



## AIRBLAST

P.O. Box 1075  
1700 BB Heerhugowaard  
The Netherlands  
Tel. : + 31-72-5718002  
Fax : + 31-72-5714340  
E-mail : info@airblast.com  
Homepage: <http://www.airblast.com>

## COMMERCIAL INFORMATION

DOC. NO.: 001 GARNET RECYCLING 50160

VERSION: 001

DATE: 2000

**TITLE: Garnet recycling unit RC- 50/160**



### Dimensions (in standing position):

Height	:	4.450 mm
Width	:	2.400 mm
Depth	:	2.000 mm

### Technical Specification:

Weight (with empty silo)	:	3.000 kg.
Total Power	:	1.6kW 230 / 400 Volt – 50 Hz.
Compressed Air	:	min. 4 bar

Silo Capacity	:	1.600 Liter
Recycling Capacity	:	3.000 Liter/hour

→ For garnet this is  $2,3 \times 3.000 / 1.000 = 6,9$  ton/hour

→ For steel grit this is  $4,5 \times 3.000 / 1.000 = 13,5$  ton/hour

The used abrasive has to be put into the abrasive hopper, which generates a regulated flow of abrasive to the elevator inlet. From the elevator, the grit flows into a rotary sieve, with  $\varnothing$  3.0 / 3.5 / 4.0 or 5.0 mm at choice. This rotary sieve separates contaminants like coating scale, glass, cigarette-butts and other big parts, from the (polluted) abrasive by the rotating movement. The rotary sieve compartment is executed with a dust exhaust connection. After passing the rotary sieve, the abrasive flows into the cascade cleaning system.

The air wash system can be regulated to control the size of the reusable abrasive. Dust and non-usable (too fine) abrasive are automatically discharged and collected in big bags or extracted by the separate filter PF-1. The cleaned abrasive is put into the storage silo, ready to be used again in the blast vessels or big-bags.

The installation comes complete with crane hooks and inspection covers.

**A detailed technical specification is included in Appendix A.**

Several options are possible, such as:

- Complete closed construction, with or without heating
- Bigger silo capacity
- Ladder to silo platform

Included in our delivery are:

- Testing of all elements of hardware in our works.
- All necessary drawings and foundation plans.
- Instruction manual/ parts list in the English language.
- All necessary electric panels to operate the equipment.
- Painting of the equipment in our standard colours RAL **5017** (blue) / RAL **1007** (yellow).

Excluded from our delivery are:

- Erection and commissioning at site.
- All building and construction activities.
- Electrical supply / connection to electrical supply
- All electric cables as from operating panels to all elements to be connected.
- Air compressor and connection to pneumatic supply.
- All pneumatic piping as from supply to all elements to be connected.
- Consumables.

Delivery:

Ex works, unpacked as per Incoterms 2001

Taxes, Duties:

All taxes and duties levied outside The Netherlands, as well as obtaining of and costs for import / export licences are excluded.

Delivery time:

Approx. 10 – 14 weeks ex works, after clarification of all technical details and receipt of down payment. Subject to spare parts available from stock

Guarantee:

We offer a guarantee period of 1 year after commissioning with a maximum of 15 months after ex works delivery, excluding normal wear and tear.

Conditions:

This quotation is subject to the general conditions for the supply and erection of plant and machinery for import and export No: 188A, prepared under the auspices of the United Nations economic commission for Europe.

Standards and codes:

All our equipment is manufactured according to internationally accepted standards and codes.

## **Appendix A: Technical Specification Garnet Recycling Container - Type RC-50-160**

### Dimensions (in standing position):

Height	:	4.450 mm
Width	:	2.400 mm
Depth	:	2.000 mm

### Technical specification:

Weight (empty)	:	3.500 kg
Total electrical power	:	1,6kW 230/400 Volt – 50 Hz.
Compressed Air	:	min. 4 bar

Capacity Silo	:	1.600 Liter
Capacity Elevator	:	3.000 Liter/hour

→ for garnet this is  $2,3 \times 3000 / 1000 = 6,9$  ton/hour  
→ for steel grit this is  $4,5 \times 3000 / 1000 = 13,5$  ton/hour

### Consisting of:

#### **1) ONE ABRASIVE HOPPER WITH INLET SIEVE**

##### Opening Dimensions:

Height above floor	:	650 mm
Width approx.	:	700 mm
Depth	:	500 mm

Made of 3 mm. Steel plate complete with sieve and grit regulating system to prevent bucket conveyor overload.

#### **2) ONE BUCKET ELEVATOR E-50**

Total Height, approx.	:	4.400 mm
Width	:	460 mm

Closed dust free bearing system. Special belt with Columbus buckets.

Nord Gear motor	:	0,37 kW, with Electro/mechanical brake
Capacity	:	50 L/min.

#### **3) ONE AUTOMATIC SELF CLEANING ROTARY SCREEN TZ-80**

Capacity 80 Liter per minute

##### Dimensions:

Height	:	520 mm
Width	:	400 mm
Depth	:	750 mm

Holes :  $\varnothing$  3 or 3,5 or 4 or 5

##### Construction:

Made of 2 mm and 3 mm steel plate, reinforced with profiles. Provided with motor reductor 0,37 kW 230/400 Volt, dust-closed bearings and an inspection cover.

### Abrasive Cleaning:

The Rotary Sieve must be used if the abrasive is polluted with big parts like coating-scale, wood chips, glass, etc.. The contamination is separated through the rotating movement of the sieve. Further, the sieve comes complete with a dust exhaust connection.

#### **4) ONE GRIT CLEANING SYSTEM**

Consisting of one heavy -duty cascade system with double air wash action of the abrasive, mounted directly onto the outlet of the rotary sieve.

The air wash action can be regulated to control the size of re-useable abrasive. The dust and non-useable abrasive (too fine) are discharged automatically and collected in big bags or extracted by the separate filter PF-1.

#### Technical specification PF-1

Exhaust capacity	:	960 m <sup>3</sup> /h.
Total Pressure	:	2.000 Pa.
Motor capacity	:	0,82 kW, 230/400 Volt, 50 Hz.
Filter cartridge(s)	:	1 Piece
Filter Area	:	15,6 m <sup>2</sup>
Filter Medium	:	Polyester membrane SF 806
Dust collecting bag(s)	:	1 Piece
Max. Dust emission	:	< 3 mg/nm <sup>3</sup>

The system comes complete with regulating valve and ducting.

#### **5) ONE ABRASIVE STORAGE SILO 1.600 LITER**

Silo for abrasive storage with top cover, connection to grit cleaner and two outlets for 2 blast vessels.

#### **6) ONE ELECTRIC PANEL**

Complete with automatic switch controllers, safety switches, main switch, signaling lamps and control buttons for filter, rotary screen and elevator.

#### **7) ONE COMPLETE FRAME**

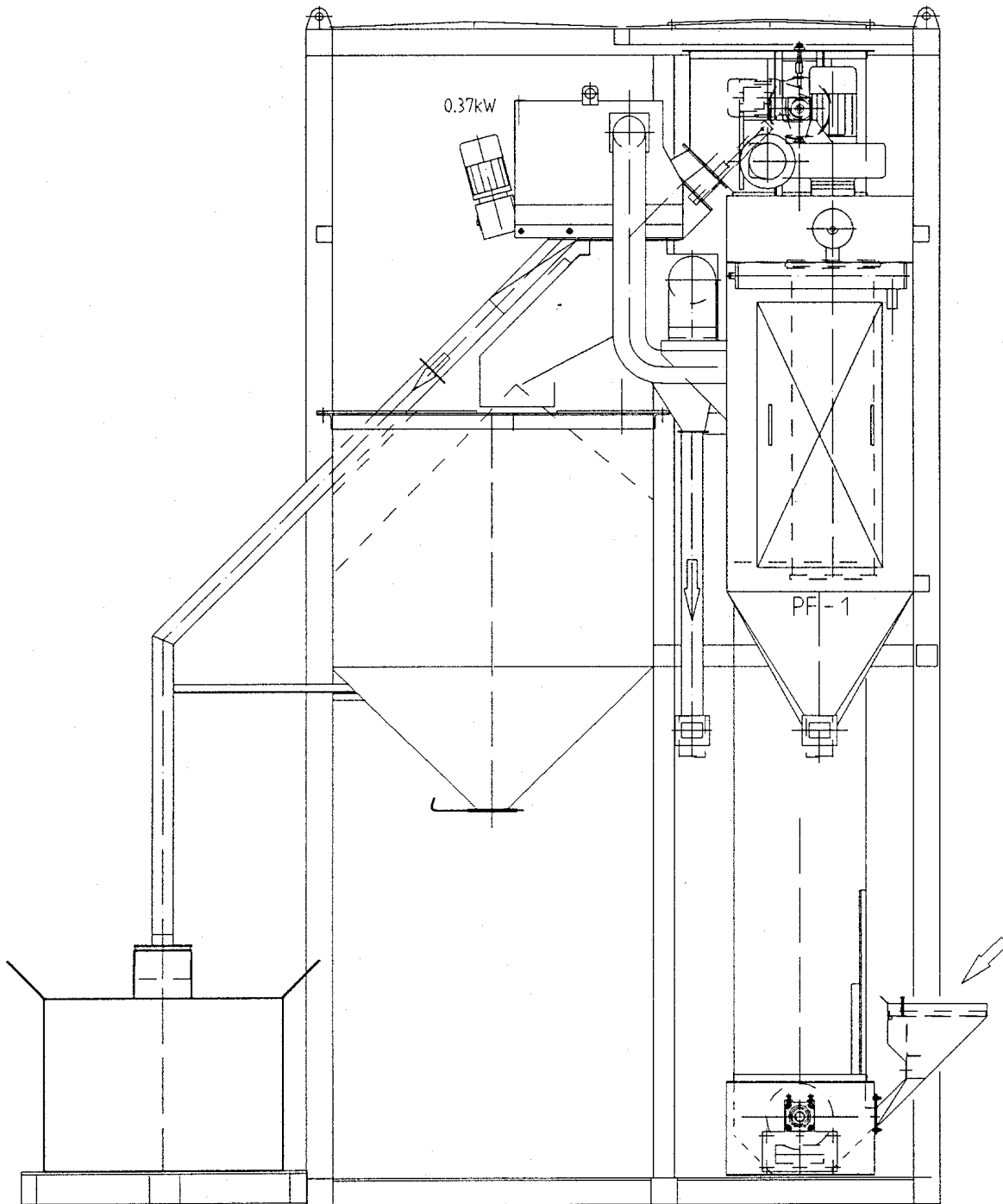
All components are mounted within a sturdy steel frame, so the unit is easy to transport and requires little downtime to set up.

Recovery Unit especially suitable for cleaning garnet (of course other abrasive can then be cleaned as well). The cleaned Garnet is discharged in a silo, and from the silo into 2 blast vessels or 2 big bags.

The Roof is completely closed with steel plate. Further, the frame is open.

# GRIT CLEANING SYSTEM

## RC-50-160



**Airblast B.V.**  
P.O. Box 1075  
1700 BB Heerhugowaard  
The Netherlands

Tel: +31 (72) 5718002  
Fax: +31 (72) 5714340  
E-mail: [info@airblast.com](mailto:info@airblast.com)  
Web: [www.airblast.com](http://www.airblast.com)