	<p>Object</p> <p>Technical Specification</p>	<p>Factory BRESCIA</p> <p>Firm Sector COMMERCIAL</p>
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TECHNICAL SPECIFICATION

PERMANENT MAGNETIC OVERBAND SEPARATOR

Our type: **SM 100/120 NS**

The separator has the function of extracting the ferrous magnetic intrusions present in the process material and discharging separately in special collectors.


The permanent magnetic separator must be suspended (transversely or longitudinally on conveyor belts), so that the electromagnet is at the working distance specified in the contract: The suspension must be provided so as to be able to adjust both the working distance and the possible inclination of the separator, suspending it in such a way that the electromagnet is at the contractual working distance, to attract the ferromagnetic underlying intrusions and unload them into the appropriate collector (when in operation), separating them from the process material, by means of the extractor belt that rotates around the magnet.

This separator must be mounted transversally or longitudinally on conveyor belts and it has the task of extracting the intrusion ferromagnetic material present in the process inert material and discharged separately in special collectors.

The machine has got the following constructive and functional characteristics:

- a) **MAGNET** with special steel covering structure in iron at low way of carbon and at high magnetic permeability.
- "Sr-Ferrite" magnets at high magnetic induction and strong coercive force.
 - Closing plate made in non-magnetic stainless steel (UNIX8CN1910 - AISI 304).
 - Dimensions of the magnet: mm 1.360 x 990 x 280 thick.
 - Magnetisation guarantee: 20 years.
 - Magnetic performance: as diagram here attached.
- b) **(WP) EXTRACTING BELT** made in black rubber resistant to abrasion, type EP 400, with 3 high resistance synthetic clothes, covering mm 4 + 2, ring shaped, with listels measuring 25 x 40 mm, distance listels mm 460, belt working load Kg/cm 40, dimensions mm 1.000 x 5.030.
- c) **GEARED MOTOR** endless screw with hollow shaft directly shrinked on the shaft

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of the drive drum, type W 110 U15, floating execution, exit revolutions 93/1', complete of 2,2 KW motor, three-phase feeding 400 V, 50 Hz, protection grade IP 55.

- d) **DRIVE DRUM and IDLE DRUM** Ø mm 320 x 1.070 long, complete of special steel shaft, centre distance mm 1.995.
The drums are built on self-aligning bearings in waterproof execution, complete of a grease-valve, two of them are mounted on plates with slides and steel turnbuckles.
- e) **Frame** made in strong plasma shape steel.
- f) **Carters** of protection.

Outside surfaces will be painted with antirust and finishing enamel (RAL 6011).

Total weight: Kg. 2.300.

Dimensional features as drawing no. 13-AS-0239-CL-R0 enclosed.

The construction is in conformity with: the

MACHINE Directive 42/2006/CE;

EMC Directive 2014//30/UE and

Low Voltage directive **2014/35/UE.**


Important note:

The magnetic separator, object of this technical specification, cannot be set at work until the plant, where the separator will be incorporated, has been declared in conformity with the Machine Directive **42/2006/CE.**

- ★ In case of longitudinal installation on discharging point of conveyor, it is necessary that the head roller of the conveyor was made in non magnetic metals (stainless steel UNIX8CN1910 - AISI 304).
In case of transversal installation it is necessary that the magnetic separator is suspended between a tern of rollers and another tern and not above one of these.
In case of installation on vibrating feeders, it is necessary that they were made in non-ferromagnetic material. (stainless steel UNIX8CN1910 - AISI 304).

WP = WEAR PARTS for what a particular control and maintenance are recommended and we advise you to buy the spare parts.

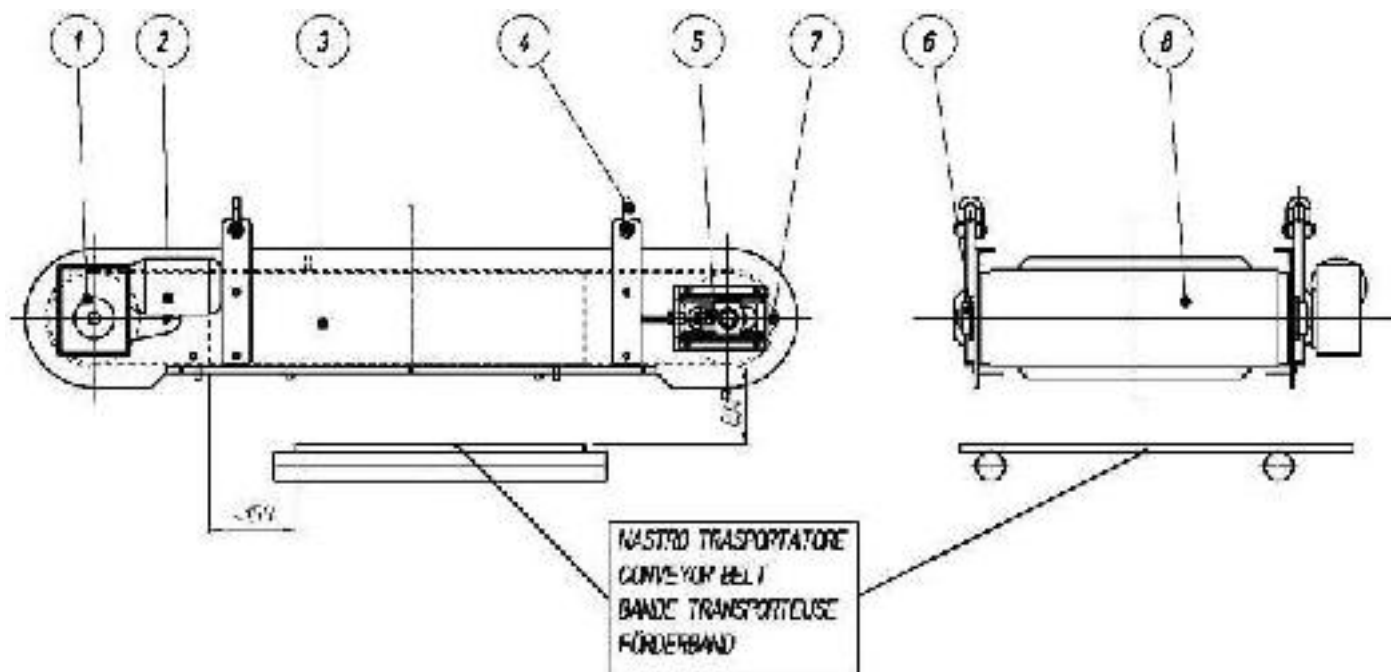
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Parts of overband magnetic separator

The overband magnetic separator is mainly composed of the following parts:


- A frame made of shaped iron sheet or profiled iron (UPN), depending on the applications and the demands of the customer;
- Two main dished roller heads (item 7), of which one drives and one is driven;
- A looped extractor belt, equipped with transverse strips (item 8);
- A gear motor to control the extractor belt, with three-phase asynchronous motor (item 2) and worm gear reducer (item 1), and if requested, the separators are also built with the predisposition of a hydraulic motor instead of an electrical motor or with special gear motors;
- A permanent magnet plate (item 3) with high induction and high coercive force, which provides excellent depth of the magnetic field;
- No. 2 supports for the driven roller (item 5);
- No. 2 supports for the driver roller (item 6);
- As an option, the machine can be supplied with skid control devices, sensors and local controls.



Spare parts for 1 working years, 24/24 h, 7/7 days

Description	N°	
Conveyor belt EP 400/3 4+2 1000 X 5030 MM	1	8
Gear boxes W110U15	1	1
Motor 2.2 Kw 3X400Vx50hz	1	2
Set of plummer block housings	2	6

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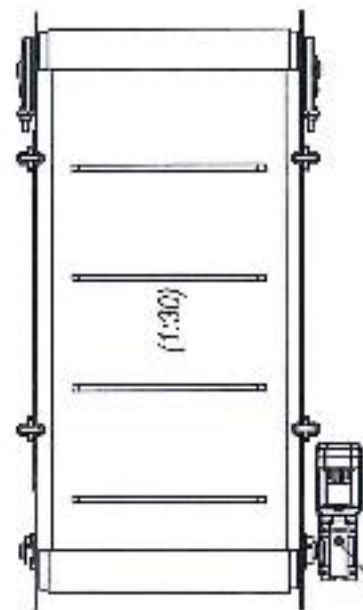
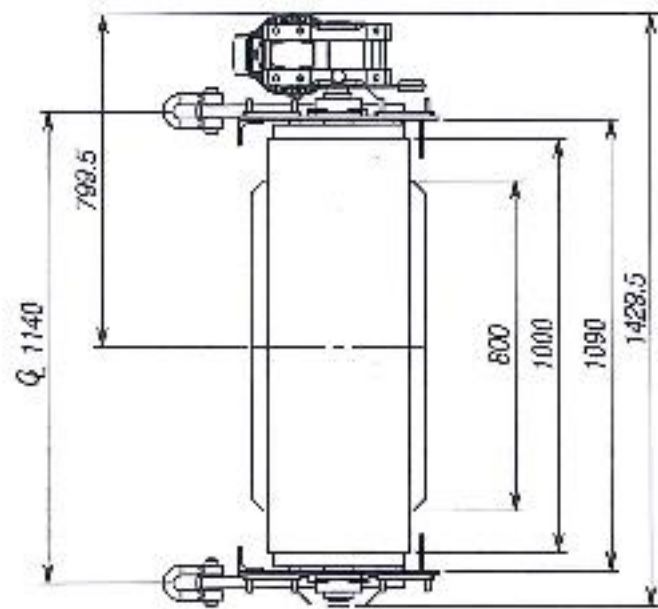
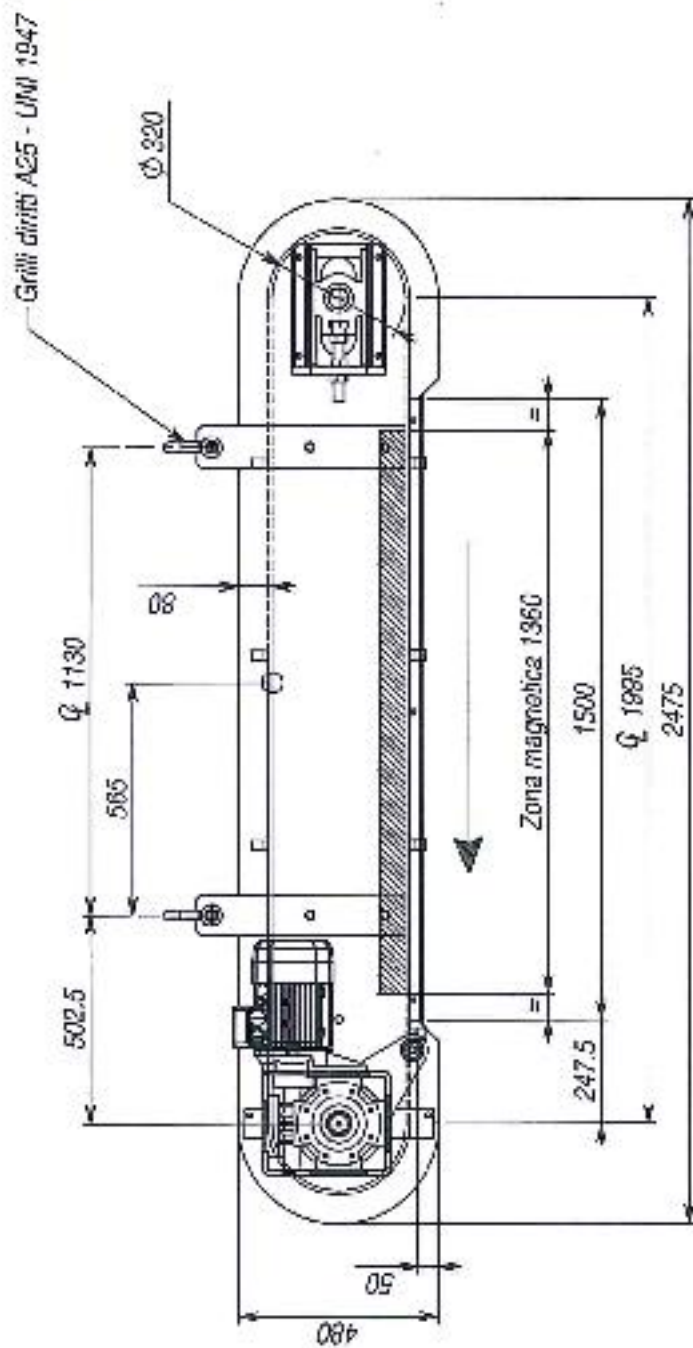
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Set of sliding bearing supports	1	5
Drive drum Ø 320 x 1070 mm	1	3
Idle drum Ø 320x 1070 mm	1	2

The frequency of maintenance operations which are indicated in Table 1 refer to a machine subject to a service working under normal conditions of 1 (a) daily work shift of **8 (eight) hours**.



Table 1 - PERIODIC MAINTENANCE					
O = operator assigned by the use of the separator M = by specialized maintenance					
Checks and controls to be performed	Daily	Weekly	Monthly (*)	Half-yearly (*)	Change
Visual check	O				
Overall Testing	O			M	
Control of corrosion absence		O	M		
Check tightness of bolts and screws			M		
Cleaning and removing of ferromagnetic pieces	O				
Plates readability			O	M	If illegible
Rollers (motor and driven)		O		M	
Belt check		O	M		If worn or damaged
Chains		O	M		If worn or damaged
Gear motor		O	M		
Supports and bearings			M		
Structure				M	
sealing rings check			M		
Cleaning and lubrication		M			
oil level and topping up (if applicable) of the gear motor			M		

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Motoriuttore Bonfiglioli W 110 U 15 S3 M3LA4 Kw 2.2

Peso tot. ~2300 Kg

Rev.	Data	Descrizione	Eseguita da
		 Gauss magneti s.n.c. ATTREZZATURE VACUUMETRICHE E A DEPRESSIONE	AUT. CERTIFICATA ACCREDITATA UNI EN ISO 9001
			DATA 18-03-2010 SCALA 1:17.5 AUT. CERTIFICATA ACCREDITATA UNI EN ISO 9001
		COMPATTO	A. Lorini AUT. CERTIFICATA ACCREDITATA UNI EN ISO 9001
		13-AS-0239-CL-F0 A4 COMPLESSIVO	AUT. CERTIFICATA ACCREDITATA UNI EN ISO 9001

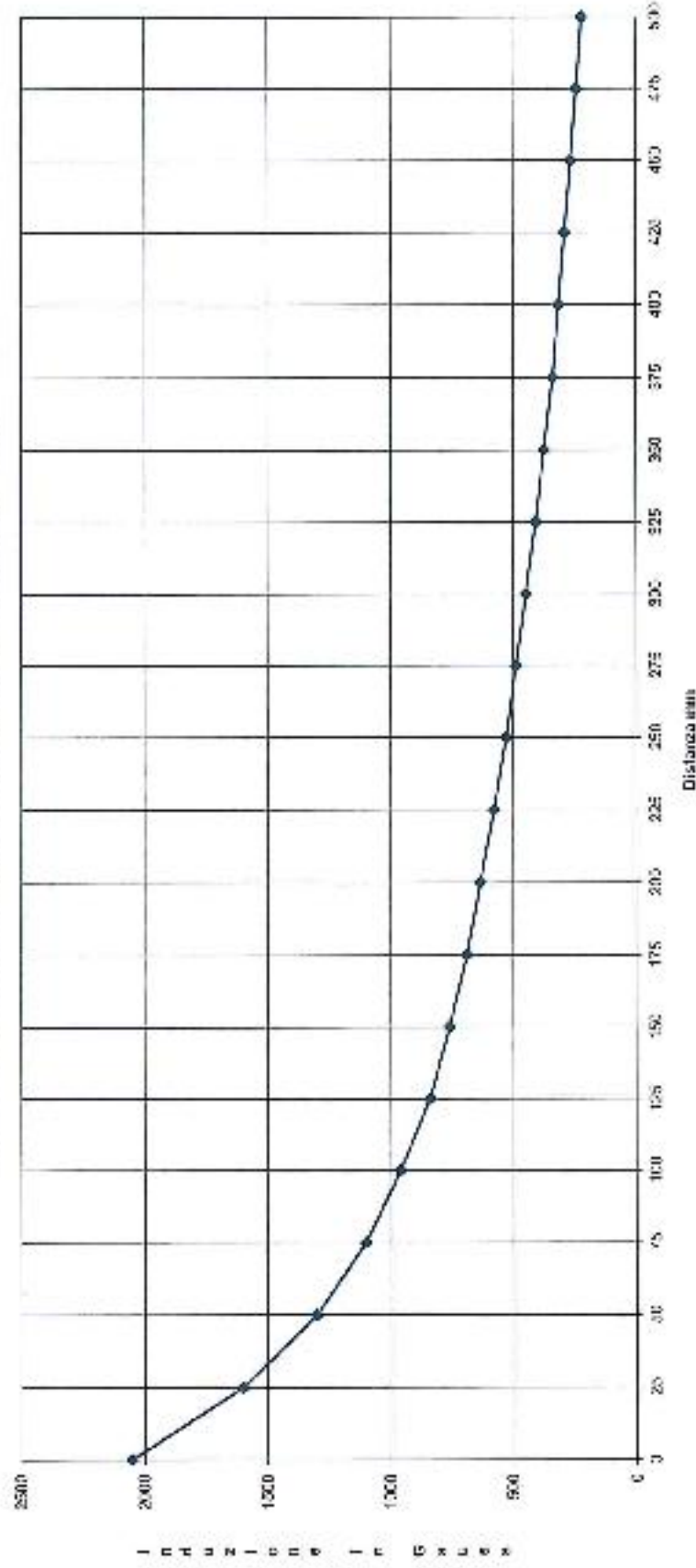
2009

Assieme separatore a magneti permanenti SM 100.120 N's

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Curva di induzione magnetica in funzione della distanza SM 100



Tipo:
Com:
Data: