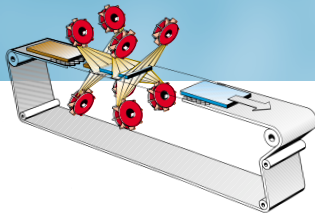


Wire Mesh Blast Cleaning Machines WM



DISA



Wire Mesh Blast Cleaning Machines WM



020029
Unloading area

Optimum process technology for flat and thin-walled castings

Desanding of flat, thin-walled and fragile iron or aluminium alloy castings makes specific demands on the blast cleaning machine and the blast cleaning process with the following requirements:

- Smooth and shockless passage of parts through the machine
- Simultaneous abrasive impingement from above and below to prevent deformation of the parts

While DISA wire mesh belt blast cleaning machines are specially designed for this range of applications they still offer many other advantages.

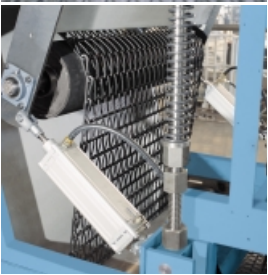
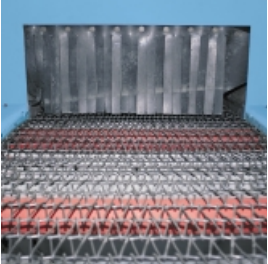
Charging with
uncleaned castings
020028

- Throughfeed operation:
The machines are suitable for "in-line" throughfeed operation. They are an important link in a fully automatic production flow from the moulding line to the finishing department.
- Simplicity of design for smooth process flow
- Improved product consistency
- Short transport distances (no intermediate storage of the parts)
- Reduced operating costs since the blast cleaning process can be integrated in automatic production lines



Modern Design at reasonable Cost

010309



010302

Wire mesh belt and
tensioning system

The whole system comprises different modular component groups:

- Machine base with protective lining, blast wheels, wire-mesh belt and sealing
- Vibratory conveyors
- Bucket elevators
- Screw conveyors
- Abrasive separation system
- Abrasive storage hopper
- Service platforms
- Ductwork

Service access and platforms are an integral part of the individual component groups which can be easily transported and set up within a minimum of time. This concept renders the equipment "operative from the start": The individual components are completely assembled at our factory where they are only allowed to leave after having been tested for perfect operation.

Loading, unloading

The peripheral equipment is adapted to suit the needs of the user. Delivery of workpieces to the entry side and their discharge from the exit side is either manually or in automatic mode. Handling of uncleaned workpieces can be reduced or entirely avoided thus eliminating bad working conditions and considerably improving the environment of the workplace.

Wire Mesh machine:
Easy integration into production lines

010299

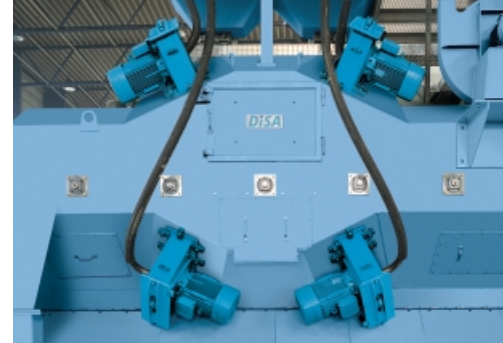


Shot
removal system
020034

The Shot Blast Machine

Unique blast wheel arrangement offering optimum blast effect

010301



The centre piece of the shotblast machine is a continuous wire mesh belt made of hardened spring steel running on rollers. The castings are blast cleaned simultaneously from above and from below without any deformation in shape. Transport of the parts through the machine is smooth without jamming, shocks and knocks.

Perfect blast cleaning of castings without any deformation

The shotblast machines are equipped with either 4 or 8 direct drive blast wheels. To meet different cleaning requirements the blast wheels are available in various power ratings. The unique blast wheel arrangement and blast pattern geometry ensure

- even abrasive impingement to clean the castings from all sides
- blast cleaning without deformation of the castings
- a thorough blast cleaning effect

Adjustable belt speeds and optionally adjustable abrasive throwing speeds and throughput quantities offer the following advantages:

- Easy adaptation of dwell periods and the blast cleaning intensity to suit a specific type of casting
- Reduction of wear
- Reduction of shot consumption

Shot removal and automatic wire mesh belt tensioning are standard.



Separation and dust removal system

020033
020031



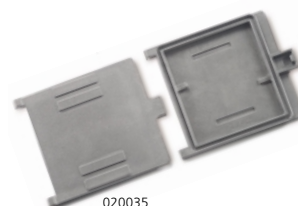
020038



020039



020042



020035



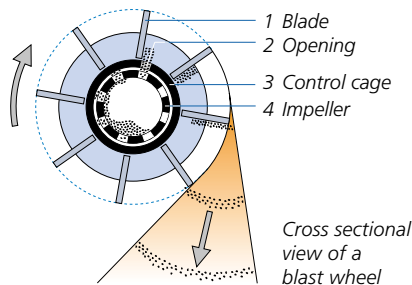
020043



020036

Efficiency and Precision

DISA Blast Wheels



DISA blast wheels are renowned for high capacity and maximum energy efficiency. These blast wheels come in various power ratings, and the amount of abrasive can be adjusted from the operator's panel which results in a high degree of flexibility. The abrasive is mechanically pre-accelerated and delivered to the blast wheel in a continuous stream. This ensures optimum utilisation of the power from the drive motors.

Clean abrasive is indispensable for clean and dustfree workpieces. For castings with excessive moulding sand, careful preparation of the abrasive mix is of utmost importance. A reliable abrasive circulation and preparation system, fully integrated into the machine, serves this purpose.

- Coarse particulates are removed automatically on vibratory chutes provided with screen sections.
- Magnetic rollers separate sand and abrasive, then pneumatic separators remove sand residues or undersized grain from the abrasive.
- Machines for blast cleaning aluminium castings come with pneumatic separators and screw conveyors.



Wear resistant material is used for the blast chamber

020030



Deformation free blast cleaning of flat, thin-walled and brittle castings

Easy Integration and Maintenance, high Safety and Reliability

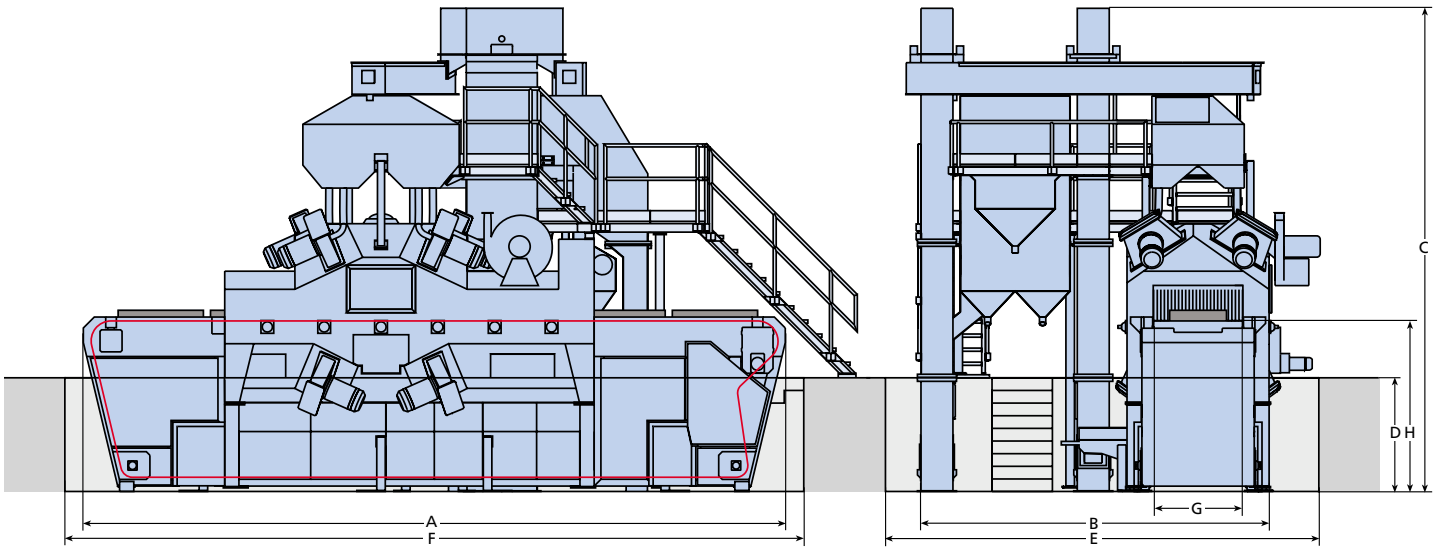
The compact, space-saving design with the low machine height facilitates integration – even into existing production lines. Abrasive return, by means of several troughs offers the advantage that individual troughs, can easily be removed for inspection. The same applies to the wire-mesh belt. High wear resistant material in the shot blast chamber, blast wheels and wire mesh belt ensures a long service life. Specific design and tight tolerances assure rapid and simple replacement of wear parts. Original DISA spare parts guarantee a perfect fit, are made of high-quality materials and a design tailored to suit a specific application. Simple but effective sealing elements prevent escape of shot. Integrated platforms and large service doors facilitate rapid completion of maintenance tasks. The machine will normally operate without any assistance, requiring only periodic inspections. With the machine integrated into automatic production lines, operators will not need to handle the workpieces before they exit the machine absolutely clean and free of abrasive.



*Wire mesh machine
during assembly*

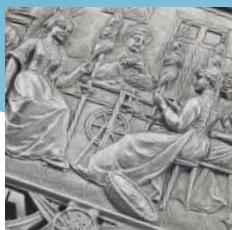
010300

Technical Data



			Iron castings		Aluminium castings	
Type			WM 800/4/2	WM 1250/8/2	WM 800/4-8/1	WM 1250/8/1
Throughput rate	max. t/h		3,5	7,5	parts specific	parts specific
Weight of castings	max. kg		120	120	50	50
Speed of passage	m / min		0,5 – 2,5	1 – 5	1 – 4	1 – 4
Blast wheels			4	8	4 or 8	8
Power per blast wheel	kW		11 – 22	11 – 22	5.5 – 11	5.5 – 11
Sand separation capacity	max.kg/min		100	150	–	–
Separation system			MP ¹⁾	MP ¹⁾	p ²⁾	p ²⁾
Abmessungen						
Length	A	mm	9 800	9 800	9 200	9 800
Width	B	mm	4 500	5 000	3 300	5 000
Height	C	mm	6 800	6 800	5 400	7 200
Foundation depth	D	mm	1 600	1 600	0	0
Foundation width	E	mm	5 700	6 100	0	0
Foundation length	F	mm	10 400	10 400	0	0
Belt width	G	mm	800	1 250	800	1 250
Inlet / outlet height	H	mm	2 400	2 400	1 200	1 200
Connected load	kW		93 – 137	137 – 237	40 – 109	70 – 120
Dust collection capacity	m ³ /h		8 000 – 10 000	11 000 – 16 000	upon request	upon request

¹⁾ magnetic-pneumatic ²⁾ pneumatic



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.

DISA
www.disagroup.com

DISA Industrieanlagen GmbH
Schwerter Str. 200
D-58099 Hagen
Germany
Tel +49 2331 965 3
Fax +49 2331 965 521
info.hagen@disagroup.de

DISA Industrie AG
Postfach 1070
CH-8207 Schaffhausen
Switzerland
Tel +41 52 631 1717
Fax +41 52 631 4888
info.sh@disagroup.ch

DISA Industries s.r.o.
Za Balonkou 269
CZ-261 01 Přebram 1-269
Czech Republic
Tel +420 318 479 111
Fax +420 318 479 333
info.pribram@disagroup.cz

DISA Industrieanlagen GmbH
Greschbachstr. 3
D-76229 Karlsruhe
Germany
Tel +49 721 4002 0
Fax +49 721 4002 260
info.karlsruhe@disagroup.de