



**Airlock & Mill Roll Specialists**



**IMADO** Rotary Valves are suitable for the conveying of all types of dry as well as semidry products. The design of the valves ensures minimal pressure / vacuum loss with materials to match all applications.



**IMADO**

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## Welcome to the World of IMADO

Imado was established in 1992 based on turbine engineering and rotating plant technology. Through investment and continuous training Imado soon established itself as a market leader in plant refurbishment and manufacture.

Initially formed to service the food manufacturing and power generation industry, Imado broadened its base in bulk handling technology to the point where industrial demand justified the design and manufacture of high quality airlocks in materials such as stainless steel, aluminium, austenitic ductile, iron and alloy steels for special applications.

Imado is now a highly respected manufacturer and supplier of equipment in Sub-Saharan Africa as well as overseas.



To meet industrial demands Imado Marketing has developed a number of Rotary Valves in materials such as Stainless Steel, Aluminium, Austenitic Ductile Iron and Alloy Steels for special applications.

### Typical Applications:

- Maize, Wheat & Soya milling.
- Coffee, Cacao & Rice milling.
- Steel Plant dust extraction.
- Chemical Plant.
- All dry food products.
- All granular materials.

### Manufacturers of airlocks & associated equipment refurbishers of rotating plant

- Airlocks
- Conveyors
- Rolls and Pulleys
- Measures
- Diverters
- Gearboxes
- Pumps
- Fans
- Hammer Mills
- And much more

### **Technical Data and Capacities:**

The Rotary Valves are supplied with geared motors or bare shafts. Gearing should match the application to ensure maximum efficiency. Speed variators can be fitted for more flexibility.

The degree of filling in each rotor pocket depends on the material density. As a guideline for a free flowing granulate material with a density of  $\pm 650\text{kg/m}^3$  is a filling of 85% in each pocket. The degree of filling increases with lower R.P.M.

Imado Rotary Valves are designed with minimum air leakage. Due to the pressure difference across the valve air leakage can never be avoided.

The air trapped in the rotor pocket will be released in the top position which can severely restrict the material flow if a venting system is not available. Please contact Imado Marketing for further details.



### **Super Airlocks**

Latest designs incorporate bi-metal casting technology for superior strength and flexibility as well as heat treatable areas to enhance wear resistance without overcoating. Ni hard is a further option for sterile environments and conveying products with high surface tension. The product will determine the Ni hard final composition.



### **Flap type diverter:**

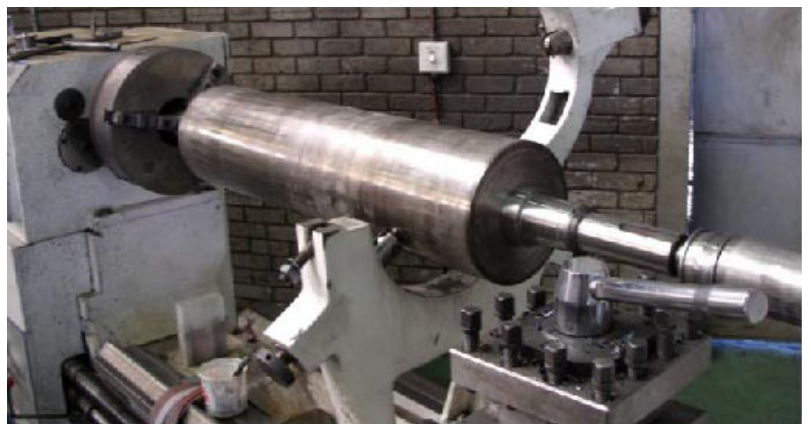
Compact Design  
Simple Construction  
Optimal Sealing  
SG, Aluminium or Stainless Steel

The Imado flap type diverter have been designed to divert powders and pellets in pneumatic conveying systems.

The parabolic style blade of the diverter is fitted with a food quality poly urethane seal providing a virtually leak proof unit. Seal replacement and maintenance is done without removing the unit from the system. Mode of operation is by Pneumatic Cylinder, Pneumatic Actuator or Electric Actuator

## Mill Rolls

The spun cast bi metal rolls from Imado is a further breakthrough in roll manufacture. Alleviating the chill bond area creating minimum structural change from chrome chill to mother metal. Rolls up to and including 600 mm dia x 1820 long can be manufactured. Hardness 500 - 550 bhn.



### Material Specifications: Material

Clear Carbon Chilled Cast Iron

Ni-Cr Alloyed Chilled Cast Iron

Grey Cast Iron

### Process

Centrifugal Spun Cast

Static Cast

Centrifugal Spun Cast

Static Cast

Centrifugal Spun Cast

### Hardness

430 - 550 HB

380 - 520 HB

500 - 630 HB

480 - 580 HB

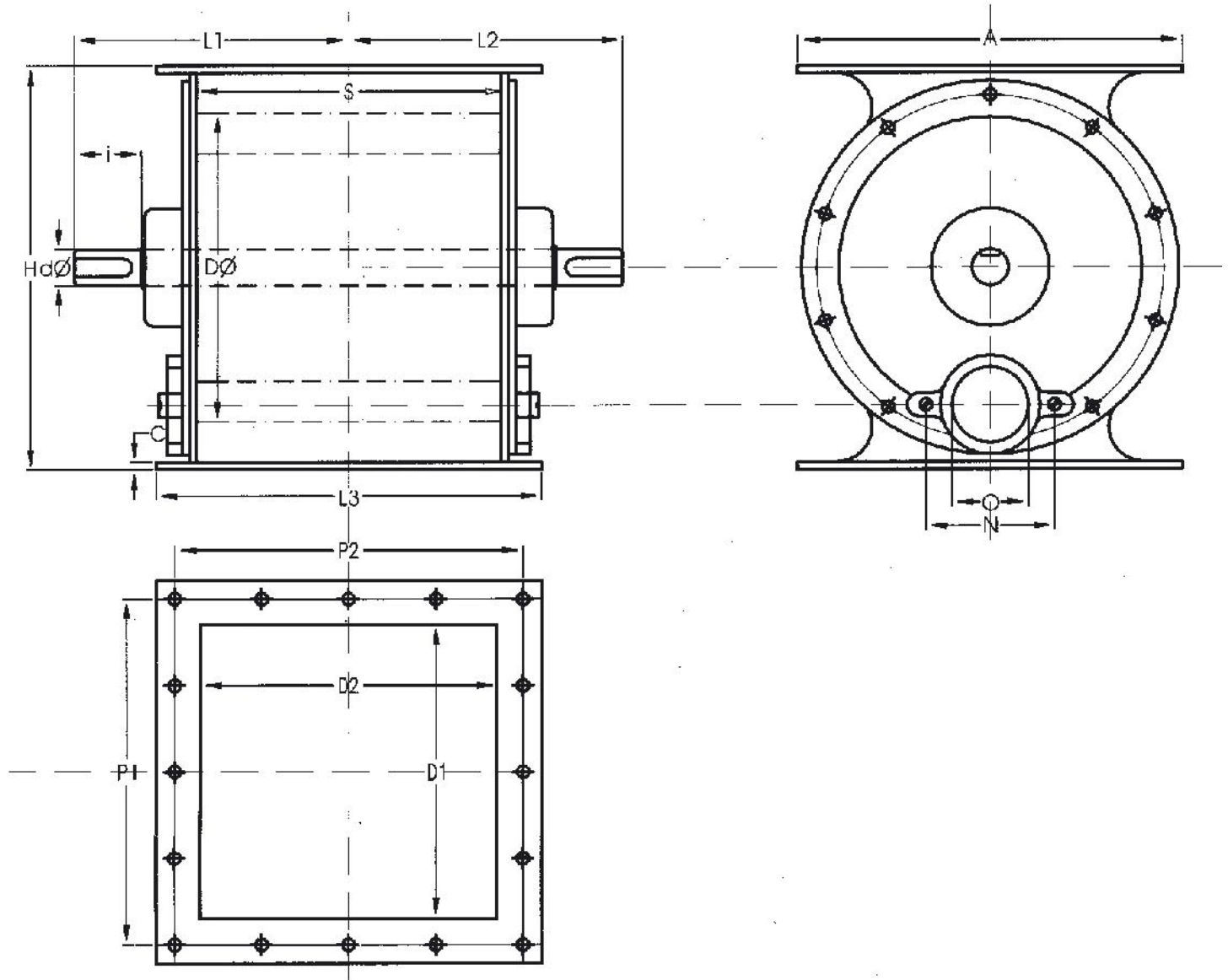
180 - 350 HB

## Technical Data

Rotary Valve / Airlock - Blow Through Type

Scale - N.T.S

Date: 17/05/99



## Technical Specifications

Dimensions subject to change without notice.

### Blow Through Type

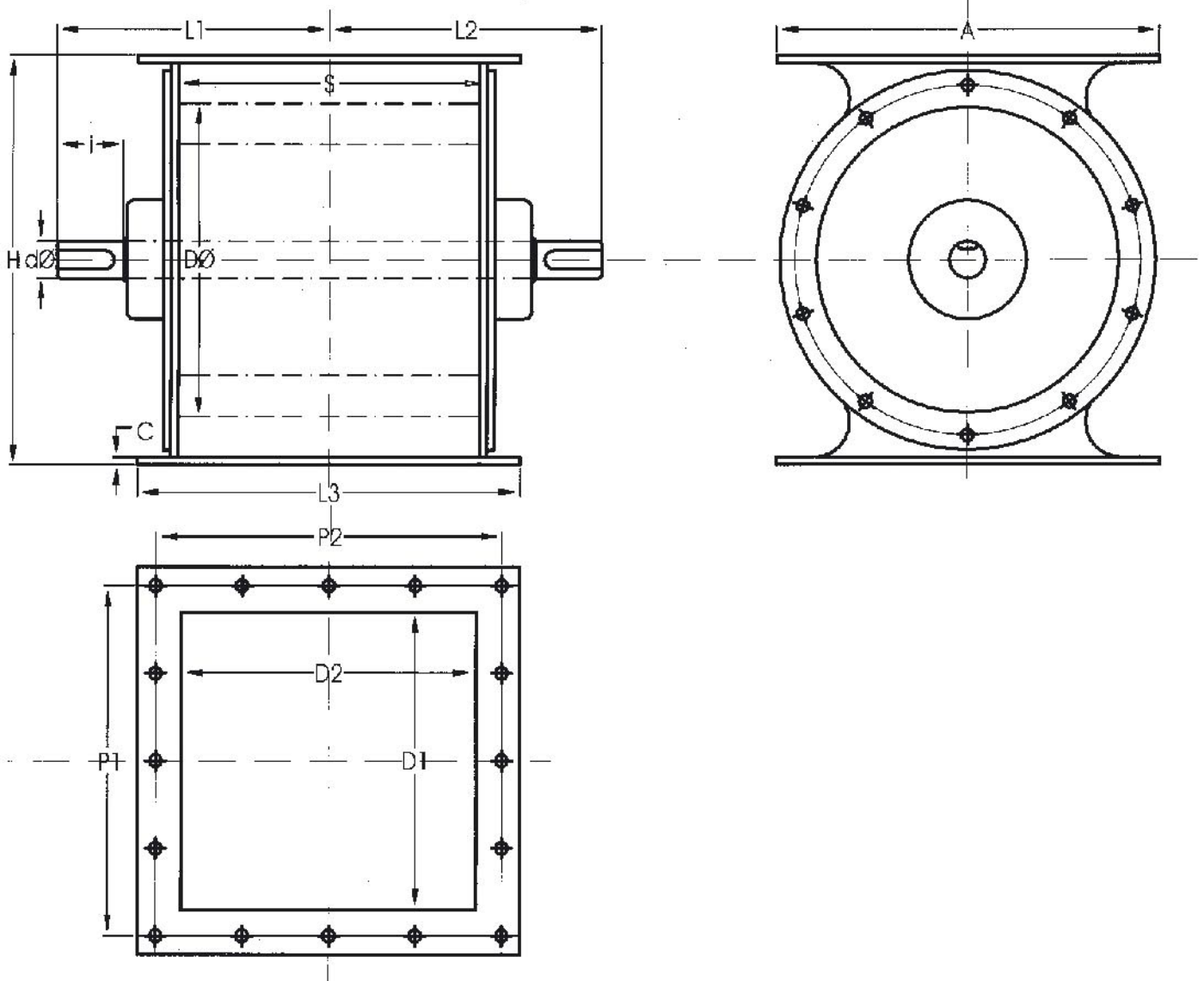
MODEL	D DIA	S	H	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	d dia	i	A	C	P <sub>1</sub>	P <sub>2</sub>	D <sub>1</sub>	D <sub>2</sub>	N	O	CODE
8500	220	200	340	300	300	220	40	75	255 285	12	220	250	200	180	110	70	22/22
1 850	280	270	435	310	270	290	35	60	340	15	305	180	250	270	170	100	28/30
3 900	360	350	480	400	400	445	50	80	355	20	320	420	250	345	180	110	36/38
5 000	400	400	540	450	350	520	60	100	520	16	470	470	380	380	176	125	40/40
9 800	500	500	575	480	670	670	80	120	445	25	405	575	330	460	176	125	50/50
17 000	614	645	935	660	660	640	100	110	760	23	655	715	585	610	205	160	60/60
40 000	800	790	1 000	755	755	960	100	135	960	15	890	890	800	800	245	2 0	80/80

## Technical Data

Rotary Valve / Airlock - Drop Through Type

Scale - N.T.S

Date: 17/05/99



## Technical Specifications

Dimensions subject to change without notice.

### Drop Through Type

MODEL	D DIA	S	H	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	d dia	i	A	C	P <sub>1</sub>	P <sub>2</sub>	D <sub>1</sub>	D <sub>2</sub>	VOLUME	CODE
500	220	150	320	TO CLIENT'S SPECIFICATIONS	TO CLIENT'S SPECIFICATIONS	205	35	TO CLIENT'S SPECIFICATIONS	185	12	100	175	105	130	5 LIT	22/13
700	220	190	320			270	35		235	12	100	235	150	190	7 LIT	22/19
700R	200	200	285			270 DIA	35		270 DIA	10	235 PCD	6x12	175 DIA		7 LIT	200
1 000	250	200	314			240	35		240	12	180	200	130	180	10 LIT	25/20
1 350	280	220	450			300	35		240	10	270	150	220	160	1 350 LIT	28/22
1 500	250	300	314			340	35		240	12	160	310	130	280	15 LIT	25/30
1 900R	275	300	410			370 DIA	40		370 DIA	16	325 PCD		265 DIA		14 LIT	275
3 900	360	380	480			450	50		350	16	320	420	250	350	39 LIT	36/38
5 000	400	400	540			520	60		520	16	470	470	380	380	50 LIT	40/40
9 800	500	500	575			610	80		610	25	405	575	330	460	98 LIT	50/50
17 000	614	645	935			680	80		680	23	732	680	650	600	170 LIT	60/60
40 000	800	800	1 000			960	120		960	25	890	890	780	780	400 LIT	80/80