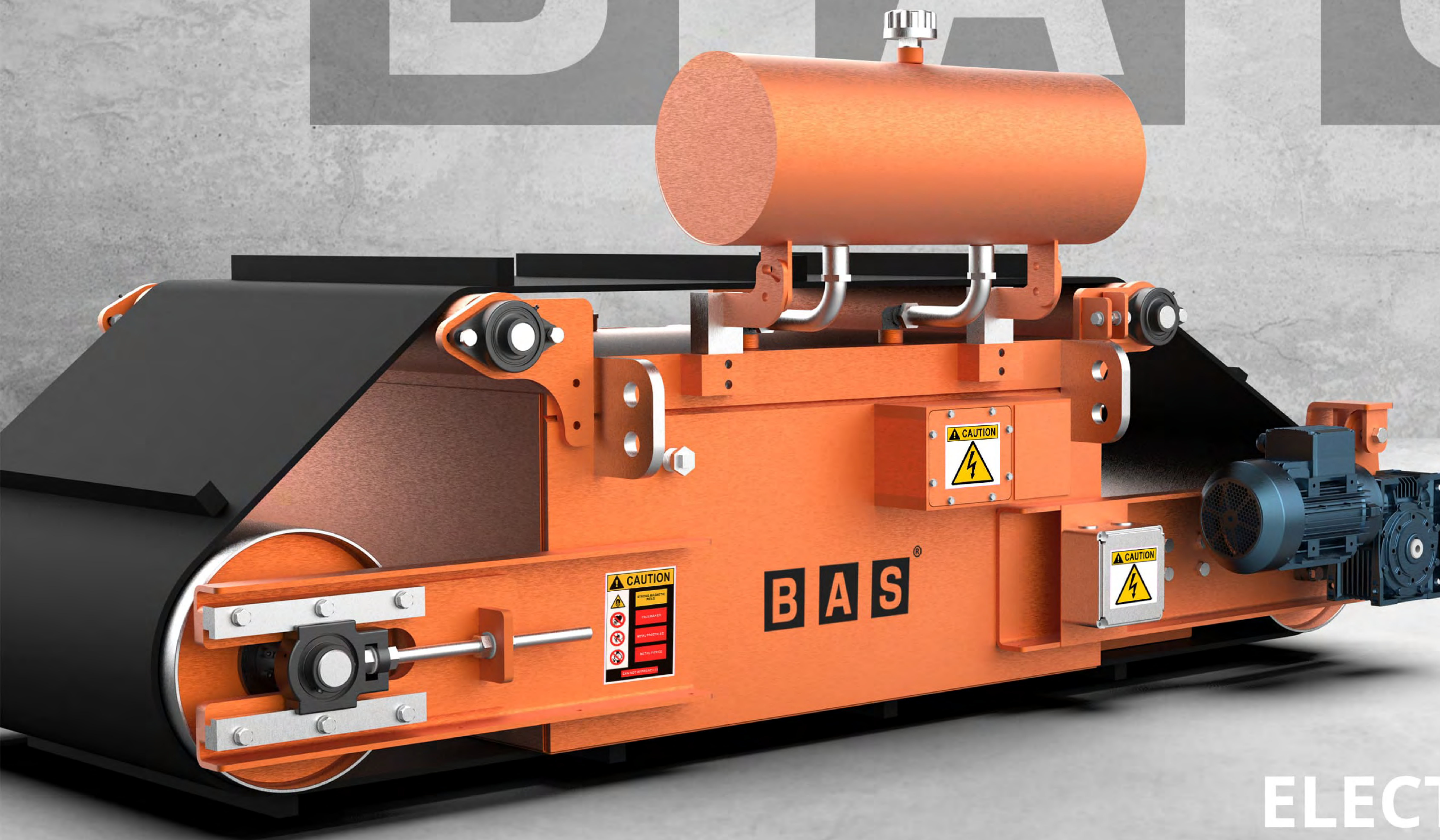


BAS[®]



ELECTROMAGNETIC
OVER-BAND FERROUS
METAL SEPARATORS



bas-tr.com



EMBS-I-1000 waste recovery application

ELECTROMAGNETIC OVER-BAND FERROUS METAL SEPARATORS

BAS® Electromagnetic Over-band metal separators are used for separation unwanted metals from conveyors and chutes. Electromagnetic overband metal separators consists of main magnetic block, separator belt, drums and motor.

For more videos

please check out

 channel;



properties

- U High magnetic field intensity
- Full magnetic isolated steel armour
- Two high precision band adjustment rolls
- On-hanging belt change
- Easy maintenance with direct coupling + tightening bush drum shaft
- 5 year Guarantee for Magnetic Field Intensity

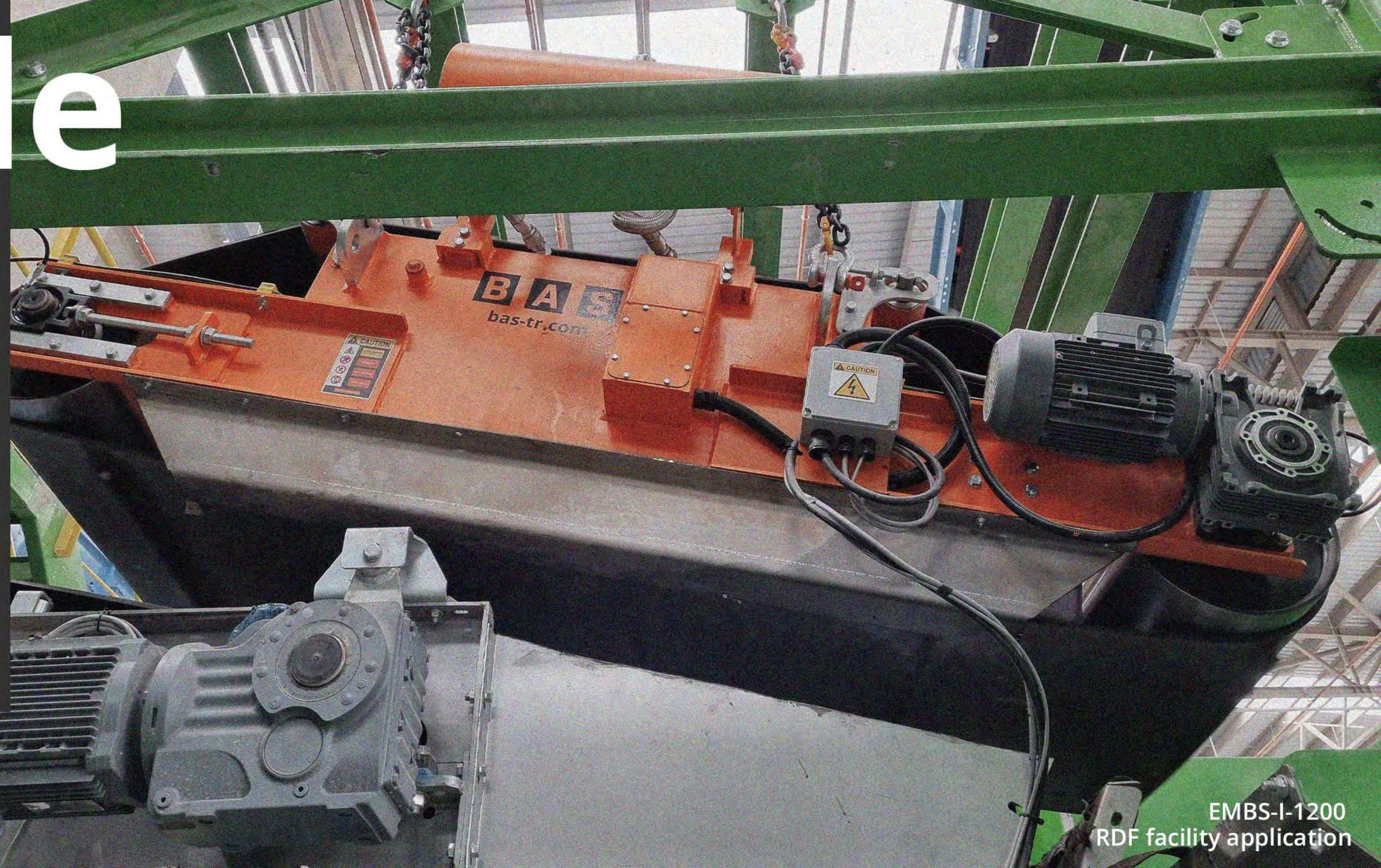
principle

In cross-belt applications and parallel – in line belt applications, the length of the metal separator must be up to the minimum conveyor width.

For heavy duty mining tramp metal separation applications, EMBS-6H serie separators can occur up to 2.000 Gauss magnetic intensity on 50cm distance.



EMBS-I-1400 solid waste recovery application



EMBS-I-1200 RDF facility application

application



EMBS-I-1000 and ECS-C-1000-12-VF
combination PET recycling application

The basic models of electromagnetic separators work with the principle that the magnetic block is located in the oil pool and is cooled by the natural heat transfer method (Heavy duty models – EMBS-H Serie – have fan + pump for forced heat transfer).

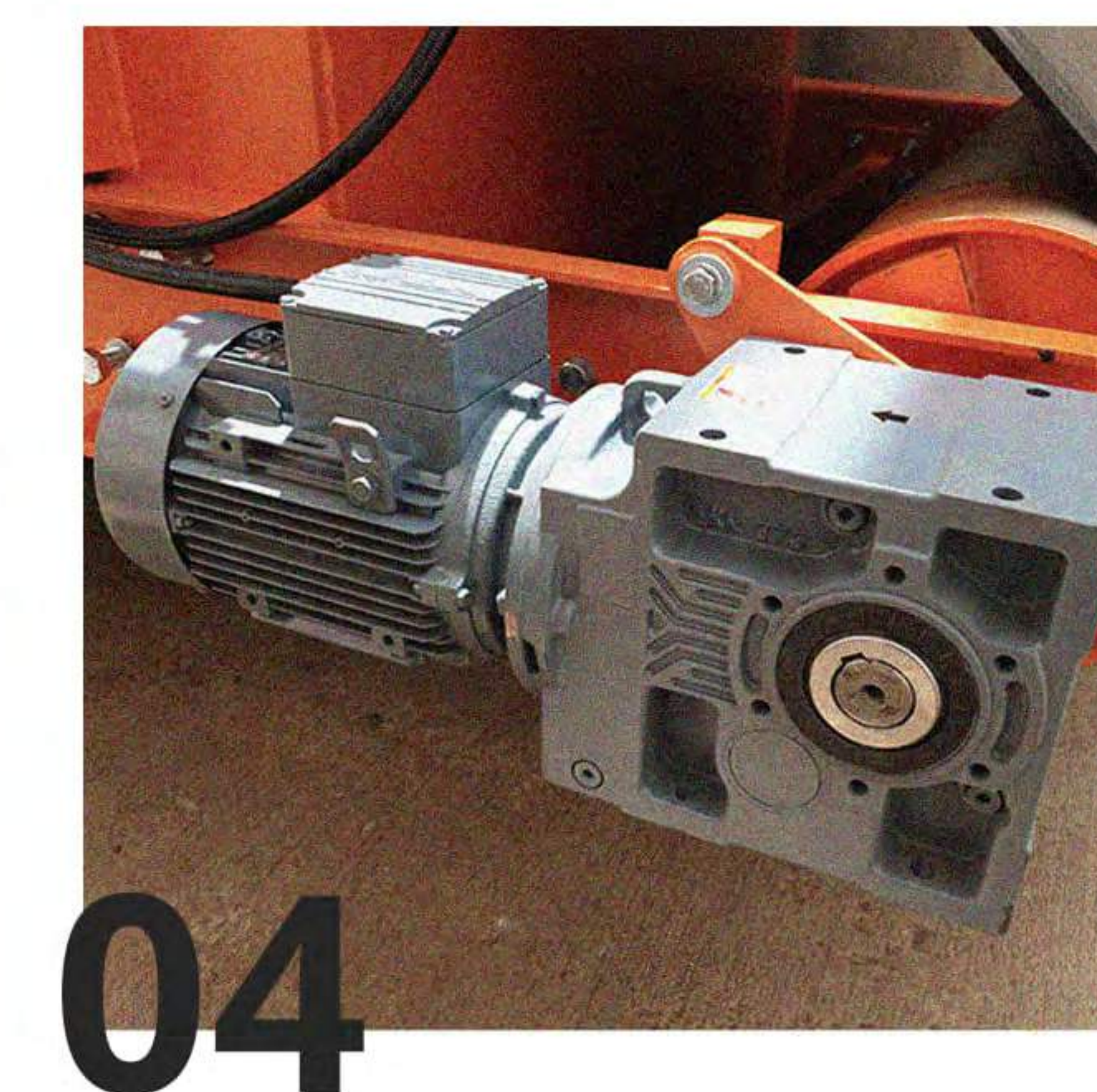
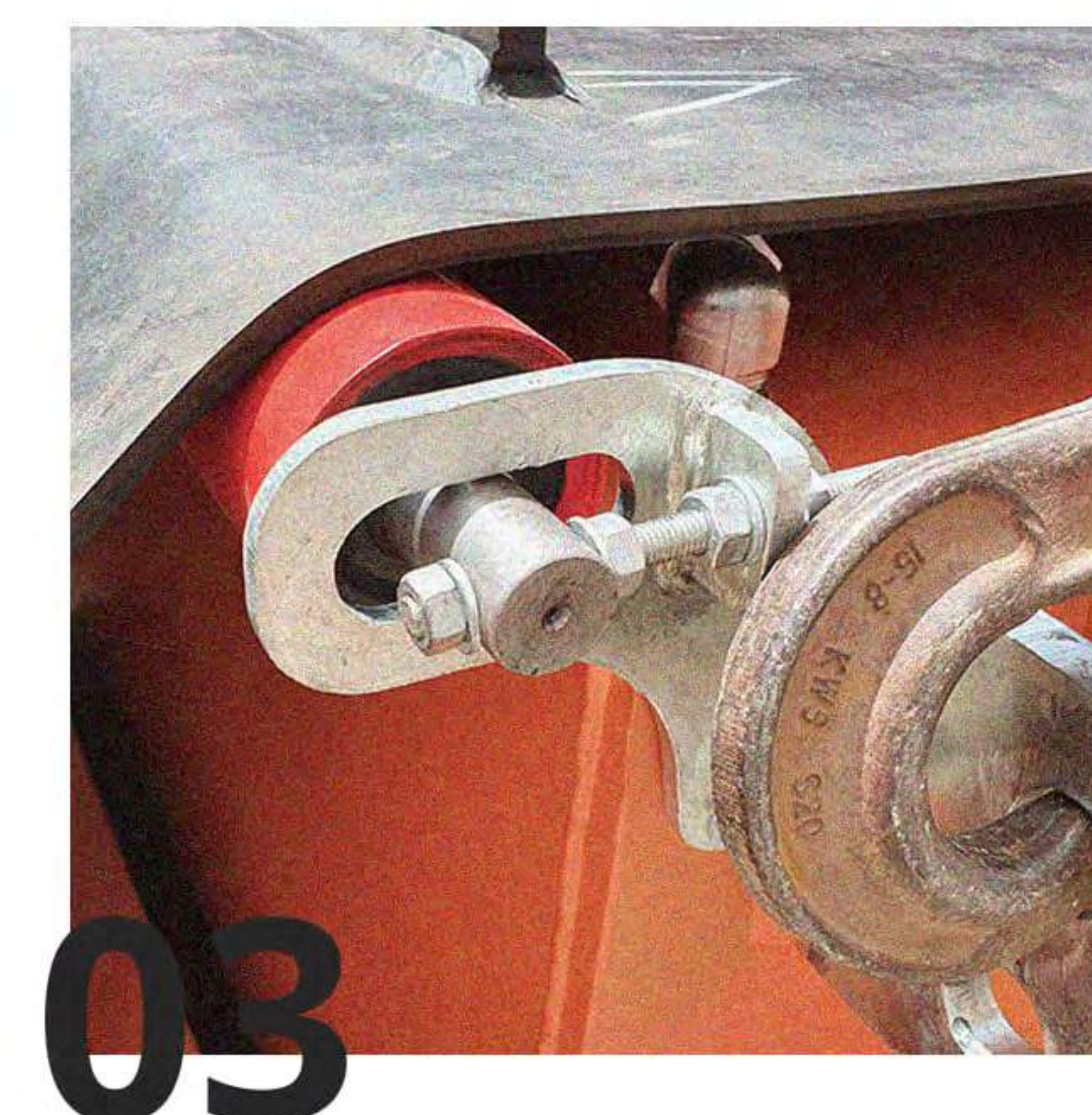
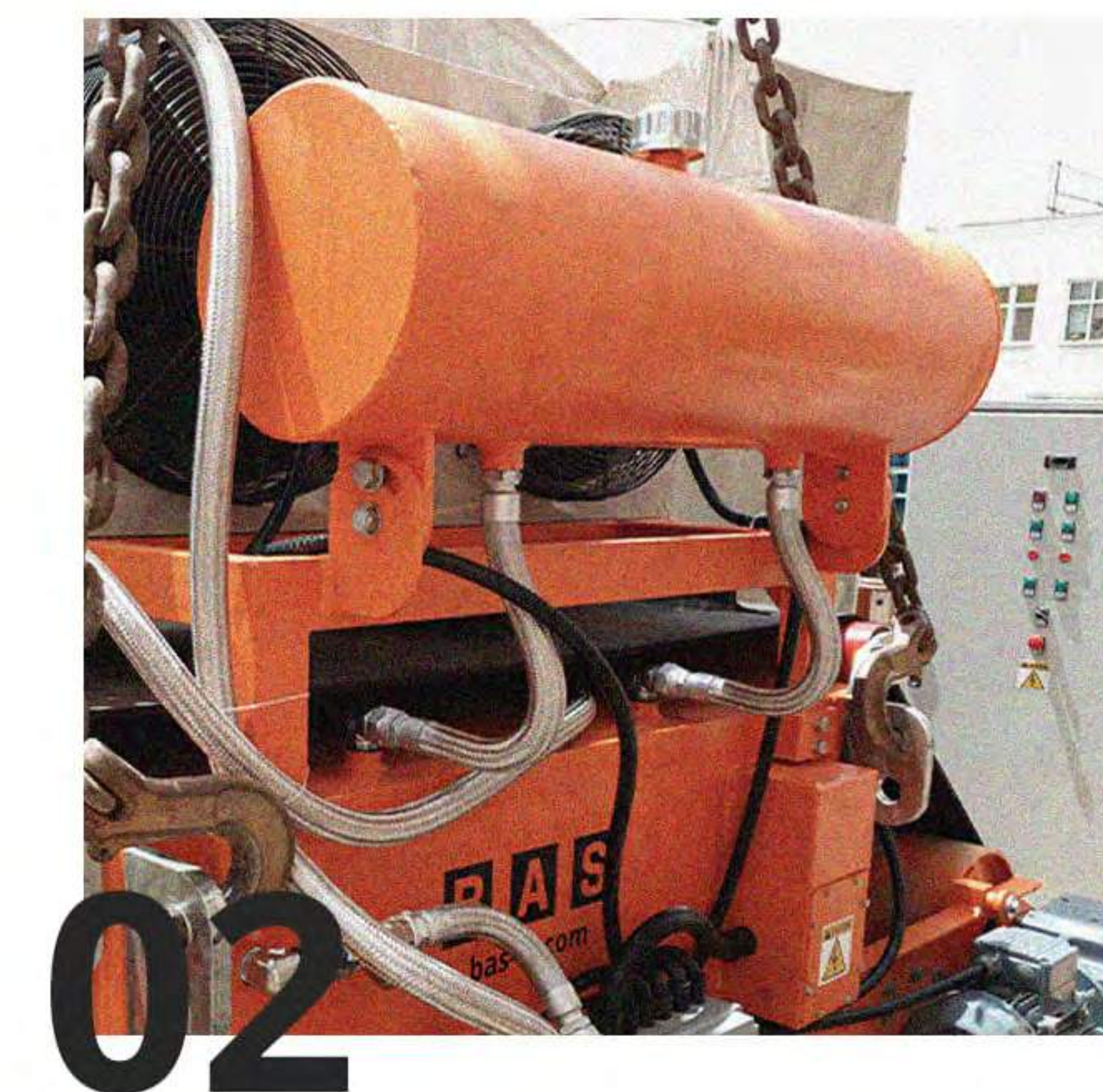
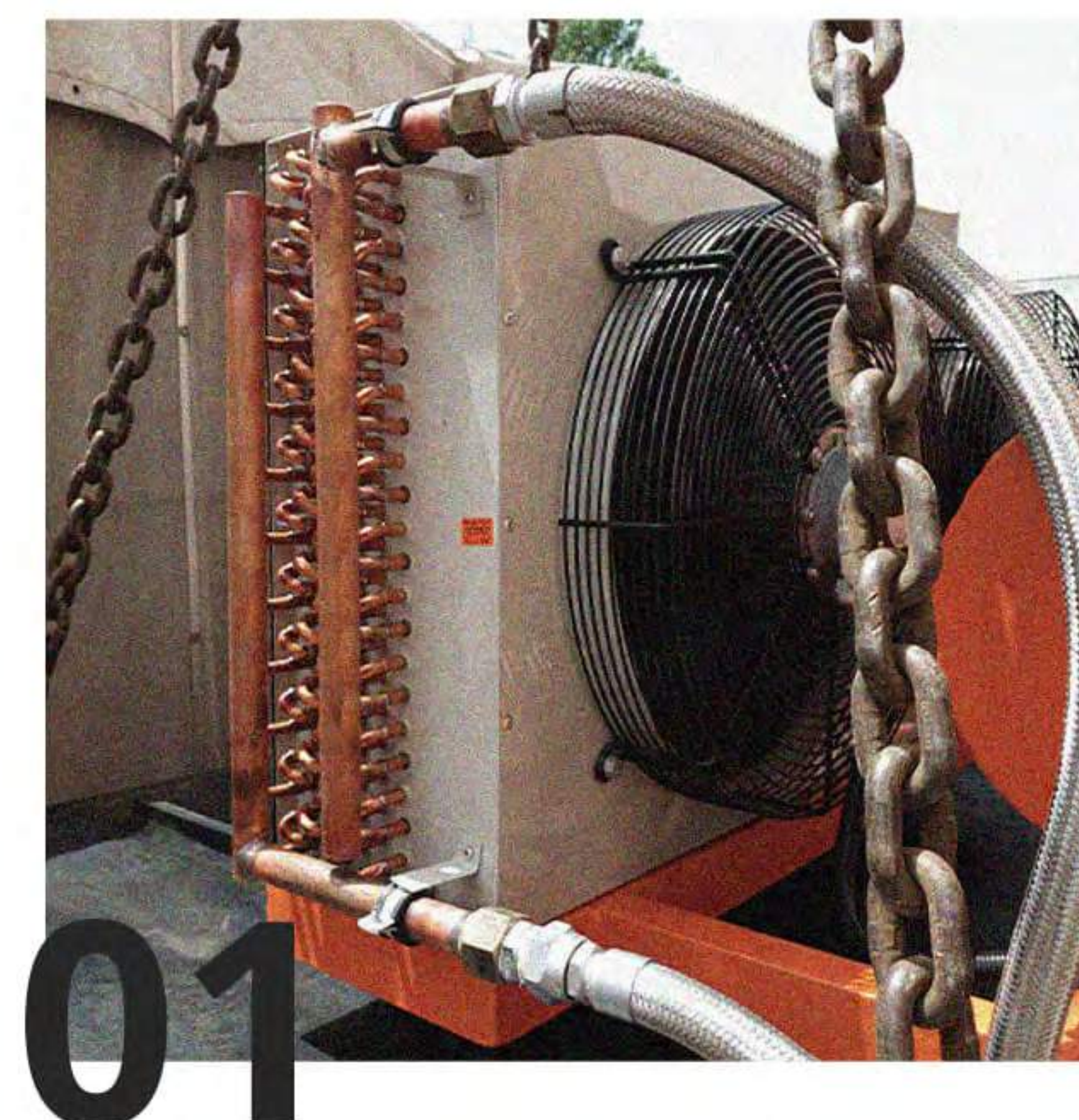
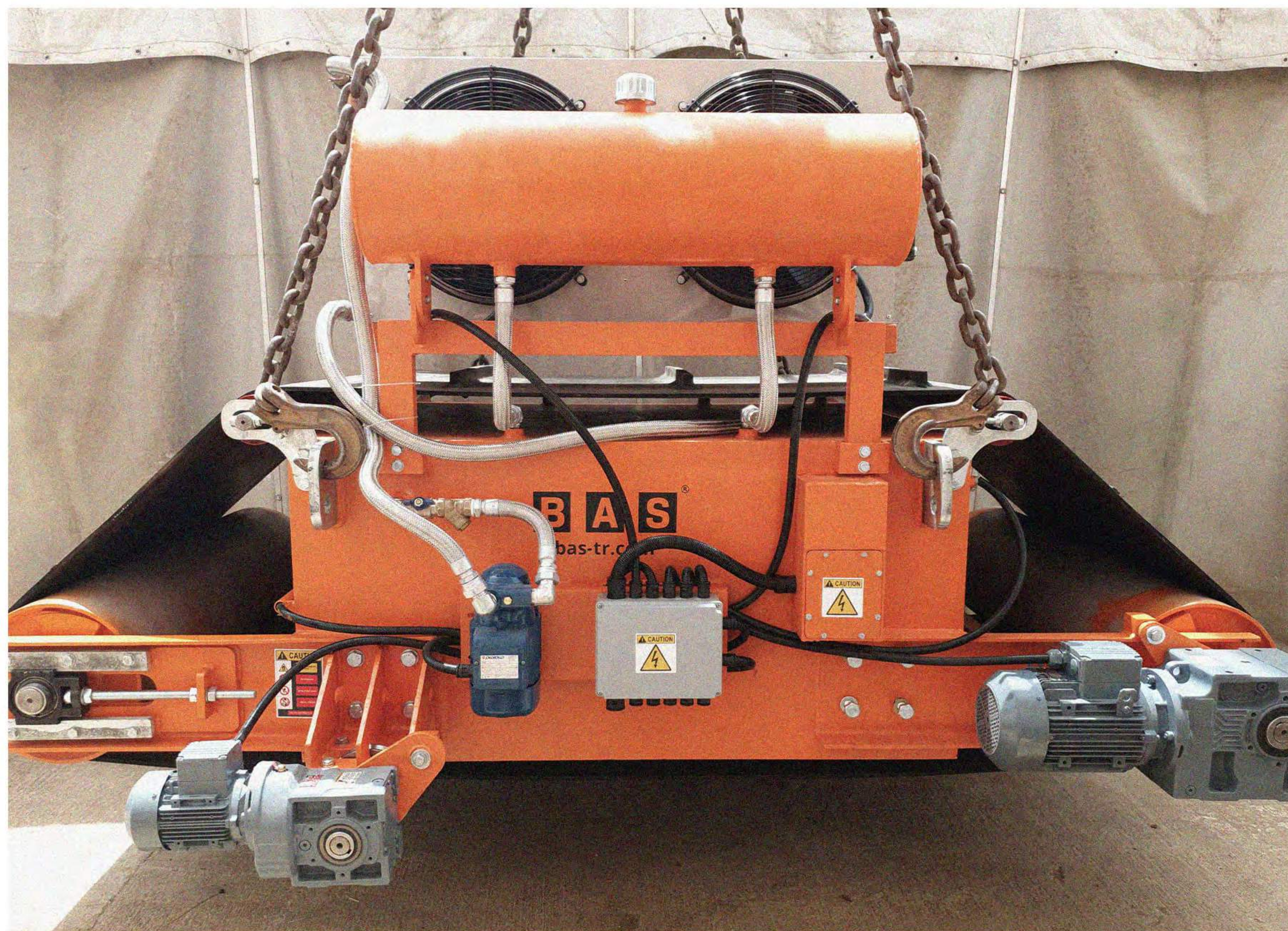
Main magnetic block consists of special steel core that allows high magnetic intensity and has aluminum wire coil. The magnetic block has three pole and makes sure that the effective magnetic area field is only created at the separator bottom.

Magnetic over-band metal separators can be installed onto the conveyor in cross or parallel methods. The Cross belt application can be placed at any point of the conveyor up to a 30 degree angle. Parallel application can be placed at a distance convenient enough to the conveyor chute to ease catching and dropping the metal. The magnetic separator contains two drums. In addition, the separator provides safety for two band adjustment rolls and band settings control in its main body. Two chutes to the sides prevent the metal from entering between the magnetic block and the band. The direct actuated band motor provides uninterrupted and lossless power transfer, and conical locked drums provide ease of service.



EMBS-C-1000 PVC
recycling application

structure



01 air cooling radiator

04 gear + motor

02 expesion tank

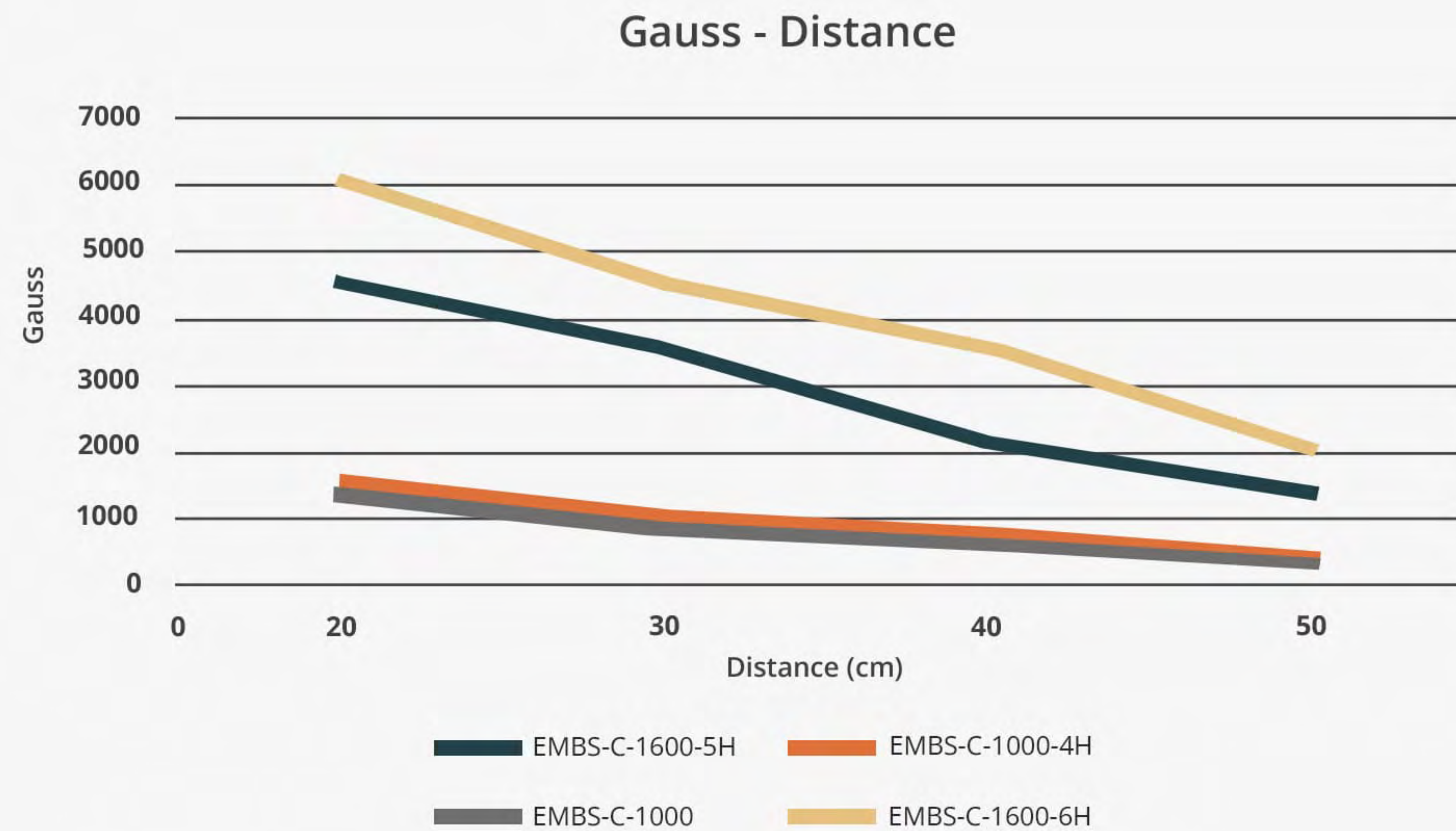
05 recirculation pump

03 adjustment roller

06 secondary drum bearing



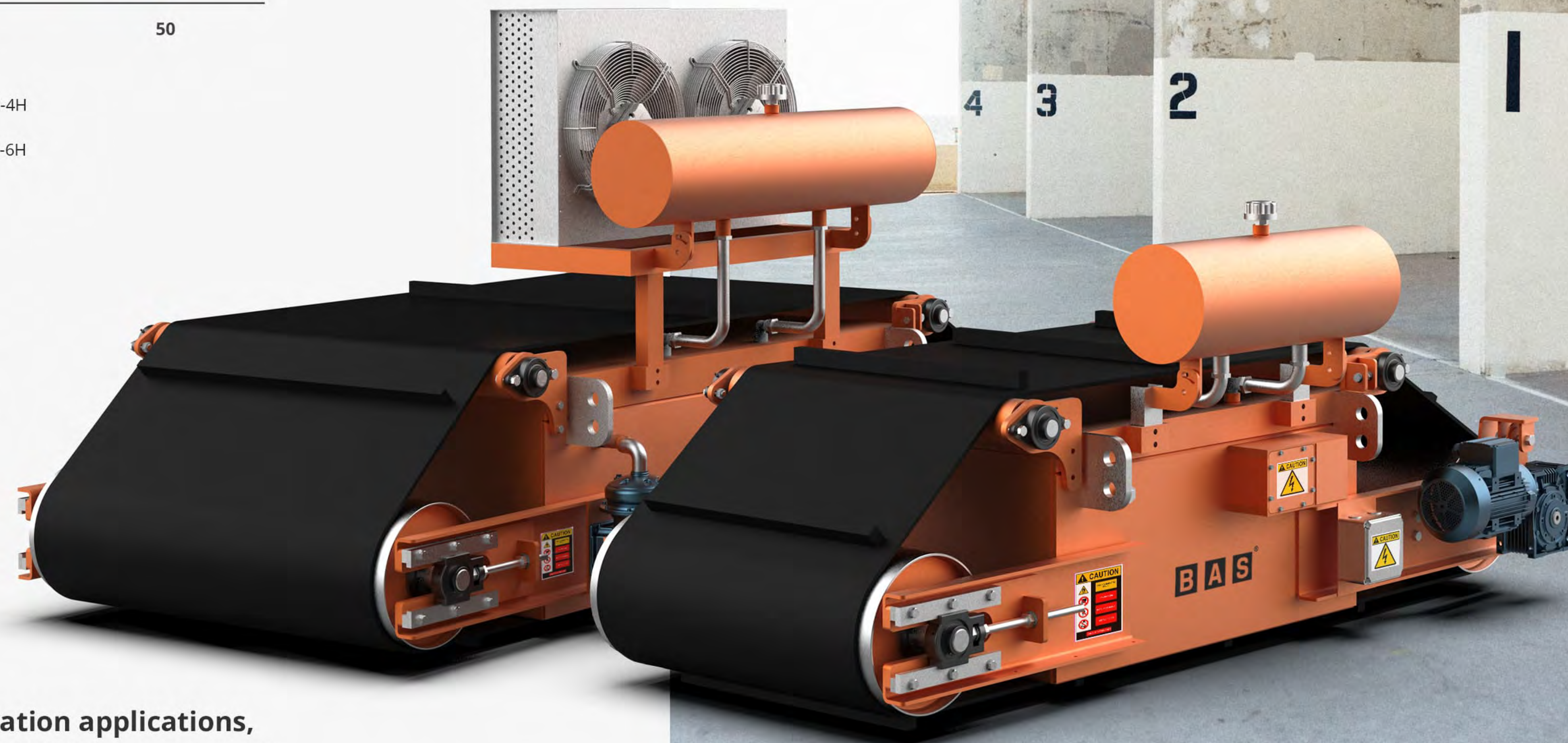
magnetic intensity distance relations



20cm-60cm Distance and Magnetic Intensity
(Example EMBS-1200 Electromagnetic Separator)

EMBS serie electromagnetic overband metal separators have natural heat transfer system by oil. In this serie system doesnt need forced heat transfer system and equipment can be cooled easily via open atmospere body surface. But EMBS-H serie separators occur higher magnetic intensity and equipment's coil needs cooling by forced heat transfer system (radiator,pump and fan).

***For heavy duty mining tramp metal separation applications, EMBS-6H serie separators can occur up to 2.000 Gauss magnetic intensity on 50cm distance.**



magnetic field

Electromagnetic separators are made up of core and coil. Electromagnetic separators are advantageous compared to permanent magnetic separators as the difference between the field where the magnetic scan peak and the overall magnetic field in the whole is undeniable.

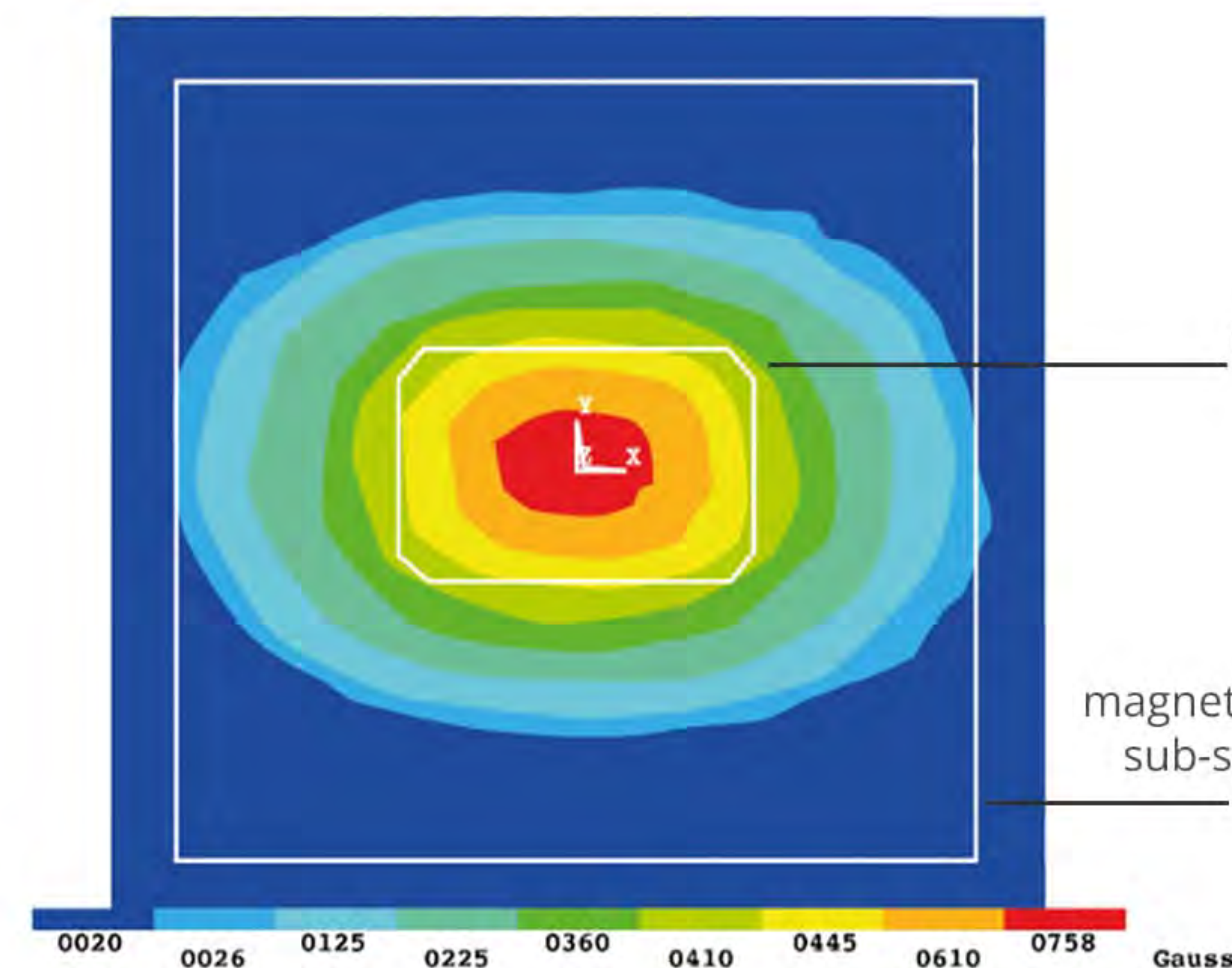
BAS® electromagnetic separators provide maximum magnetic field intensity to the wider area as seen above. In addition to the magnetic field force in magnetic separators, the area that this force scans is of high importance. It provides stronger magnetic force across the entire band on the conveyors it hangs and prevents metal miss out.

It is effective for over 40% wider area.

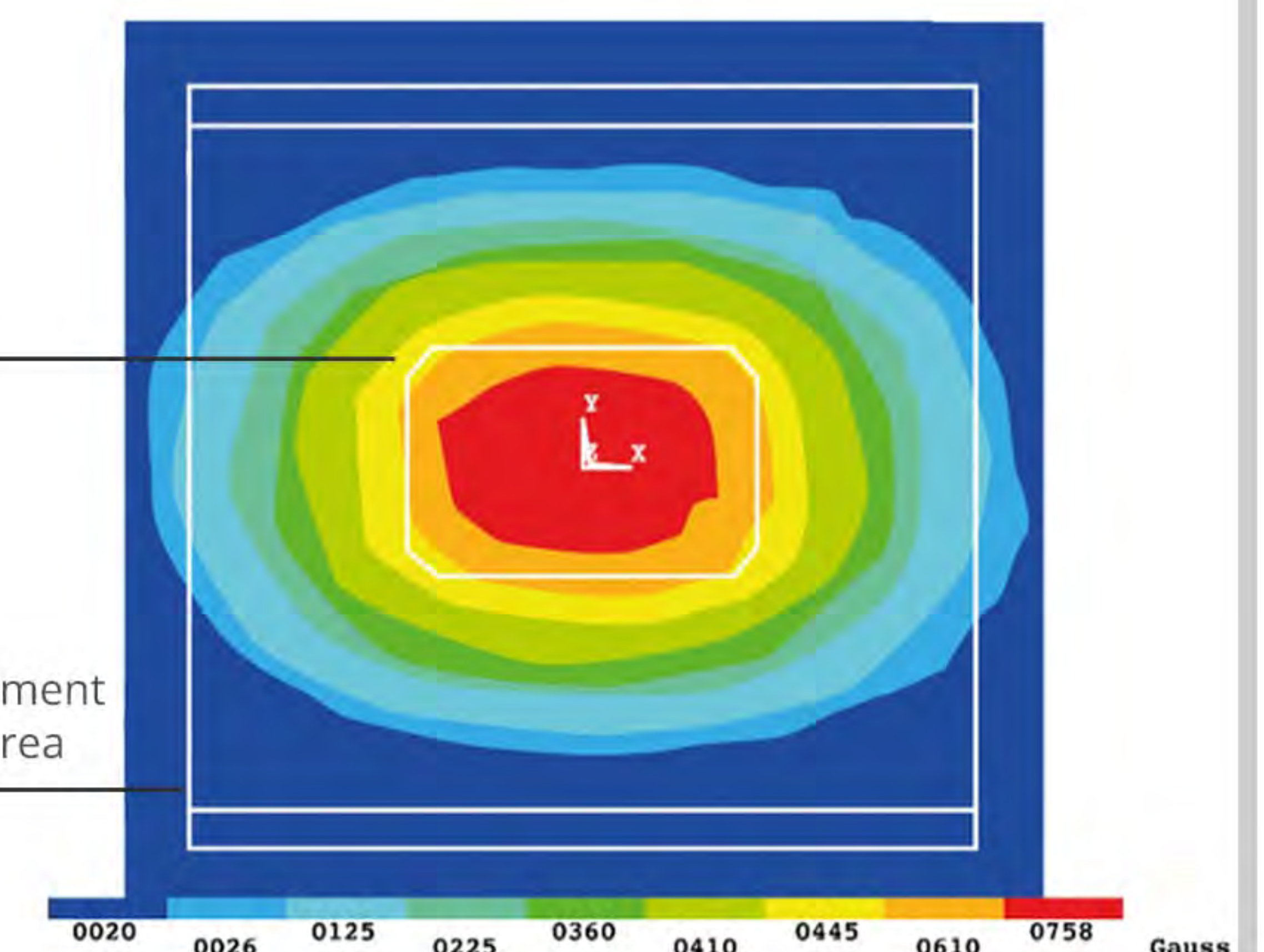
Magnetic Intensity Distribution at 350mm

(EMBS-1200 Example Application)

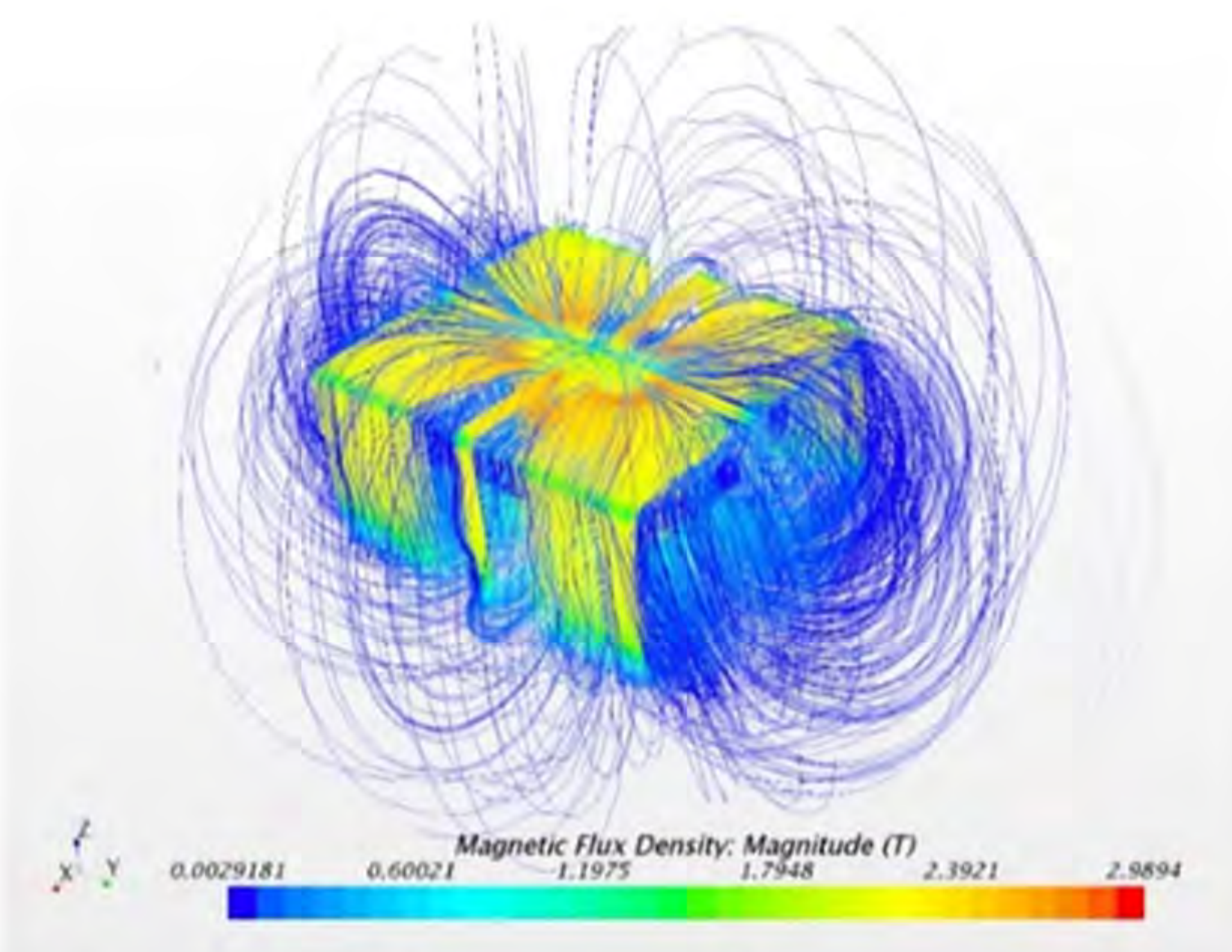
Standard 1200mm
Electromagnetic Separator



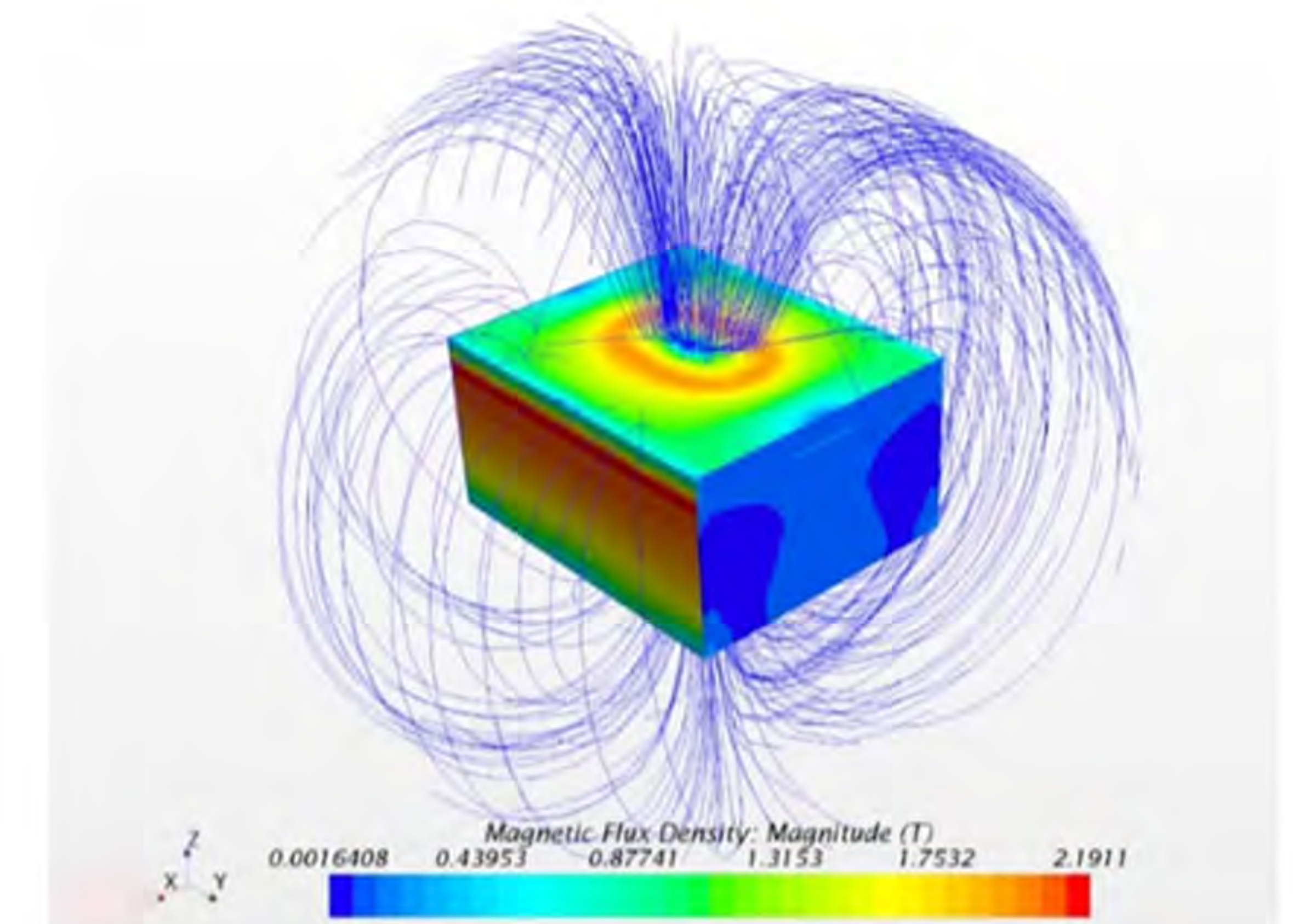
**BAS® EMBS-C-1200
Elektromagnetic Separator**



Standard Electromagnetic
Separator Magnetic Field
Intensity Distribution @350mm

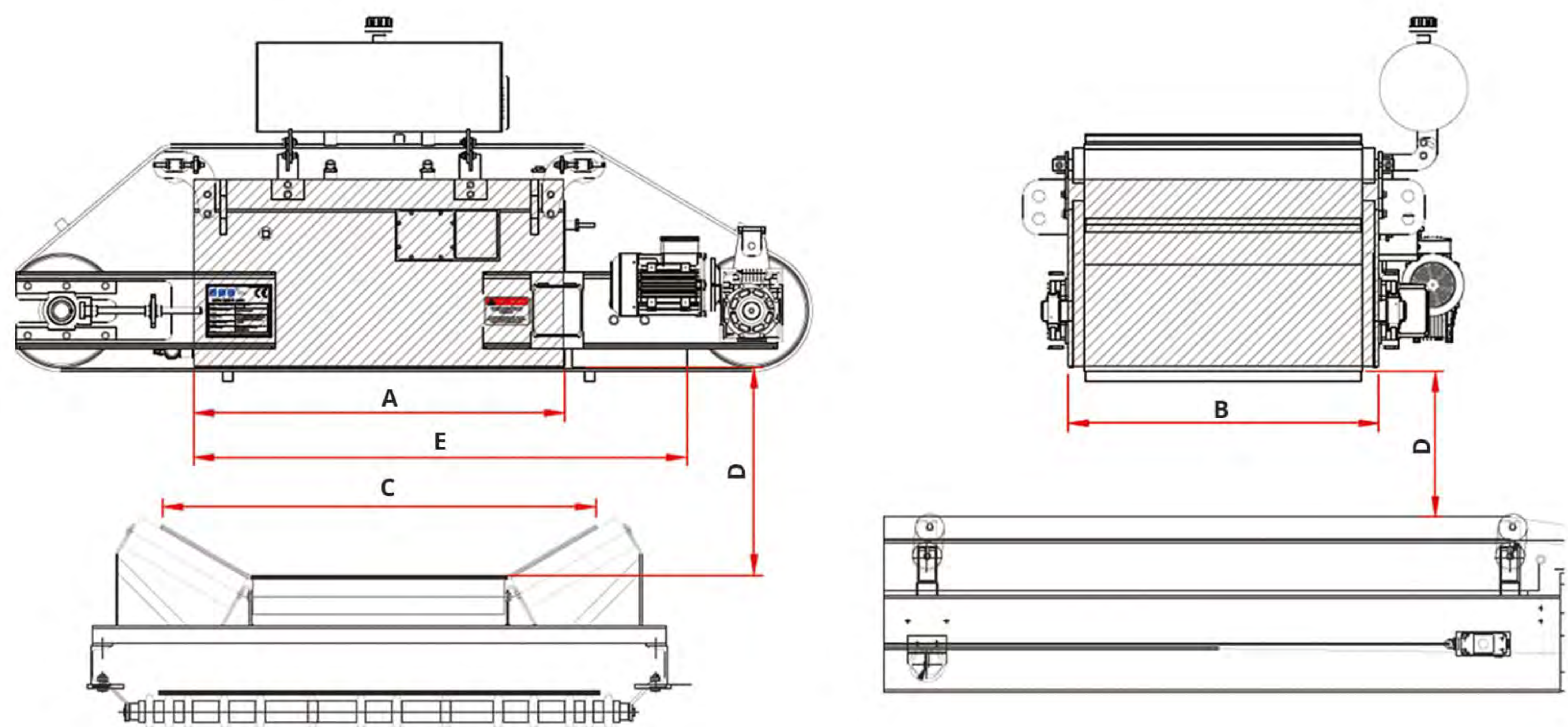


**BAS® Electromagnetic
Separator Magnetic Field
Intensity distribution @350mm**



MODELS

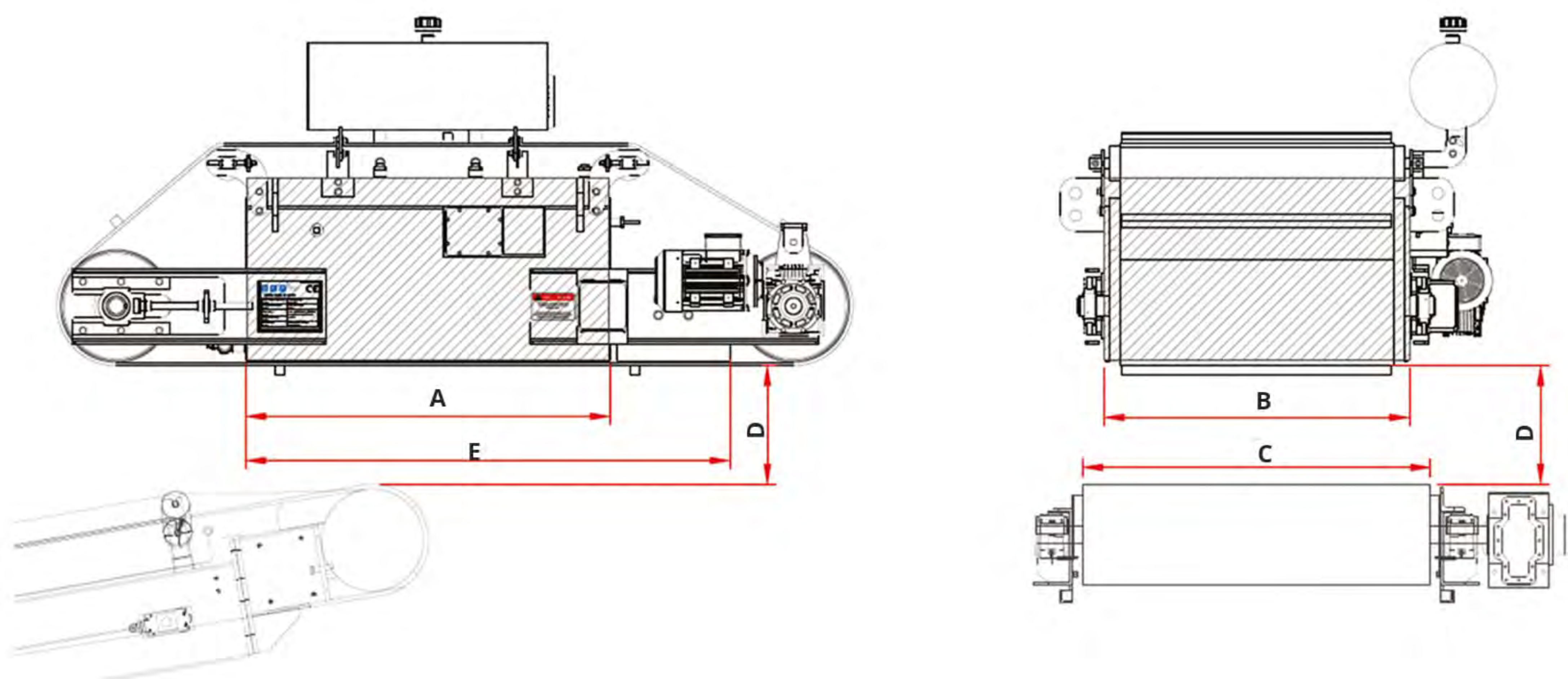
Crossbelt Application Choosing Table



CROSSBELT APPLICATION MODEL	MAGNETIC OUTPUT (kW)	CONVEYOR WIDTH C	MAIN MAGNET WIDTH B	MAIN MAGNET LENGTH A	TOTAL MAGNET LENGTH E	APPLICATION DISTANCE D	SEPARATOR BELT	MAGNETIC AREA INTENSITY	BELT MOTOR (kW)	COOLING
EMBS-C-800	3,7	800	800	800	1150	"150mm -350mm"	"EP600-4 10MM RUBBER (50mm Barrier) "	"800 Gauss [@350MM] "	1,1	Naturel Het Transfer
EMBS-C-1000	5,3	1000	960	915	1265				2,2	
EMBS-C-1200	6,6	1200	960	1150	1550				3	
EMBS-C-1400	8,3	1400	1060	1310	1710			"1000 Gauss [@350mm] "	4	
EMBS-C-1600	11,5	1600	1300	1520	1920				5,5	
EMBS-C-1800	12,6	1800	1300	1710	2110					
EMBS-C-2000	13,9	2000	1300	1950	2350					

*For different magnetic area field request pls contact.

Inline Application Choosing Table

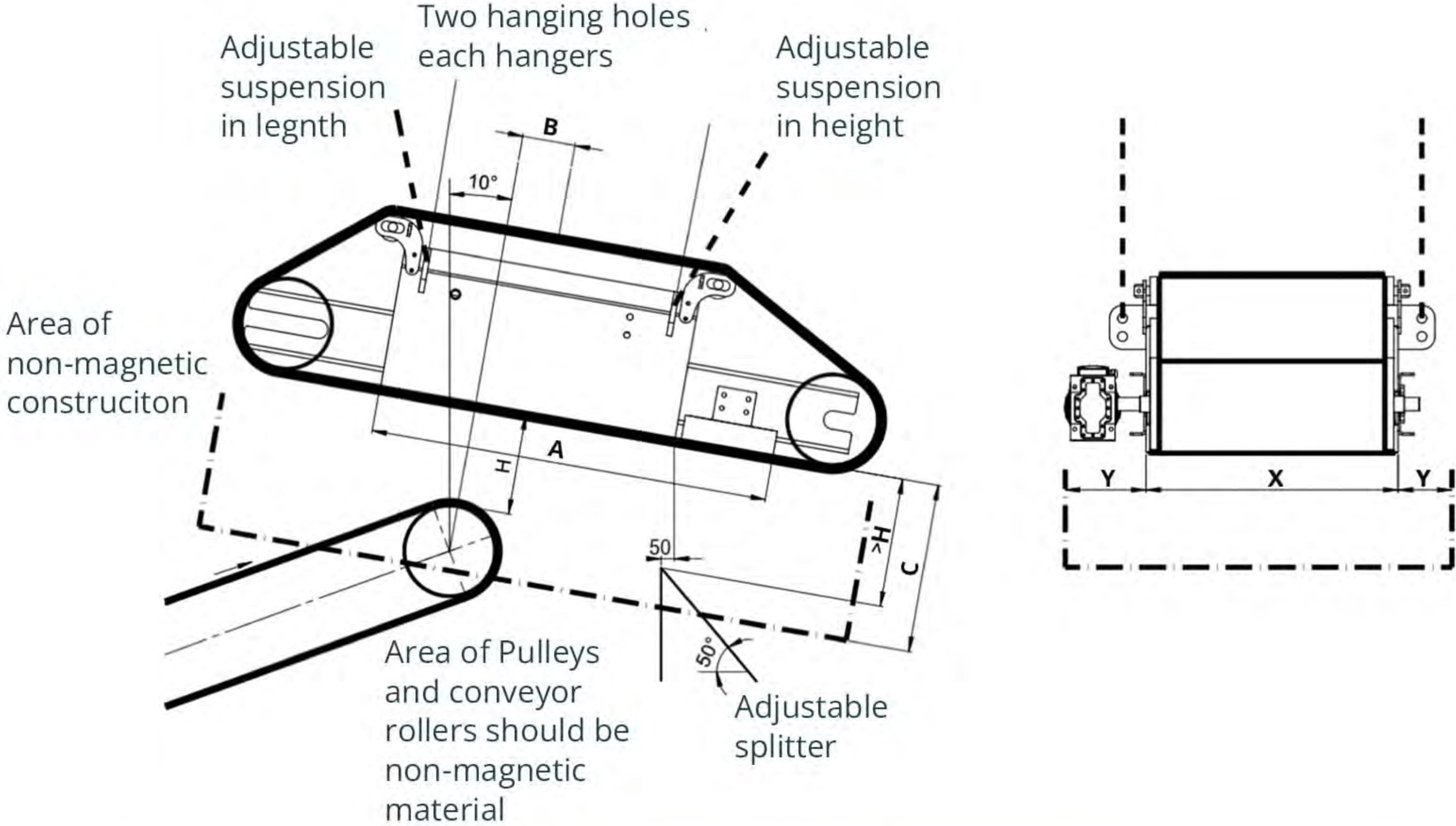


INLINE APPLICATION MODEL	MAGNETIC OUTPUT (kW)	CONVEYOR WIDTH C	MAIN MAGNET WIDTH B	MAIN MAGNET LENGTH A	TOTAL MAGNET LENGTH E	APPLICATION DISTANCE D	SEPARATOR BELT	MAGNETIC AREA INTENSITY	BELT MOTOR (kW)	COOLING
EMBS-I-800	3,7	800	800	800	1300	"150mm -350mm"	"EP600-4 10MM RUBBER (50mm Barrier) "	"800 Gauss [@350MM] "	1,1	Naturel Het Transfer
EMBS-I-1000	5,3	1000	960	915	1415				2,2	
EMBS-I-1200	8,0	1200	1150	1150	1750				3	
EMBS-I-1400	10,2	1400	1350	1350	1950			"1000 Gauss [@350mm] "	4	
EMBS-I-1600	12,3	1600	1500	1450	2250				5,5	
EMBS-I-1800	14,4	1800	1700	1450	2250					
EMBS-I-2000	17,7	2000	1900	1550	2350					

*For different magnetic area field request pls contact.

APPLICATION DETAILS

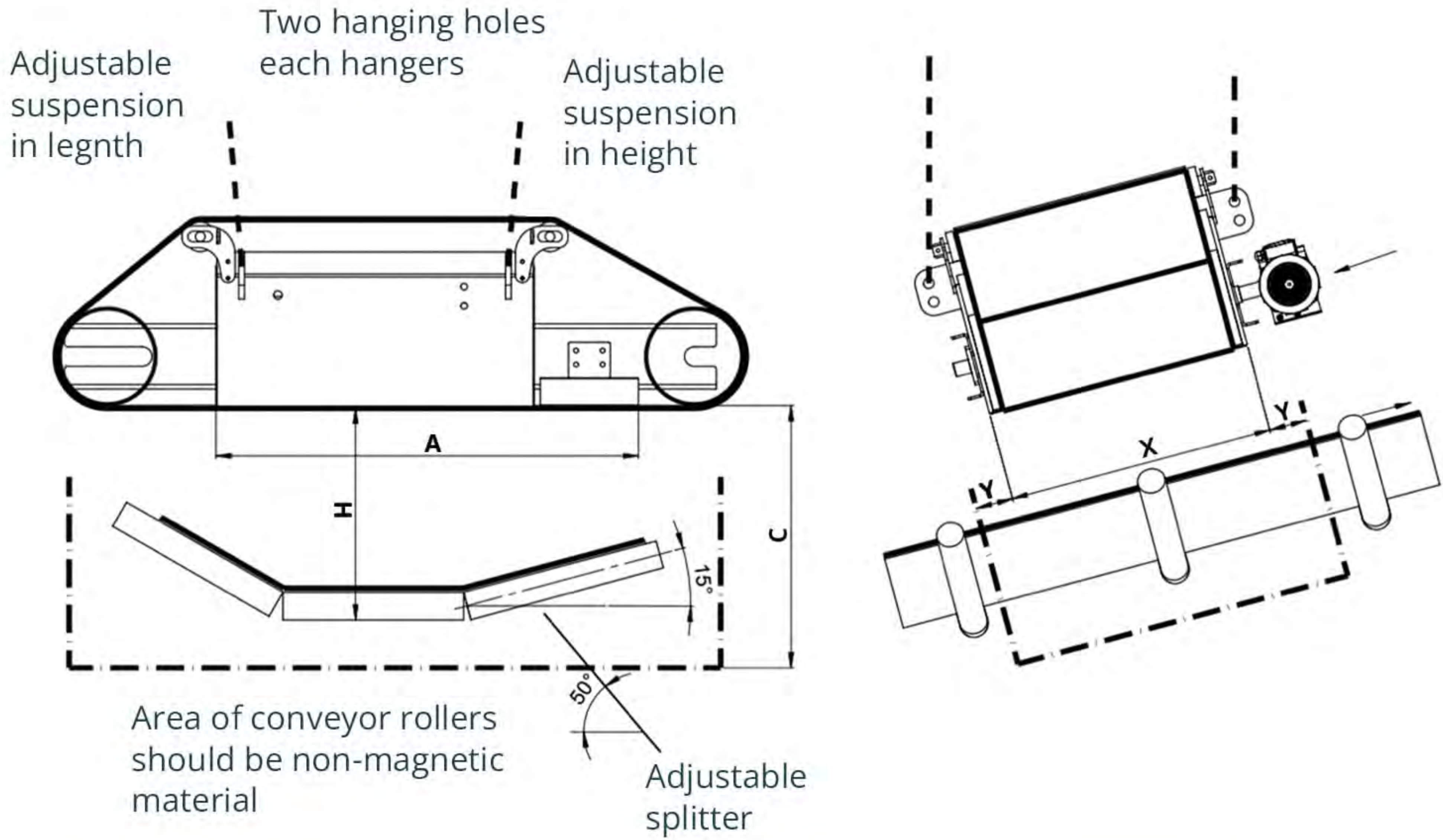
EMBS-I Series Inline Application Type Proposals



MODEL	H	A	X	B	C	Y
EMBS-I-800	300	1300	800	200	500	200
EMBS-I-1000	350	1415	960	250	650	250
EMBS-I-1200	350	1750	1150	300	700	300
EMBS-I-1400	400	1950	1350	350	800	350
EMBS-I-1600	550	2250	1500	400	950	450
EMBS-I-1800	650	2250	1700	500	1100	500
EMBS-I-2000	700	2350	1900	600	1300	600

- Equipment protected according DIN15 220. These are recommended values for belt speed up to 2m/s.
- The systems properly working conditions are under customer responsibility.

EMBS-C Series Crossbelt Application Type Proposals



MODEL	H	A	X	C	Y
EMBS-C-800	300	1150	800	550	200
EMBS-C-1000	350	1265	960	650	250
EMBS-C-1200	350	1550	960	650	300
EMBS-C-1400	400	1710	1060	800	350
EMBS-C-1600	450	1920	1300	950	400
EMBS-C-1800	500	2120	1300	1100	450
EMBS-C-2000	550	2350	1300	1200	500

- Equipment protected according DIN15 220. These are recommended values for belt speed up to 2m/s.
- The systems properly working conditions are under customer responsibility.



BAS three letters that makes our mission as a beneficiation solution maker and separation technologies represent three main headings.

Beneficiation: Ore beneficiation systems

Application: Field application abilities

Separation: Separation technologies of ore or recycling raw materials

BAS caters to all possible recycling and ore beneficiation processes all around the world with 2 factories in total 40,000 m2 and more than 500 employees. BAS offers ore beneficiation turnkey solutions, high-tech separation and field applications with its own engineering and laboratory. BAS is responsible for all ore mineralogy, production engineering & design from laboratory work to production. Together with the laboratory service, it works on all possibilities on the ore and optimizes the solution. In separation solutions, it performs on limited lab & pilot-scale preview of the methods to be applied and provides field applications.

As BAS that we are a fair team that works with passion and strive for excellence. And applies the right engineering solutions in the field.

HEAD OFFICE & MAIN FACORY

BAŞKENT OSB 51.CAD NO:3 SİNCAN
ANKARA TURKIYE
0090312 8154152
info@bas-tr.com

SECOND FACTORY

BAŞKENT OSB BAŞKENT BULV. 2. CAD NO:5 SİNCAN
ANKARA TURKIYE
0090312 3944691

POLAND OFFICE

NADBRZEZNA 2, 43-300
BIELSKO-BIALA POLAND
004853 3084009
poland@bas-tr.com

CANADA OFFICE

68 BEDLE AV. TORONTO / ON M2H 1 K8 /
CANADA
001416 6481574
canada@bas-tr.com

SOUTH KOREA AGENCY

8-1, ARAETSAEUDAE-GİL, UIWANG-SI, GYEONGGI-DO,
REPUBLIC OF KOREA
008231 4223336
korea@bas-tr.com



BOS-3 Factory



BOS-1 Head Office
and Main Factory



Beneficiation
Laboratory Applications