
- Discharge Blower Evacuation Systems
- Complete System Control Integration
- Magnetic Separators & Detector Systems
- Material Fines Separation & Classification Systems



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