

### POWDER PROCESS DESIGN SERVICES LIMITED

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### STOCK LIST – JANUARY 2021

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

## **Crushers**

### **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.

For further details:

https://terrasource.com/equipment/cage-paktorcage-mill-by-gundlach-crushers-brand/

#### **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.



Registered in England No. 6497152

Registered Office: Brooklands, Church Lane, Bramsh and, Staffordshire, ST14 5BQ



#### **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/



### 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



### **Edgar Allen Heavy Duty Crusher**

Swing Hammer crusher with grate discharge arrangement.

Mounted on support frame.





### **Alpine Omniplex Hammer Mill**

Model Ha 40/32 Swing Hammer Mill.

Installed power: 15 kW

Feed Inlet: 340 x 150 mm.

Screen discharge arrangement.



### 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. Some 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 gearbox.

# **British Rema Stag Ball Mill**

Model No.8 Stag Mill c/w 45 kW drive

Ideally suited to coarse grinding of hard abrasive materials where minimum fines generation is desirable.

Complete Mill in excellent condition.









#### **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 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 40 Air Classifier Mill**

Offered in fully refurbished condition.

Hammer rotor

High chrome segmented grinding track.

Installed Power: Rotor - 30 kW

Classifier - 4 kW

Size reduction of soft to medium hard materials.

Fineness range: 150 – 25 µm.

PPDS can design and supply of ancillary equipment and controls.



### **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 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.



### Alpine 100 UPZ Fine Impact Mill

Laboratory Mill with Beater and Track grinding media.

Offered in refurbished condition with new control panel.

Installed Power: 1.5 kW

Arrangement includes feed hopper, vibratory feeder, discharge hopper, installation table and 200 mm dia x 1000 mm filter bag with support cage.



# **Classifiers:**

#### **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.





#### 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).



### **Bradley VBC 30 Classifier**

Bradley Pulveriser Company airstream classifier for separation in the 97% passing 150 – 25 micron range.

Airflow rating of up to 20,000 m<sup>3</sup>/hour.

Installed Power: 22 kW

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





### **Dryers:**

### **Didion Rotary Dryer**

1.8 metre diameter x 11 metre long.

30 kW geared motor drive.

Can be offered either as machine only or as complete drying system with feed arrangement, air heater, filter and exhaust fan.



### **Rotary Dryer**

1 metre dia x 5 metre long Rotary Dryer offered in fully refurbished condition.

7.5 kW geared motor drive.



### **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.





### **Scott AST Air Swept Tubular Dryer**

Model 5418 Dryer complete with feeder, air heater and exhaust fan.

110 kW vee-belt drive

Feed Screw with agitated feed hopper.

3.4 MW LPG fired air heater.

Airflow: 30,000 m<sup>3</sup>/hour – 90 kW exhaust fan included.



### **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



# **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:**

#### DCE Dalamatic Reverse Jet Filter

Model DLM 2/8/15 filter with 160 off 1.5 metre flat bags.

Cloth Area: 240 m<sup>2</sup>.

Suitable for an airflow of approximately 20,000 m<sup>3</sup>/hour.

To be offered in refurbished condition with new filter bags, reverse jet valves and controller for "as new" performance.

Overall Dimensions: 2100 mm wide x 2300 mm deep x 6000 mm high (includes support frame with 1500 mm clearance under hopper).





#### **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.



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**

Numerous Podmore Vibrating Trough Feeders/Conveyors.

Ranging in size from 200 mm wide x 850 mm long to 500 mm wide x 4000 mm long.

Controllers available.



#### **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.





### 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.



# **Rotary Valves:**

### **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

2 sold, 1 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)

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



### **Belt Conveyor**

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

