

## solids Blow Through Rotary Valve

### Type DBS



Discharge and metering rotary valve, for continuous discharge of silos and feed into pressure or vacuum conveying pipelines



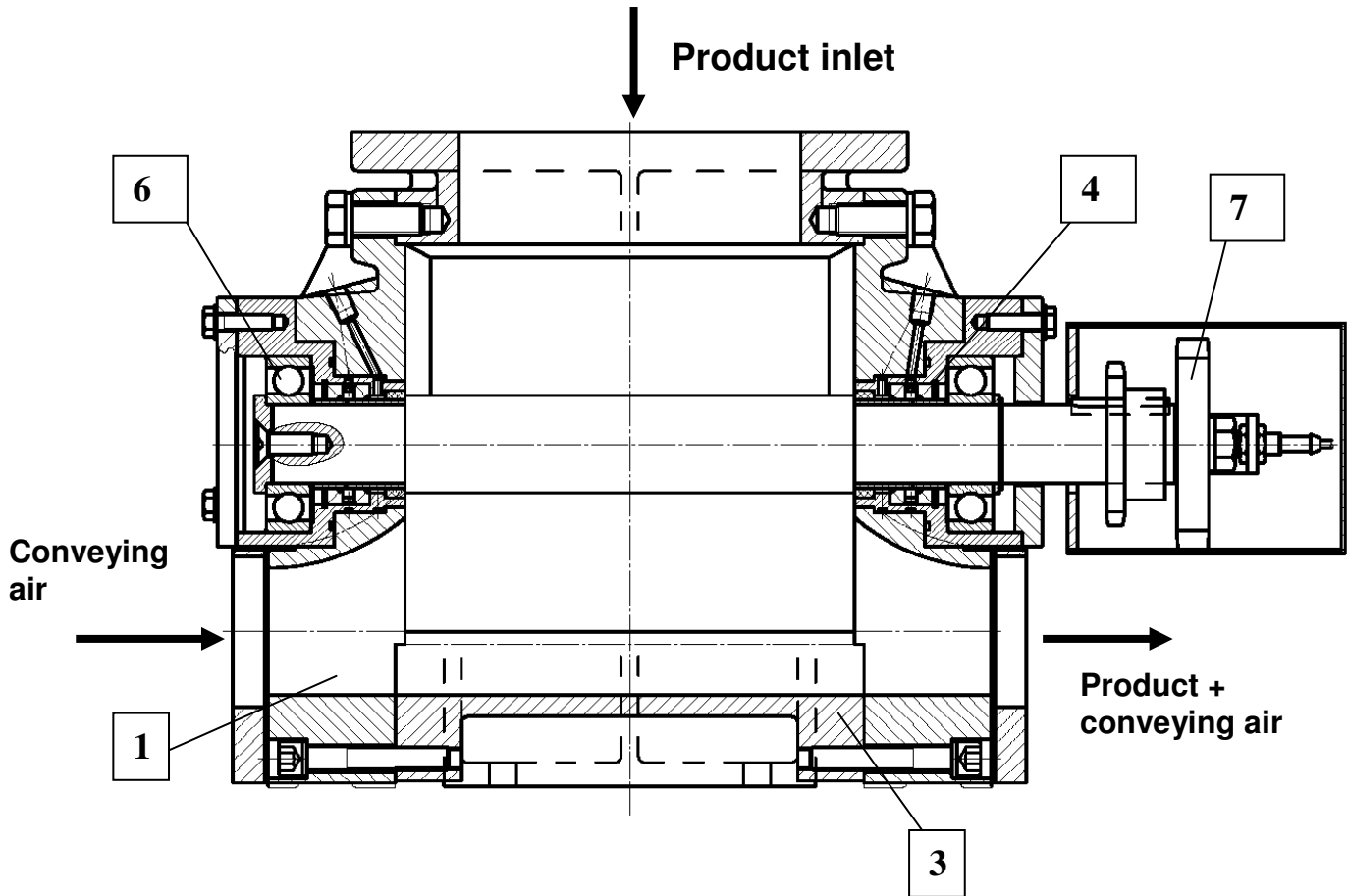
#### Advantages:

- Space-saving, less installation height due to built-in conveying air connections in the housing
- Large capacity range
- High operational safety due to sturdy design and cleaning effect by blowing out the rotor chambers
- Cost-effective owing to low installation investment
- Low maintenance due to simple assembly
- Less leakage air

S.S.T.-Schüttguttechnik Maschinenbau GmbH  
Lechwiesenstr. 21, 86899 Landsberg / Lech  
Tel. 0049 (0)8191-3359-50 / Fax 0049 (0)8191-3359-55  
E-mail [SST@solids-service.de](mailto:SST@solids-service.de) [www.solids.de](http://www.solids.de)



# solids Blow Through Rotary Valve Type DBS



## Characteristics:

- Sizes (entry):  $\varnothing$  175, 200, 250, 300 mm
- Delivery rate: 0.3 - 50 m<sup>3</sup>/h
- Pressure shock resistant and flame penetration resistant up to 10 bar (overpressure) with a DMT certificate
- 1) The housing contains: horizontal conveying pipe with a connecting flange for a pneumatic conveying pipeline
- 2) Emptying by blowing out the rotor chambers horizontally using conveying air
- 3) Robust cast housing made of GG, GS, 1.4308, 1.4408
- 4) Pressure-tight shaft seal with radial shaft sealing rings and sealing air connection
- 5) Integrated leakage air dissipation
- 6) External bearing
- 7) Chain drive with a geared motor attached laterally

**S.S.T.-Schüttguttechnik Maschinenbau GmbH**  
Lechwiesenstr. 21, 86899 Landsberg / Lech  
Tel. 0049 (0)8191-3359-50 / Fax 0049 (0)8191-3359-55  
E-mail [SST@solids-service.de](mailto:SST@solids-service.de) [www.solids.de](http://www.solids.de)



# solids Blow Through Rotary Valve

## Type DBS



### Job definition and operating conditions

The task is to discharge and meter from a hopper into a pneumatic conveying system. Minimised leakage air flow from the pneumatic conveying system into the storage container is one of the important requirements for pressure conveying.

### Solution of the problem

The solids blow through rotary valve type DBS is a space-saving and cost-effective feeding instrument for pneumatic conveying. Similar to normal rotary valves, bulk solids fall into the inlet of the rotor chambers, and are then transported downwards when the rotor revolves. The product however does not fall freely through an outlet opening, but is blown out horizontally through the integrated conveying pipe connection using conveying air in the vacuum or pressure operation. Since the conveying pipeline almost passes through the rotary valve, the installation height is saved and the chambers are emptied effectively. Blow through rotary valves are manufactured with small tolerances between the rotor and the housing to avoid the adverse effects of conveying air flowing in the opposite direction to that of the mass flow. Leakage air is dissipated through a lateral opening in the housing, and fed back to, e.g. a storage silo. Special leakage air collectors, if required with a granulate inlet, are also used for the same purpose.

The solids blow through rotary valve is a simple and cost-effective solution for many conveying tasks:

- Only one moving part (rotor), and therefore reduced maintenance costs
- Installation height has been saved considerably due to the small distance between the integrated conveying pipeline connection and the rotor axis
- Can be used for pressure and vacuum conveying systems.

### Series and performance data:

Nominal width = inlet diameter (mm)	Conveying volume per rotation (dm <sup>3</sup> )	Theoretical conveying volumetric flow at 100% filling (m <sup>3</sup> /h)	Nominal width of conveying pipeline (mm)
175	6	2 - 12	65-100
200	11,2	3 - 23	80-125
250	20	6 - 42	100-150
300	34	10 - 61	125-200

### S.S.T.-Schüttguttechnik Maschinenbau GmbH

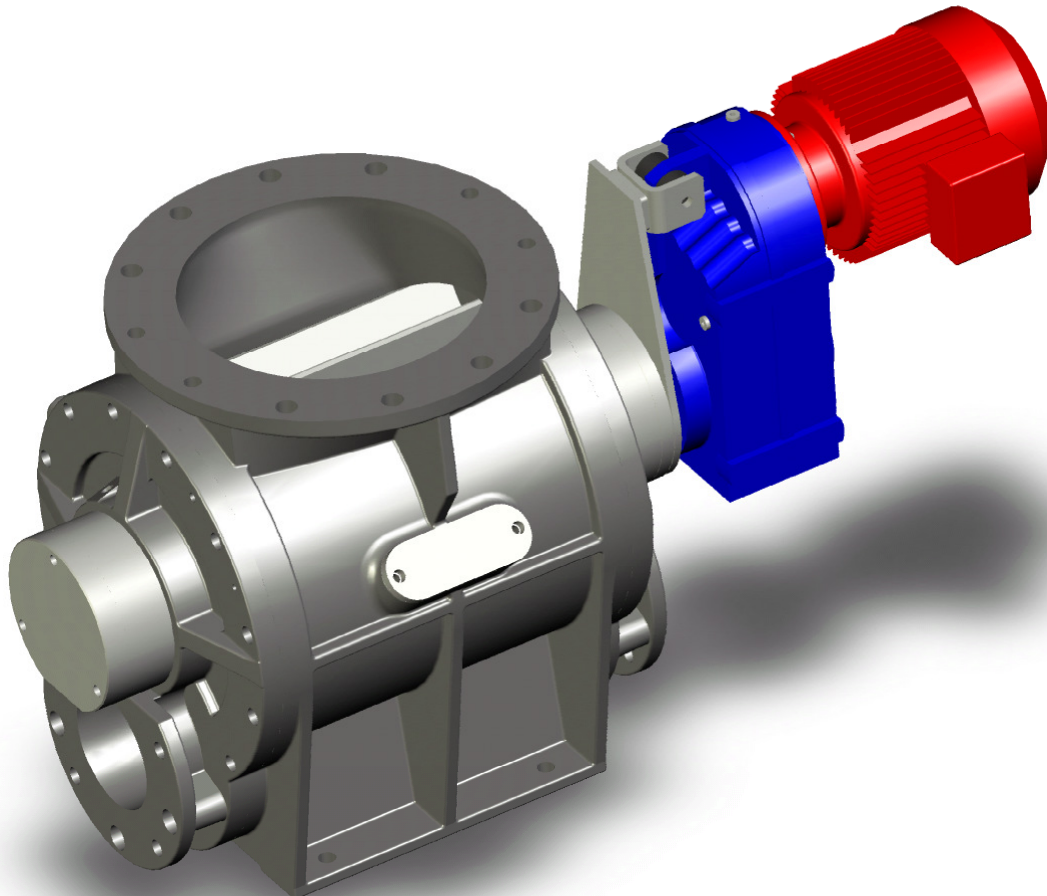
Lechwiesenstr. 21, 86899 Landsberg / Lech  
Tel. 0049 (0)8191-3359-50 / Fax 0049 (0)8191-3359-55  
E-mail [SST@solids-service.de](mailto:SST@solids-service.de) [www.solids.de](http://www.solids.de)



# solids Blow Through Rotary Valve Type DBS



Type DBS300 with a direct drive:



**S.S.T.-Schüttguttechnik Maschinenbau GmbH**  
Lechwiesenstr. 21, 86899 Landsberg / Lech  
Tel. 0049 (0)8191-3359-50 / Fax 0049 (0)8191-3359-55  
E-mail [SST@solids-service.de](mailto:SST@solids-service.de) [www.solids.de](http://www.solids.de)

