

## POWDER PROCESS DESIGN SERVICES LIMITED

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# STOCK LIST - DECEMBER 2019

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PPDS Ltd is pleased to offer the following plant and equipment, subject to prior sale:

# **Crushers**

#### **MMD Sizer**

500 CTRS Short Case Sizer for the size reduction of a wide range of different materials.

Installed power: 75 kW

**Toothed Segments** 

To be offered in refurbished condition.



#### **PRALL-TEC Hammer Mill**

Model PTH 650/500 SK Swing Hammer Mill with "clamshell" body and hydraulic opening for ease of access.

Year of Manufacture: 2010

Machine No.: 201506

Feedsize up to 75 mm.

Products down to minus 1 mm possible.

45 kW vee-belt drive.

Selection of spare parts available with the mill.

http://prall-tec.com/pth/



Registered in England No. 6497152

Registered Office: Brooklands, Church Lane, Bramshall, Staffordshire, ST14 5BQ



#### Model 32" x 39" Double Roll Kibbler

32" (812 mm) dia x 39" (990 mm) wide Bradley Craven Kibbler Rolls for size reduction of Chalk, Dolomite, Gypsum, Shale, Clay, Chamotte, etc.

Installed Power: 37 kW

Capacity: Typically 50 - 60 tonne/hour

Overall Dimensions of Crusher with drive: 5800 x

3500 x 1500 mm high.

Total Weight: 14,400 kg



# **Barmac Rotopactor**

Suitable for the size reduction and shaping of a wide range of different materials.

Rock on rock crusher, ideal for hard and abrasive minerals.

Now part of Metso product range.

75 kW drive.

Can be supplied "as is" or in refurbished condition.



## **Edgar Allen Heavy Duty Crusher**

Swing Hammer crusher with grate discharge arrangement.

Mounted on support frame.





## **Gundlach Cage-Paktor**

Model 40-2C4R-3768 Cage-Paktor Crusher

Size reduction by impact using 2 counter rotating cages.

High size reduction ratio.

Feedsize up to 75 mm. Product fineness down to minus 2 mm.

Ideal for processing sticky and moist materials.

Rotor power – 75 kW and 55 kW.



## **Alpine Omniplex Hammer Mill**

Model Ha 40/32 Swing Hammer Mill.

Installed power: 15 kW

Feed Inlet: 340 x 150 mm.

Screen discharge arrangement.



## **Sturtevant Crushing Rolls**

For sample preparation or pilot plant operation.

4:1 reduction ratio with adjustable gap to give products down to minus 1 mm.

Rolls measure 200 mm dia x 125 mm wide.

Condition of rolls is very good.





## Mills:

#### **HARDINGE Conical Ball Mill**

10'-0" dia x 84" ball mill for the dry grinding of industrial minerals.

Mill fitted with Manganese steel liners for operation will steel ball grinding media.

Cooper Split Roller Bearings on trunnions.

Installed Power: 525 Hp (395 kW)

Gearbox and motor included. Spare parts included.



#### **HARDINGE Conical Ball Mill**

10'-0" dia x 84" ball mill for the dry grinding of industrial minerals.

Mill fitted with Manganese steel liners for operation will steel ball grinding media.

White Metal Bearings on trunnions.

Installed Power: 525 Hp (395 kW)

Gearbox and motor included.



#### **HARDINGE Conical Pebble Mill**

8'-0" dia x 84" Hardinge Iron Free ball mill for the dry grinding of industrial minerals for use in ceramics, e.g. silica sand, quartz, feldspar, zircon, etc.

3 mills now sold, 2 remaining.

- 1 with Cooper Split Roller Bearings on trunnions.
- 1 with White Metal Bearings on trunnions.

Mill can be supplied with new silex or alumina lining.





#### **HARDINGE Conical Ball Mill**

6'-0" dia x 36" ball mill for the dry grinding of industrial minerals.

Mill fitted with Manganese steel liners for operation will steel ball grinding media.

White Metal Bearings on trunnions.

Installed Power: 90 kW

Motor c/w inverter panel included.

Mill with countershaft drive but could be converted to goarbox

to gearbox.



# **Cylindrical Ball Mill**

10'-0" dia x 20'-0" long Iron Free ball mill for the dry grinding of industrial minerals for use in ceramics, e.g. silica sand, quartz, feldspar, zircon, etc.

Operation with either flint pebbles or aluminium oxide balls.

Silex lining currently installed but can be supplied with alumina lining.

Installed Power: 250 kW



#### **Edwards & Jones Batch Ball Mill**

Rubber lined mill for operation with aluminium oxide grinding media.

Size : 2440 mm dia x 3350 mm long

Batch Size: 5 tonne

Cooper Split Roller Bearings on trunnions.





#### **Edwards & Jones Batch Ball Mill**

Rubber lined mill for operation with aluminium oxide grinding media.

Size : 1500 mm dia x 1800 mm long

Batch Size: 1 tonne



#### William Boulton Batch Ball Mill

Silex lined mill for dry grinding.

Size : 1500 mm dia x 1500 mm long Internal : 1350 mm dia x 1200 mm long

Gear and Pinion drive

For operation with either aluminium oxide or flint pebble charge.



# William Boulton Vibro-Energy Mill

For iron-free wet fine and ultrafine grinding of industrial minerals.

Model AM-100 mill with total working volume of 2 m<sup>3</sup>.

Installed power - 6.2 kW.

Rubber/Polyurethane lining with aluminium oxide grinding media.





#### **ACM 75 Air Classifier Mill**

Offered in fully refurbished condition.

Design and supply of ancillary equipment and controls.

Hammer rotor High chrome segmented grinding track.

Installed Power: Rotor - 55 kW

Classifier - 7.5 kW

Size reduction of soft to medium hard materials.

Fineness range : 150 – 25 μm.



# **Model 630 UPZ Alpine Impact Mill**

Currently equipped with ceramic plate beater and track grinding media but can be converted to standard universal mill.

Installed Power: 55/75 kW

Size reduction of soft to medium hard materials.

Fineness range: 500 - 75 µm.



#### **Model CM500 Atritor Cell Mill**

Multirotor mill for drying, grinding or coating of industrial minerals.

Model CM500 with installed power of 55 kW.

Airflow rating 2000 – 6000 m<sup>3</sup>/hour depending on application.

Little used machine in excellent condition.





## Model 3H KEK Pin Mill (2 available)

Pin Disc Grinding Media

Feed/air inlet arrangement with magnet.

15 kW vee-belt drive.

Size reduction of soft materials. Fineness range: 500 – 45 µm.



#### Model 3H KEK Mill

Turbine Rotor and Screen.

Currently mounted on pneumatic pick-up for conveying of product to cyclone/filter.

Spare rotor and screens included.

Installed Power - 15 kW vee-belt drive.

Size reduction of soft materials. Fineness range: 500 – 53 µm.



## **Bradley Hercules Screen Mill**

Robust and proven mill design for size reduction of Calcium Carbonate and other soft to medium hardness minerals.

Feedsize : 30 mm down

Product Fineness: 90% passing 2 mm to

60% passing 75 micron

Capacity : Typically 8-10 tonne/hour.

Installed Power : 90/110 kW

Product fineness controlled by integral screen

discharge arrangement.

Vibratory feeder and discharge screw included.





# **Classifiers:**

#### International Combustion RAYCO Classifier

8'-0" diameter double whizzer Raymond RAYCO Unit Air Classifier for separations in the 250 – 45 micron size range.

For independent classification or for closed circuit operation with a ball mill.



#### 7'-6" diameter Double Whizzer Classifier

International Combustion Ltd airstream classifier for separation in the 97% passing 250 – 45 micron range.

Airflow rating of up to 30,000 m<sup>3</sup>/hour.

Installed Power: 15 kW

Suitable for operation in conjunction with mill or as independent classifier system.

Classifier casing fabricated from "Triten" wear resistant plate.



## **IIT Classifier**

Model C400 Dynamic Air Classifier.

Independent airstream classifier or for closed circuit operation with mill.

Product collection cyclone and high pressure fan available.

Feedrate up to 4 tonne/hour (depending on product fineness).

High efficiency separation of soft to medium hard materials in the 150 – 10 µm size range.





#### **British Rema Aerosplit Classifier**

Model MAC 0 for operation in pilot plant of small production facility.

Classifier offered in fully refurbished condition.

Product collection filter, high pressure fan and ducting available.

High efficiency separation of soft to medium hard materials in the 150 – 10 μm size range.



# **Dryers:**

## **FEECO Rotary Dryer**

6'-6" dia x 40'-0" long Co-current Rotary Dryer.

Combustion chamber with Maxon burner. Geared motor with girth sprocket and chain drive.

Manufactured 2003.



## **Hosokawa Micron Dryer**

Model MDH 2 Micron Dryer with swing hammer rotor and dynamic air classifier.

For flash drying of soft to medium hard materials at rates of up to 2000 kg/hour.

Evaporative capacity: 300 kg/hour H<sub>2</sub>O.

Installed Power: Rotor - 30 kW

Classifier 2.2 kW

Twin screw feeder.

Can be offered "as is" or in refurbished condition as complete drying system.





## Airswept Tubular (AST) Dryer

Model 2010 AST Dryer c/w product collection filter.

Drying of wide range of materials, e.g. filter cakes, slurries.

Evaporation of up to 500 kg/hour H<sub>2</sub>O.

Airflow 3750 m<sup>3</sup>/hour.

Installed power 22 kW.



# **Screens:**

## Mogensen Spreader Feeder

Spreader feeder for 2 metre wide Mogensen Sizer.

Distributes incoming feed across the full width of the screen - critical for optimum efficiency at high throughput.

For further details:

http://www.mogensen.co.uk/mogensen\_spreader\_feeders



## Mogensen Screen

Model 1034 sizer

3 deck machine.

Fully refurbished in 1016.

2 x 0.75 kW Vibrating Motors.





## Mixers:

#### Ribbon Blender

Batch Mixer for powders and granules.

Mild steel construction with stainless steel lining in chamber.

Approximate Overall Dimensions:

1700 mm long x 700 mm wide x 800 mm high.

Working Volume: 0.75 m<sup>3</sup>

5.5 kW motor/gearbox drive.



# Hosokawa Schugimix

Continuous mixer/agglomerator.

Can be equipped with liquid injection for granulation of powders.

55 kW vee belt drive.



# **Dust Collectors:**

## **Dantherm Reverse Jet Filter**

Model MJB 44/L/5-11

55 x 2 metre bags

Cloth area - 44 m<sup>2</sup>

Bag removal from top (cleanside removal).

Explosion relief panel (can be converted to access door for cleandown)

5.5 kW fan c/w silencer.





#### **Dantherm Reverse Jet Filter**

Model MJB 26/L/4-8

32 x 2 metre bags

Cloth area - 26 m<sup>2</sup>

Bag removal from side.

Explosion relief panel (can be converted to access door for easy cleandown)

2.2 kW fan c/w silencer.

Flange mounted unit at present but can be supplied in fully refurbished condition with discharge hopper.



#### Reverse Jet Filter

Stainless steel construction.

Tangential inlet.

Can be supplied with cartridge media.

Complete with 1.5 kW 425 m<sup>3</sup>/hour fan.



## **Product Collection Cyclone**

High efficiency cyclone for separation of product from airstream.

400 mm dia x 7500 mm overall height.

Inlet measures 270 mm wide x 620 mm high.

Airflow rating – approximately 10,000 m3/hour.





## **Product Collection Cyclone**

International Combustion Ltd Cyclone for separation of product from airstream.

3000 mm dia x 7000 mm overall height.

Inlet measures 1050 mm high x 540 mm wide.

Airflow rating – approximately 30,000 m3/hour.



# **Product Collection Cyclone**

IIT High efficiency cyclone for separation of product from airstream.

700 mm dia x 2750 mm overall height.

Inlet measures 210 mm wide x 290 mm high.

Airflow rating – approximately 3,500 m3/hour.



# Feeders:

## Vibrating Feeder

Electromagnetic drive tubular feeder (2 available)

Manufacturer: Applied Vibration Ltd

Model : 125/IC-50

Size : 150 mm dia x 750 mm long

REOVIB Controller included.





#### **Acrison Screw Feeder**

Model A1-403-105-2-13 Screw Feeder

100 mm dia screw with conditioning auger.

Installed power: 1.1 kW

400 litre feed hopper with lid and 250 mm dia inlet.



## **Chronos Richardson Screw Feeder**

Agitated feeder with 150 mm dia screw.

2.2 kW drive.



# **Rotary Valves:**

# **MID TWA Extreme Duty Rotary Valve**

Model TWA 300 with a capacity of 14 litre/rev.

Features:

Ni-hard Rotor Ni-hard Liner Mechanical Shaft Seals Geared Motor Drive Outrigged sealed for life bearings

2 sold, 1 remaining.





## **MID TWA Extreme Duty Rotary Valve**

Model TWA 500 with a capacity of 80 litre/rev.

Features:

Ni-hard Rotor Ni-hard Liner Mechanical Shaft Seals Geared Motor Drive Outrigged sealed for life bearings

1 sold, 2 remaining.



# **Polysius Heavy Duty Rotary Valve**

Inlet - 450 x 450 mm

Closed Rotor with replaceable tips.

2.2 kW geared motor drive



## **Rotoval Rotary Valve**

Model HD 600 Heavy Duty Rotary Valve.

Inlet – 550 mm diameter. Overall height – 800 mm.

Chain drive with 3 kW geared motor.

High capacity rotary airlock – ideal for low bulk density materials. Capacity of over 150m³/hour @ 20 rpm!





# **Miscellaneous:**

# Pneumex Pump (2 available)

3m³ capacity blowing vessel for dense phase conveying of powders and grits.

Capacity up to 50 tonne/hour.



# Screw Conveyor (2 available)

300 mm diameter x 8000 mm long heavy duty inclined tubular screw conveyors.



# **Belt Conveyor**

Belt conveyor – 600 mm wide belt x 22 metre long.





## **Dump Hopper c/w Belt Feeder**

 $3700 \times 3500 \times 3000 \text{ mm high} + 1200 \text{ mm high}$  greedy boards.

Outlet - 2000 mm x 750 mm.

2500 mm x 750 mm Belt Feeder c/w geared motor drive.

Support legs





## **Feed Hopper**

3000 mm long x 2000 mm wide x 1200 mm high on the straight.

900 mm high hopper section reducing to 2000 mm long x 400 mm wide outlet.

Total capacity approximately 9 m<sup>3</sup>.

5000 mm long x 300 mm dia discharge screw available.

Overall height (on legs) 4300 mm.

