

## ORDER CONFIRMATION

8 JANUARY 2023

To:

Premier Metal Recycling  
87 Kelvin Road



We thank you for your recent order. Please see the final details and our confirmation that we are to supply a new Bonfiglioli Drake 2000, 16 Hammers HIGH PERFORMANCE Mill Shredder. As per final negotiations with David Pownall, please see the final agreed pricing terms.

### **TECHNICAL DESCRIPTION**

The Drake 2000, 16 Hammer HP (High Performance) is a compact hammer mill type metal shredding system. This model is capable of efficiently shredding the following types of metal scrap:

- Light mixed scrap.
- Entire mixed metal scrap bales or car bales.
- Entire cars including engines, transmissions, running gear etc.
- Aluminum and other types of non-ferrous material.

### **SHREDDER OPERATION**

The loading hopper is generally charged with an elevated cab type material handler using a grapple or magnet. To achieve optimum production, it is best if the loading hopper is constantly maintained full of scrap. This optimizes the shredding operations inside the chamber. The material placed into the charge hopper does not need to be pre-sheared or compressed. The machine will automatically compensate and size material to the dimensions of the hopper to allow it to enter the shredding section from the feeding chamber.

There is no risk of overloading the hopper or system. The shredding operation, including material in-feed, is electronically monitored. Machine controls will match and balance machine operation function with volume of material. The downstream is fully automatic which makes the job of the person monitoring the overall shredder operation easier and more effective.

The mill rotor is protected from damage by a patented clutch system.

The mill plant is equipped with a conveniently located knock-out door with hydraulic access. The door is manually operated and allows the service personnel to remove obstructions as well as to perform routine maintenance such as changing hammers (approx. 4-5 hours to complete), checking the status of internal lines, and generally monitoring the condition of the unit.

The output shred material is in compliance with the guidelines ISRI 210.

#### TECHNICAL DATA SHEET

- With Electrical Motor:	Type: 860 kW
- Dust Aspiration plant	
- Hydraulic plant:	Working pressure: 250 bar Oil tank capacity: ~ 110 liters max
- Rotor:	16 hammers
- Rotor RPM:	950-1000
- N° of axles:	4 (hammer pins)
- Hammer weight:	≅ 168 kg
- Max Productivity:	≅ up to 30-35 t/h under normal working conditions, depending on the quantity and quality of material and ability of the operator.

#### COMPLETE PLANT

The complete plant is composed as follows:

- Loading hopper built with high strength steel Hardox 500.
- Central body with shaft, hammers, grid and electric motor WYE with delta star system for start-up.
- 2 x vibrating units.
- 2 x permanent magnets.
- 3 x conveyors (2 of 5 meters each for the waste and one of 10 meters for the final product "shred material").
- 1 x dust aspiration plant.

#### **Eddy Current System (ECS) separator to segregate the non-ferrous metal from the waste/fluff**

The ECS separator for non-ferrous metals is based on the principle of electrical currents (Foucault currents) that a rotating magnetic field induces on the surface of metals which are very close to the field itself.

The induced currents circulating on the non-ferrous metallic part to be separated generate on it a repulsion just to create a jump which permits its separation from the flow of the inertial material.

1. separation of ferrous materials.
2. vibrating channel.
3. ECS separator.
4. additional magnetic separation.
5. discharge of inertial materials.
6. discharge of non-ferrous material.

The material to be processed is submitted to a first magnetic separation and then it is discharged on a vibrating plan which enlarges the flow.

The ECS conveyors carries the non-ferrous material on the magnetic rotor which induces a violent repulsive force. It happens consequently a ballistic separation among the three components of the processed material. The ferrous waste, attracted by the magnetic rotor, are discharged on the hopper and the inert waste fall down into the central hopper, the non-ferrous metals (aluminium, copper, bronze, brass) are thrown and discharged in the hopper.

### **ECS Application**

The ECS system is employed in the recovery plant of renewable materials such as:

- cars shredding plants.
- urban solid waste plants.
- glass, wood, plastic and paper recycling plants.

### **SPARE PARTS**

A full standard set of Spare Parts to undertake the first maintenance of the unit is part of the supply. It includes:

- 3 sets of hammers (*for clarity, one set of hammers is installed, and 2 sets of spare hammers included as spares*).
- 2 set of pins.
- 1 hammer extractor.
- 1 set of filters for hydraulic board.
- 1 set of sensors for bumpers and clutch.
- 1 water pump.
- 1 rpm reader.
- 1 set valves.
- 1 set of flexible hoses for aspiration plant.
- 1 set of rubber ribbons for conveyors.
- 1 set of gearboxes for conveyors, magnets and vibrating plans.
- 1 set filters for the mud separation for dust aspiration plant.
- 1 set of side walls for the loading charging hopper.

**1. PRICING SUMMARY:**

Item	Description	Qty	Unit Price (excluding GST)	TOTAL Price (including GST)	Delivery to Site
1	1 x New Bonfiglioli Drake 2000, 16 Hammers, HIGH-PERFORMANCE Mill Shredder	1			FEB-2025 TBC

**Conditions of this sale:**

- Unit is quoted ex-works Italy, with all local freight in Italy, International shipping and charges, and local freight in Australia including all port charges and fees is payable by the customer before the unit leaves the factory.
- Unit is quoted in Australian dollars at customers request. and exchanged rate is fixed with further rate changes allowed to

**Included in the above price:**

- Labour for installation, commissioning, and operator familiarisation training.
- Commissioning is based on consecutive business days (Monday-Friday), between business hours (7am-4pm). Any deviation as result of circumstances independent from PMH may result in additional or variation to the contract/agreed supply price.
- Spare parts as specified above.

**Not included in the above price:**

- Unit is quoted on an ex-works basis, all transport and shipping costs to be determined approximately 60 days before the unit is due to ship and will be payable by the customer in full before the unit leaves the factory.
- Crane hire / lifting gear for the offloading of equipment on site on arrival.
- Container unpacking at your site.
- Hydraulic oils for first fill.
- All cranes, other lifting equipment (*forklifts, work platforms, etc.*), tools required for the installation of equipment.
- All civil works (*if required*), provision of required power and electrical connections are your responsibility.
- Any / all import duties if applicable (*we are seeking guidance with our local customs agents and will confirm as soon as possible*).
- Any item not specified in our offer.

**2. AVAILABILITY:**

Unit is expected ex-factory DEC-2024, with delivery to site FEB-2025, and commissioning in MAR-2025 - TBC.

### 3. PAYMENT TERMS:

Payment Schedule	Amount	Description
1	AUD \$140,000	down-payment ( <i>already paid</i> )
[REDACTED]		

### 4. WARRANTY:

As per clause 37.1 of the Terms and below.

Motor: As per warranty given by manufacturer.  
 Framework and rotor: 3 years.  
 Hydraulic parts: 2 years.

Approved Pacific Materials Handling technicians & procedures must be utilized to validate warranty. Warranty remains valid subject to continuous service and maintenance as outlined by the manufacturer. Warranty remains valid subject to annual machine inspection, audit and report by the manufacturer’s agent. Warranty covers manufacturing defects, but excludes damage caused by excessive impact, abuse or use outside of manufacturer guidelines.

### 5. TERMS AND CONDITIONS:

This Offer is issued under and pursuant to the Supplier’s Trading Terms and Conditions (Terms). By signing and returning this Quote and/or issuing a Purchase Order further to this Quote, I hereby accept and agree that the supply of the Equipment set out in this Quote is governed by the Terms, which I acknowledge having read and accepted before signing.

We thank you for this opportunity and should you require any additional information or have any questions please do not hesitate to contact the undersigned.

Yours sincerely,

[REDACTED SIGNATURE]

