



# V-ECO Series Rotary Shredders

Smart, powerful. versatile - the Vecoplan V-ECO High Performance Rotary Shredder is designed especially for size reduction of difficult industrial materials such as plastics, dunnage, wood scrap, medical waste, municipal waste, furniture parts, pallets, carpet, cardboard and paper.

# ULTIMATE POWER IN SHREDDING TECHNOLOGY...



## SHREDDING TECHNOLOGY IS THE KEY TO INTELLIGENT RECYCLING

The first, and often most important step in recovering, liberating, sorting and successfully recycling a wide range of materials is choosing the best shredding technology.

Introducing the best shredding technology, from the worldwide leader in shredding technology - The V-ECO from Vecoplan.

Solid, compact, high-performance, the V-ECO efficiently processes a broad spectrum of recyclables including all types of plastics, films, fiber, paper, cardboard, and textiles.

#### Features and Benefits:

- Inclined cutting chamber floor, combined with processing ram ensures continuous feeding of material to shredding rotor.
- VFD Inverter Drive, eliminates gearboxes & fluid couplings, matches rotor speed & torque to load characteristics, and senses tramp metal & stops automatically.
- "W" Rotors, with cutting geometry to shred both flexible & fibrous, or rigid & bulky materials, delivering particle consistency, maximum throughput, and minimal heat buildup.
- Single or Double Rows of Bed Knives, increase the shredding surface producing smaller particle sizes, for maximum screen throughput & minimum processing time. Plus they're externally adjustable for quick & easy maintenance of optimal cutting tolerances on thin, flexible materials like films & fibers.
- Hydraulic Lift-Up Cutting Chamber Floor, provides the safest & most convenient access to the cutting chamber. Just push a button for material changes or tramp metal removal.
- Drop Down Screen Carriage, delivers fast & easy screen changes, with quick access for cutting insert rotations or replacements, as well as other maintenance.

# ...FOR A WIDE VARIETY OF APPLICATIONS



Recyclable Containers IBCs, PET and HDPE...



Fiber & Textiles
Super Sacks, Raffia Bags, Airbags, Carpet,
PET-Fibers and Monofilaments...



Film Agricultural Film, Agro Stretch Film, Shrink Wrap, LDPE Film, PET Film...



Pipe
Pipes of different lengths, diameters
and thicknesses...



Purgings Injection Molding, Blow Molding, Extrusion, Any Size, Weight, Shape or Type...



Profiles and Lineal Scrap Extruded Profiles of Any Size, Weight, Shape, or Resin Type...



Confidential Documents
Checks, Files, 3-Ring Binders, Bankers Boxes
of Confidential Information...



Post Consumer Paper & Packaging Printers Waste, Newspaper, Magazines, Books, Cardboard, Corrugated...



Paper Rolls and Tubes
Rolls and Tubes of Various Lengths, Diameters
and Material Types...



#### 11 CUTTING INSERTS

Inexpensive cutting inserts can be rotated to 4 cutting points before being replaced and are bolted onto holders making them quick & easy to change.



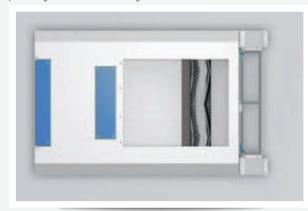
# 10 "W" ROTORS

The innovative cutting geometry shreds both flexible and fibrous, or rigid and bulky materials. Optimized to deliver processing precision, particle size consistency, maximum throughput, and minimal heat generation.



# 9 CUTTING CHAMBER

The sloped floor matches with and maximizes the hydraulic processing ram's continuous feeding of material to the rotor.



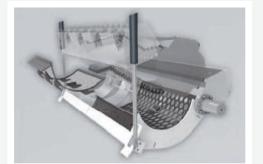
# 8 DOUBLE SIDE WALLS

Reduces heat transfer from the rotor to the bearings, prevents material build-up between the rotor & machine housing, and simplifies wear ring replacement.

# 12 DROP DOWN SCREEN CARRIAGE

Pneumatically assisted, the drop down screen carriage makes screen changes fast and easy. It also delivers quick access to the rotor for cutting insert rotations or replacements, as well as other routine maintenance.

V-ECO 1300



# MACHINE DESIGN

The shredder is enclosed and features an industrial-duty base to increase safety and decrease noise. It also provides easy cleaning and maintenance.





### 2 DRIVE

VFD inverter drive eliminates gearboxes and fluid couplings, senses tramp metal & stops automatically, matches rotor speed and torque to load volume and material



#### 3 HYDRAULIC LIFT-UP CUTTING CHAMBER FLOOR

Provides the safest, quickest and most convenient access to the cutting chamber. Just push a button for clean-outs, material changes or tramp metal removal. No bolts, no alignment, no problems.



## 4 SINGLE or DOUBLE ROWS of BED KNIVES

Increase the shredding surface area to produce smaller particle sizes, which maximizes screen throughput volumes and, in turn, minimizes processing time.



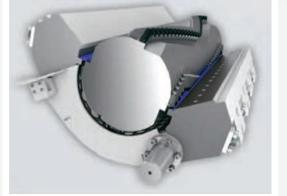
#### 5 RAM FEED

Hydraulic processing ram feeds material by pushing it into the shredding rotor.





Allow for fast and easy maintenance of cutting efficiency, particularly on thin, flexible materials such as film and synthetic fibers.



# 6 ROTOR COOLING

Chilled water is circulated through the rotor's interior during the shredding of materials with low melting points.

# TECHNICAL DATA



DETAILS		V-ECO 900	V-ECO 1300	V-ECO 1700	V-ECO 2100	
Infeed opening inch		33 x 51	50 x 60	66 x 80	82 x 80	
Rotor dimensions inch		ø20 x 33	ø20 x 49	ø20 x 65	ø20 x 82	
Rotor weight lbs.		2,000	3,000	4,000	5,000	
Rotor speed RPM		120 - 265	120 - 265	120 - 300	120 - 300	
Number of counter knive traverses		Standard: 1 traverse Option: second traverse				
Number of counterknife segments		2 standard, 4 optional	3 standard, 6 optional	4 standard, 8 optional	5 standard, 10 optional	
Number of cutters	W Rotor triple no. cutters		54	81	103	135
	W Rotor quintuple no. cutters		90	135	180	225
Motor power HP		HP	40, 50, 75, 100	40, 50, 75, 100	120, 150, 175	120, 150, 175
Weight (without hopper, without steel base) lbs.		6,200	12,200	25,000	28,000	
Throughput capacity lbs/h		Dependent on material and machine setup				
Overall dimensions	with rotor cooling	inch	80 x 42.5 x 98.5	94 x 59 x 130.5	115.5 x 75 x 160.5	132 x 75 x 160.5
(W x H x L)	without rotor cooling	inch	72 x 42.5 x 98.5	88 x 59 x 130.5	109.5 x 75 x 160.5	126 x 75 x 160.5
Output diemnsions inch		inch	33 x 21.5	49.5 x 26.5	75 x 32.5	91.5 x 32.5

# INNOVATIVE FEATURES



V-ECO 900

V-ECO 1300

V-ECO 1700

V-ECO 2100

#### Machine Design Compact, enclosed design for

smooth operation, low noise and easy maintenance.

#### Easy Access

Via a hydraulic lift-up cutting chamber floor.

V-ECO 900	
V-ECO 1300	•
V-ECO 1700	•
V-ECO 2100	•



#### **Drive Concept**

Eliminates gearboxes & fluid couplings, matches rotor speed & torque to load, senses tramp metal & auto-stops.

V-ECO 900	•
V-ECO 1300	•
V-ECO 1700	•
V-ECO 2100	•



#### Hydraulic Aggregate Features a standard shock

valve to prevent damage from hydraulic shocks.

V-ECO 900	opt.
V-ECO 1300	•
V-ECO 1700	•
V-FCO 2100	•



#### Screen Change

Quick & easy when changing for particle size output or during routine maintenance.

V-ECO 900	•
V-ECO 1300	•
V-ECO 1700	•
V-ECO 2100	•



#### **Rotor Bearing**

Optimized distance between rotor and rotor bearings for longer bearing life.

V-ECO 900	•
V-ECO 1300	•
V-ECO 1700	•

V-ECO 2100 •



## **Material Feeding**

Material feeding via hydraulic V-ECO 1300 ram with load dependent control determined by frequency converter.





#### Wear Resistant

High durability due to wear resistant steel on cutting chamber floor & feed ram.

V-ECO 900	opt.
V-ECO 1300	opt.
V-ECO 1700	•
V-ECO 2100	•



## **Cutting Rotor**

Optimized cutting geometry for maximum performance and reduced generation of heat.

V-ECO 900	•
V-ECO 1300	•
V-ECO 1700	•
V-FCO 2100	•

