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Materials **Recycling** for a
Sustainable Future



X80

QUATRO

FOUR *SHAFT* SHREDDER

WASTE MATERIALS RECYCLING MACHINE TECHNOLOGY & BIO ENERGY



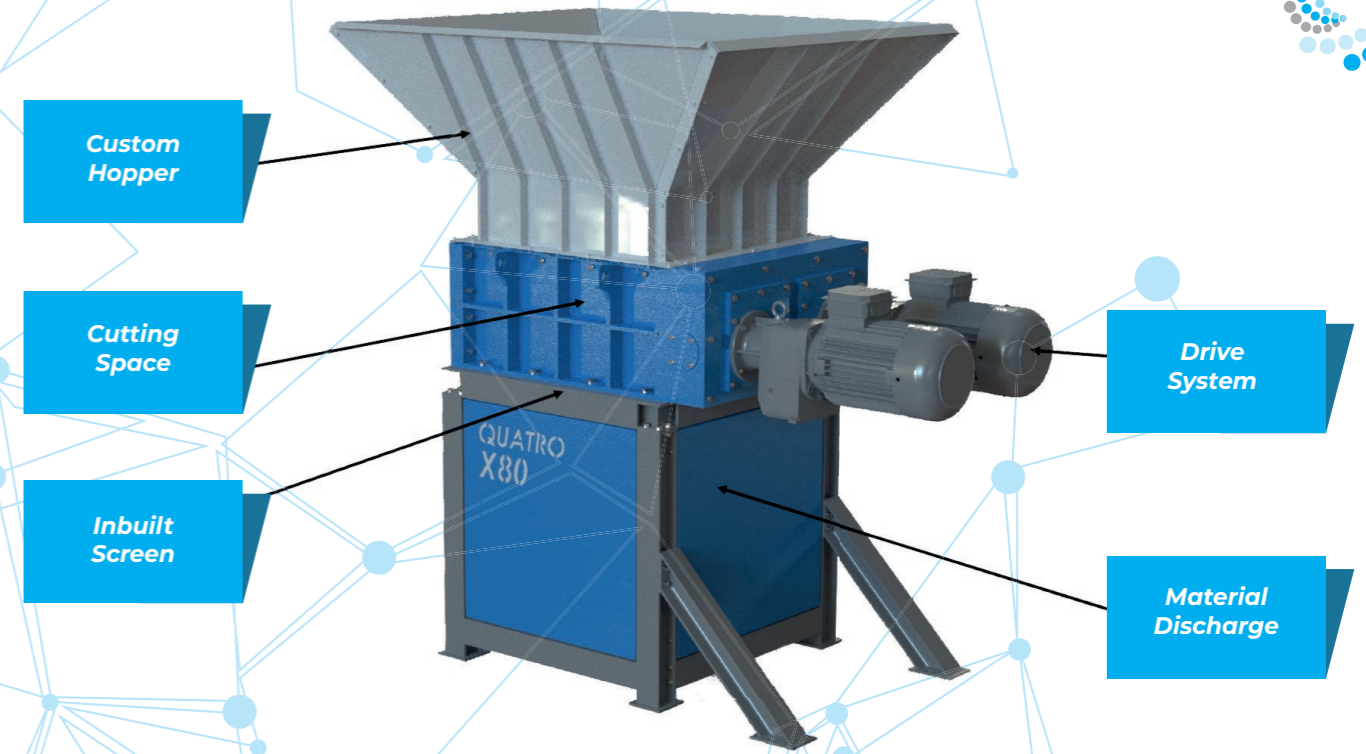
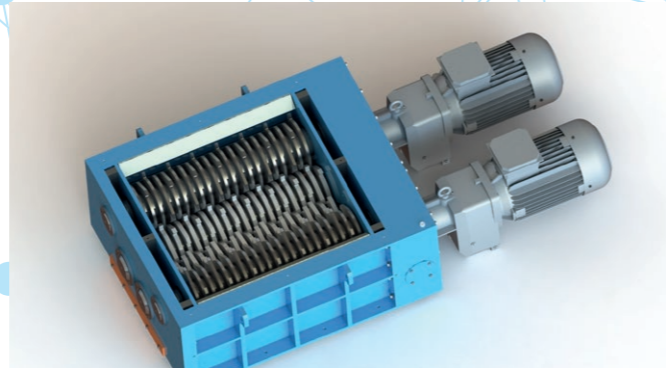
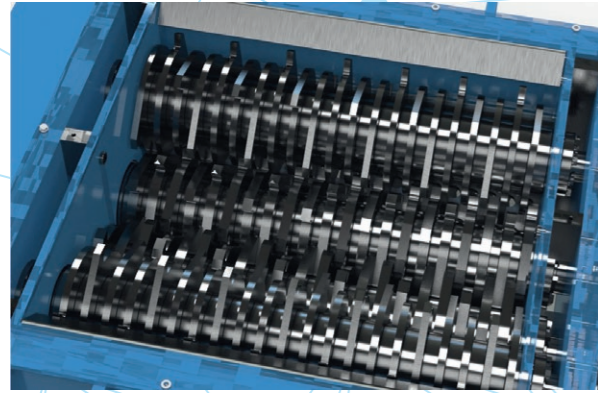
Function Overview

The **Quatro** is a **four shaft shredding machine**, utilised for the initial size reduction of a range of waste materials, as well generating uniform output particles. The **low speed, high torque** shredder can be configured with a **variety of drive systems** from geared electromotor to hydraulic mo-tor and as a result, can be employed to process the toughest of materials.

After being fed by either a grab crane, wheel loader or con-veyor, input material is drawn into the **counter rotating knives** which shred the material as per a conventional twin shaft shredder, and output falls towards the built in screen. Material not reduced to the required size is circulated back around via the outer

counter rotating knives and fed auto-matically back into the center knives. Here the material is cut once more. This cycle continues until the material is shred down to a size the will allow it to pass through the screen at which point it will be ejected from the machine.

The **blades are hardened** in order to increase their life and the automatic disturbing parts sensor stops the machine when **foreign matter is detected**, protecting the shredder and increasing operating safety. Operatives are alerted via the beacon mounted on the cabinet and information is then displayed on the touch screen at the control panel.



Application

- IBC's/Drums
- Oil Filters
- Tyres
- Cables
- WEEE (Waste Electrical and Electronic Equipment)
- Reject Materials, Textiles, Carpets and Floor Coverings
- MSW (Municipal Solid Waste), RDF (Refuse Derived Waste), SRF (Solid Recovered Fuel)
- Plastics (e.g. PVC, PET, PP, PE, HDPE, LDPE, ABS)
- Paper, data, files, cardboard etc.

Maintenance

Daily

- General cleaning of the machine
- Lubrication - Check lubrication, fill as required
- Cutting space - Check, clean and empty the cutting area, rotor blades and strips

Weekly

- Drive Motor - Clean and remove dust deposits
- Lubrication - Inspect lubrication of equipment
- Cutting Space - Check rotor and strip condition
- Steel Structure - Inspect, clean and remove dust

Monthly

- Control Cabinet – Clean the cabinet and surroundings

Annually

- Machine - Inspect cutting space side wall condition for wear (replace where necessary)
- Lubrication - Inspect lubrication of equipment
- Shafts - Check rotor shaft seal

The Quatro X80 can be utilised for various volume reduction purposes with the output in pieces dependent on the inbuilt screen size.

- Electrical—Inspect/monitor electrical equipment and connections, record and replace any damaged cables
- Tighten screws

Wear Parts List

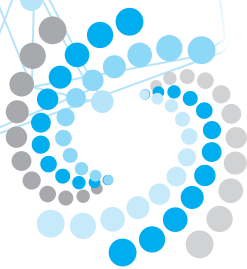
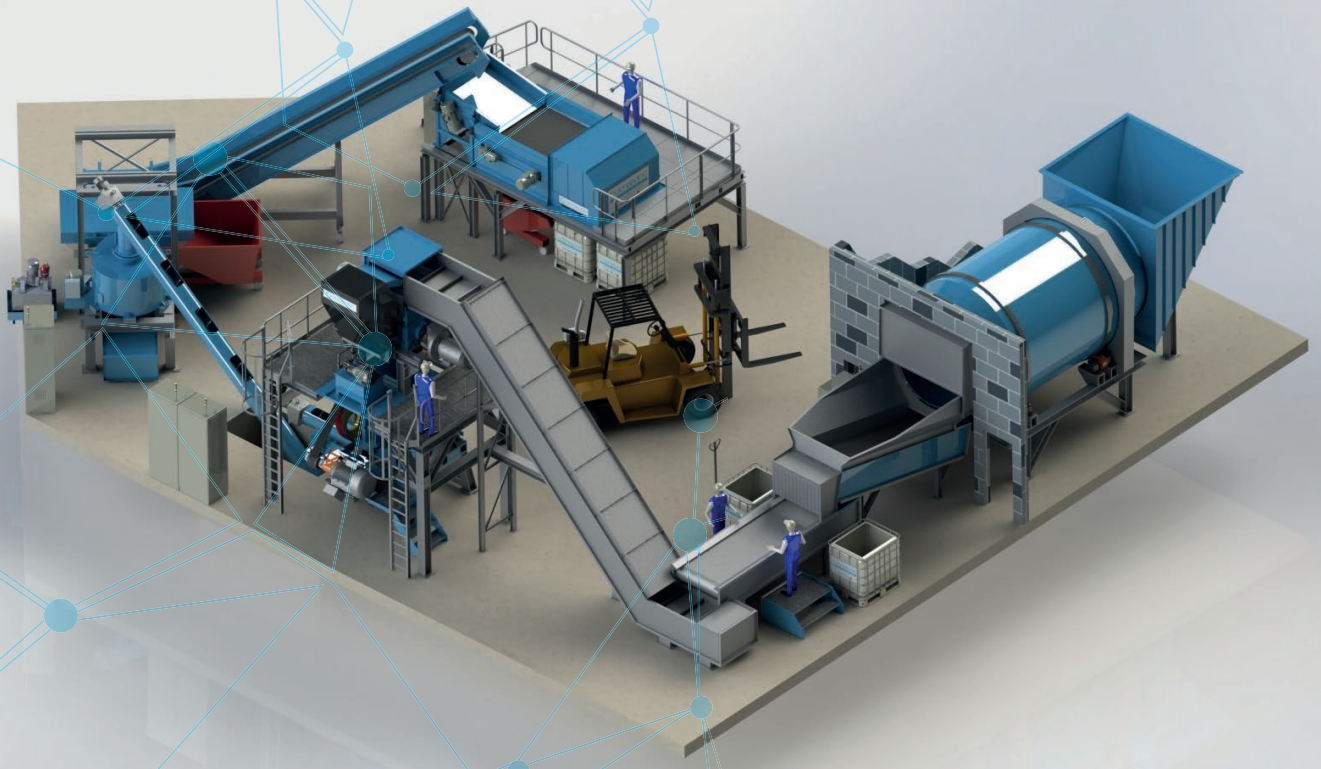
- Rotor Blades
- Strips
- Screen
- End wall Wear Plates

Advantages

- Efficient, low noise machine
- High throughputs
- Uniform output partial size
- Relatively small footprint
- Wide range of applications
- Relatively low maintenance/running cost
- Flexible drive system

Technical Data

Item	Unit	Description
Machine Dimensions (L x W x H)	mm	2,400 x 1,500 x 2,350
Total Weight	kg	Approx. 10,000 (max depending on drive configuration and blades/strips selection)
Machine Type		Four Shaft Shredder
Cutting Space (L x W)	mm	800 x 700
Drive Power	kW	2 x 30, 2 x 37, 2 x 45, 2 x 55,
Power Supply		400V, 50Hz, 3 phase
Input Capacity	t/hr	Up to 5 (Depending on material and screen size)
Output Fraction Size	mm	10 - 60 (Dependent on material/requirements)
Material infeed		Conveyor Belt/Grab Crane/Wheel Loader
Noise Level	db(A)	Idle < 85
Surface Finish		RAL 5015, RAL 7030 & galvanised
Chassis Type		Steel I-beam welded construction, IPB100 (DIN 1025-2 / BS EN 1025-2)
Rotor Type		Hexagonal Shaft
Central Lubrication		Yes (SKF Lincoln)
Control System		PLC control with touch screen HMI
IP Protection		IP 54
Auto Reverse		Auto Reverse then forward again. Time parameters can be modified
Optional Extras		Remote Control Remote Maintenance Assistance IIOT (Industrial Internet of Things) Fire Suppression, Water Spray Custom Hopper



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