Rubber Belt Conveyor Blast Cleaning Machine BB



Rubber Belt Conveyor

Blast Cleaning Machine BB

The DISA BB blast cleaning machine offers favourable, convincing solutions for blast cleaning of small and medium size workpieces, in batch quantities. The BB series will accomodate batch weights of 180 kg to 1 360 kg. The applications of these machines are especially variable:

- Blast cleaning of iron castings, precision castings, and die castings
- Descaling of forgings or heat-treated workpieces
- Shot peening for surface compaction
- Deburring of metallic (e.g. stampings) and non-metallic workpieces
- Surface finishing

Acceptance of a BB 85 at manufacturer's works



BB blast cleaning machines have been successful over several years and in thousands of applications, often in multishift operation. The BB series have proved to be economical for low production runs, as well, assuring reliable performance and optimum blast cleaning. The BB series offers the following advantages:

- Attractive price/value ratio
- Rugged, compact design
- Ease of operation
- High blast cleaning performance
- Quick and easy replacement of wear parts

Design and sequence of operations

Depending on the weight, size, volume, and flow rate of the castings to be cleaned, the machine can be loaded in a manual, mechanical, or automatic mode. The workpieces are then tumbled inside the blast cleaning chamber consisting of a continuous troughing rubber belt conveyor and lateral discs of highly wearresistant material.

Especially designed carrier bars attached to the rubber belt conveyor assure gentle tumbling and full exposure of all surfaces of the workpieces. The abrasive containing burrs, scale, or sand drops through the perforations of the rubber belt and is then transported to the bucket elevator and the separator. After passing through the separator for removal of impurities, the abrasive returns to the storage hopper.

Hydraulic Loaders

Hydraulic loaders are used for the machine types BB 170, BB 340 and BB 680 and, on special request, can also be provided for the smallest machine size BB 85. The shot blast machines can receive the parts to be cleaned

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directly or using separate transport bins of the standard sizes 800 x 600 mm or 1200 x 800mm. Other dimensions of transport bins can be accomodated.

Technical Specifications

- Rugged welded structure fixed to the machine and to the floor
- Separate hydraulic unit
- Lifting movement of the tilting loader in two stages (one axis for lift and one for tilt) by means of lateral cylinders
- Delivery of the transport bins to the front or to the side of the tilting loader Other types of loading equipment (such as belt conveyors, etc.) upon request.

BB 680 with loader

Efficiency and Precision DISA Blast Wheels



– 1 Blade – 2 Opening – 3 Control cage – 4 Impeller



Cross-sectional view of a blast wheel

DISA blast wheels are renowned for high capacity and maximum energy efficiency. These blast wheels come in various power ratings, giving a high degree of flexibility. With modifications it is possible to reverse the blast wheel rotation thus allowing a greater range of applications. The amount of abrasive can be adjusted from the operator's panel. The abrasive is mechanically pre-accelerated and delivered to the blast wheel in a continuous stream. This ensures optimal utilisation of the power from the drive motors. High wear resistant material ensures maximum service life of the blast wheel. Unique design features allow for rapid and simple replacement of wear parts.

Shot peening of valve springs 970 164

Directly driven blast wheel c 10422





C 10295c

Technical Data



	BB 85	BB 170	BB 170HD	BB 340	BB 680
Max. useful capacity [dm ³]	85	170	170	340	680
Max. batch weight [kg]	180	360	500	720	1360
Blast room inside dimensions [mm]	Ø610x788	Ø700x988	Ø700 x 988	Ø1068x980	Ø1220x1473
Max. workpiece diagonal [mm]	250	350	350	450	500
Max. weight per workpiece [kg]	10	15	23	35	40
Number of blast wheels	1	1	1	1	2
Power per blast wheel [kW]	5,5	11	11	15	11/15
Abrasive throughput, max. [kg/min]	105	180	180	240	360/480
Initial abrasive filling [kg]	135	180	180	900	1810
Air required for dust collection [m ³ /h]	1 400	1 600	1 600	3 400	4250
Installed power, approx. [kW]	6,5	12,3	12,3	18,5	34/42
Dimensions, approx. [mm] A	2810	3730	3730	5 000	6 150
В	1 680	2070	2070	3 890	3 5 7 0
С	1 280	1610	1610	4730	5 1 5 0
Weight, approx. [kg]	1 460	2250	2 300	4310	8770/8900
Max. carrying capacity of loader [kg]	180	360	500	800	1 500
Power of loader [kW]	3	5,5	7,5	11	11
Weight of loader [kg]	800	1 1 5 5	1250	1 300	2 800

5



DISA Group

Founded in 1900, DISA is the world's leading supplier of foundry equipment, metal surface finishing systems, and air pollution control solutions. DISA is constantly setting new standards in the industry through an outstanding commitment to research and development.

With 2,500 employees, DISA is represented worldwide with production facilities and sales and service offices in three continents, and an extensive agent network.

A. P. Moller Group

DISA is part of the worldwide A. P. Moller Group which has offices in 325 cities in more than 100 different countries, and employs some 50,000 people.

The business interests of the A. P. Moller Group include oil and gas exploration and production, shipbuilding, aviation, industrial engineering and IT services.

For illustrative purposes the DISA equipment may be shown without any warning labels and with some of the protective guards removed. The warning labels and guards must always be in place when the equipment is in use.

The technical data are not binding. They are not warranted characteristics and are subject to change. Please consult Conditions of Supply stipulated in the relevant quotations.

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