

donasonic

Materials **Recycling** for a
Sustainable Future



TWIN *SHAFT* SHREDDER

X700

TYPHOON

WASTE MATERIALS RECYCLING MACHINE TECHNOLOGY & BIO ENERGY

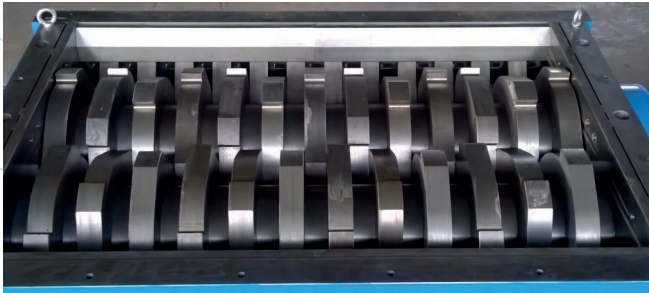
Function Overview

The **Typhoon** is a twin shaft, **pre-shredding machine**, utilised for the initial size reduction of a range of waste materials. The counter rotating shafts pull material into the teeth of the shredder with the support of an optional hydraulically driven nodding unit for problem free processing of bulky materials at high throughputs.

The **range of blade configurations** enables application with many different materials. The shredder is a slow-turning, low noise, efficient machine due to the low connected load and can be fitted with a variety of drive systems including geared electromotor and hydraulic motors. 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.

The Typhoon X100 has a series of **blade configurations** not only in thickness but in design. Along with the traditional blade that is designed to slide onto the shaft, Donasonic have developed an additional **removable blade** which enables changing of the cutting teeth **without dismantling the machine**. This greatly reduces the maintenance times and due to the smart engineering, the blades can be used multiple times reducing wear parts costs.



Application

- Tyres (Cars, Trucks, Construction Machinery)
- Car and Truck Oil Filters
- Cables
- WEEE (Waste Electrical and Electronic Equipment)
- Reject Materials, Textiles, Carpets and Floor Coverings
- Municipal Solid Waste
- Plastics (e.g. PVC, PET, PP, PE, HDPE, LDPE, ABS)
- Domestic, Commercial and Bulky Refuse

Maintenance

Daily

- General cleaning of the machine
- Hydraulic Components - Check battery level and oil temperature
- Lubrication - Check lubrication, fill and bleed as required
- Cutting space - Check, clean and empty the cutting area and rotor blades and strips

Weekly

- Drive Motor - Clean and remove dust deposits
- Lubrication - Inspect lubrication of equipment
- Cutting Space - Rotor and stator blade verification
- Steel Structure - Inspect, clean and remove dust

Monthly

- Pipelines/hoses - Inspect, clean and remove dust
- 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

The Typhoon X100 can be utilised for various volume reduction purposes with the output in strips equal to the width of the blades. The Typhoon X100 can also process single non-tempered metal pieces with a cross section area of up to 400mm², comparable to a metal bar of approx. 20 x 20 mm, as well as sheet metal parts with a thickness of maximum 2 mm and a length of 200 mm.

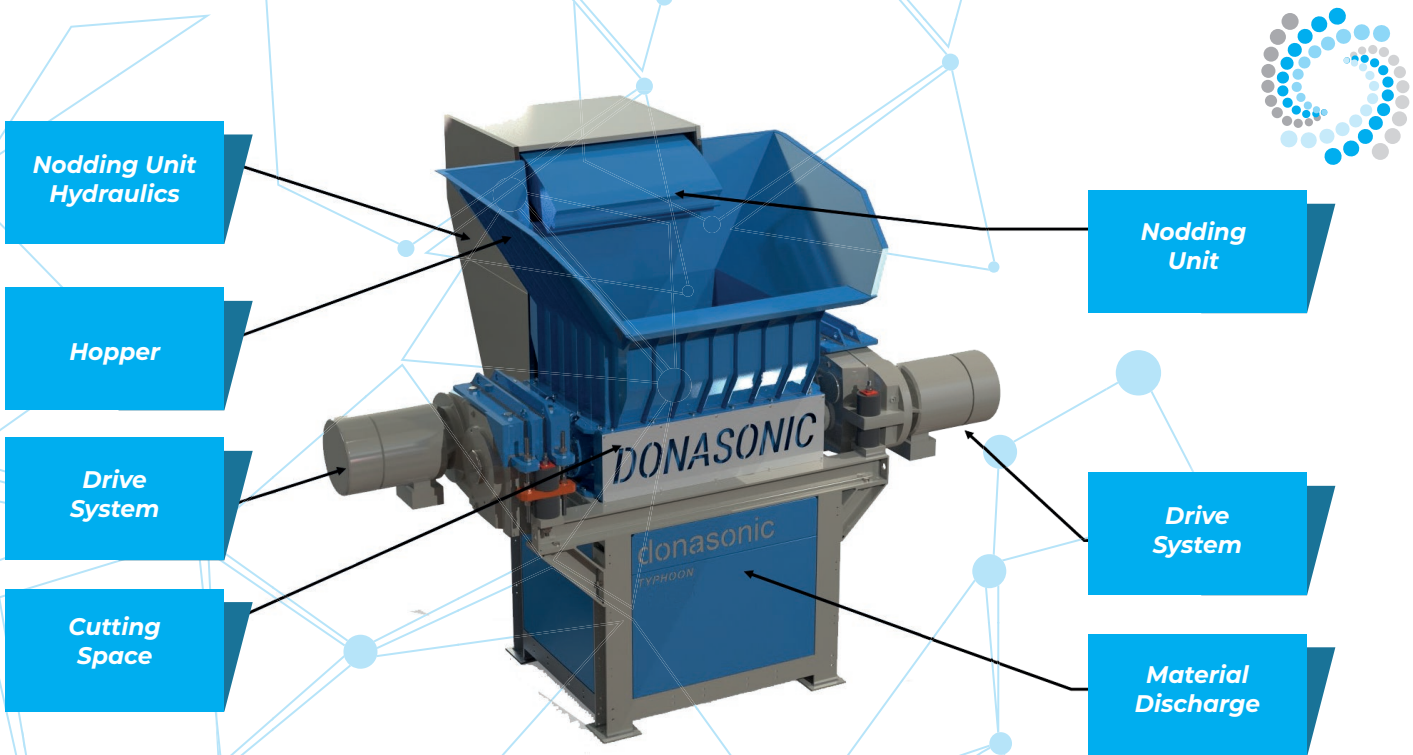
- Shafts - Check rotor shaft seal
- Electrical - Inspect/monitor electrical equipment and connections, record and replace any damaged cables
- Tighten screws

Wear Parts List

- Rotor Blades/Cutting Teeth
- Strips
- End wall Wear Plates

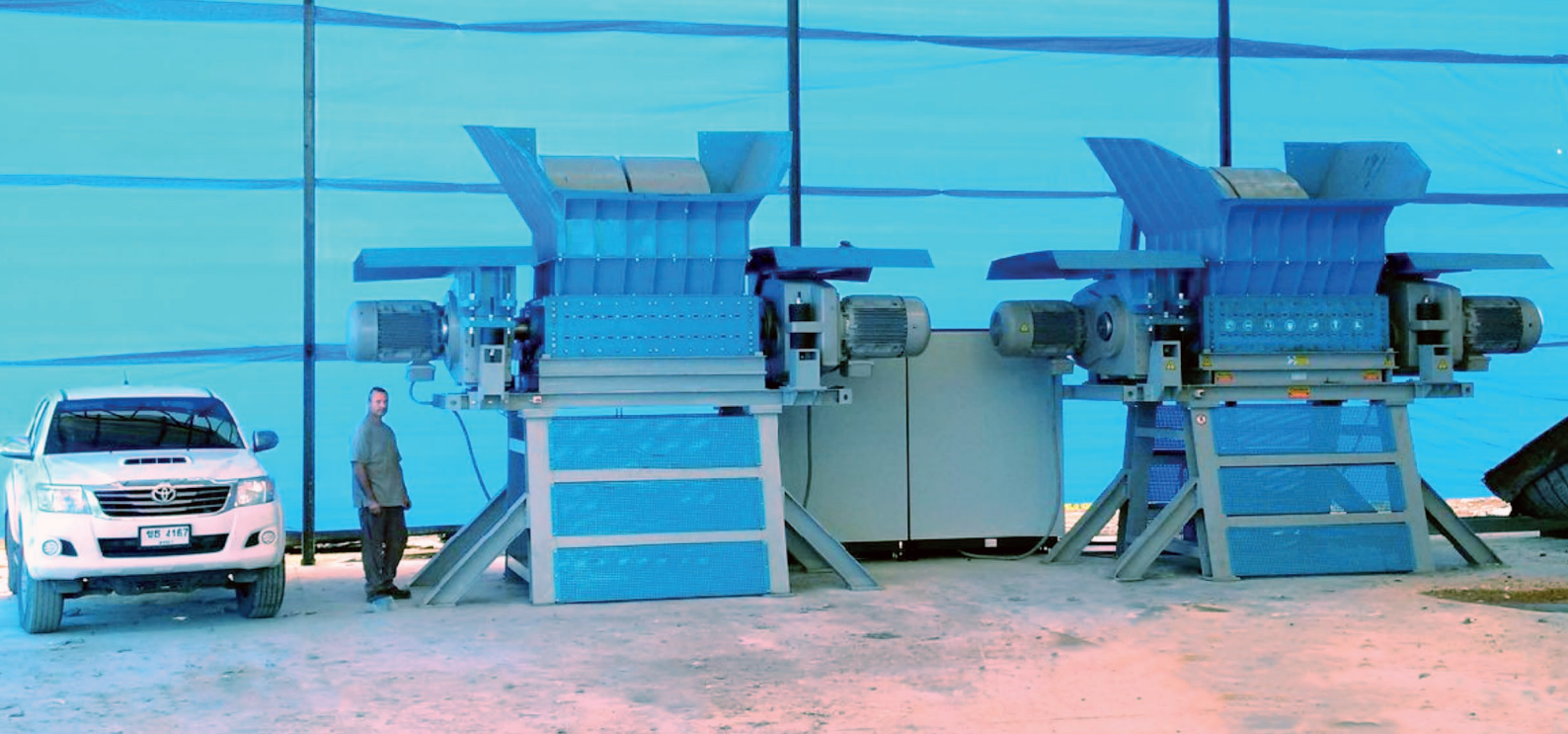
Advantages

- Efficient, low noise machine
- High throughputs
- Homogeneous output material size
- Relatively small footprint
- Wide range of applications
- Flexible drive system



Technical Data

Item	Unit	Description
Machine Dimensions (L x W x H)	mm	4,080 x 2,770 x 3,590
Total Weight	kg	Approx. 11,500 (depending on drive system and blades/strips selection)
Machine Type		Twin Shaft
Cutting Space (L x W)	mm	1000 x 1,100
Drive Power	kW	2 x 11, 2 x 15, 2 x 22, 2 x 30
Power Supply		400V, 50Hz, 3 phase
Rotation Speed	rpm	14-23 (depending on application, controlled by frequency converter)
Input Capacity	t/hr	Up to 7.5 (dependent on material)
Output Fraction Size	mm	Dependent on material / requirements (20 Min.–100 Max. width of strips)
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, IPB140 (DIN 1025-2 / BS EN 1025-2)
No. of knives		10 - 50 (depending on blade width)
Rotor Type		Polygon Shaft (P3G)
Rotor Dia.	mm	Ø 120
Rotor Blade Dia.	mm	495
Rotor Hardfacing		52-55 HRC
Automatic 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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