

DIMET 

LIFTING ELECTROMAGNETS



CATALOGUE

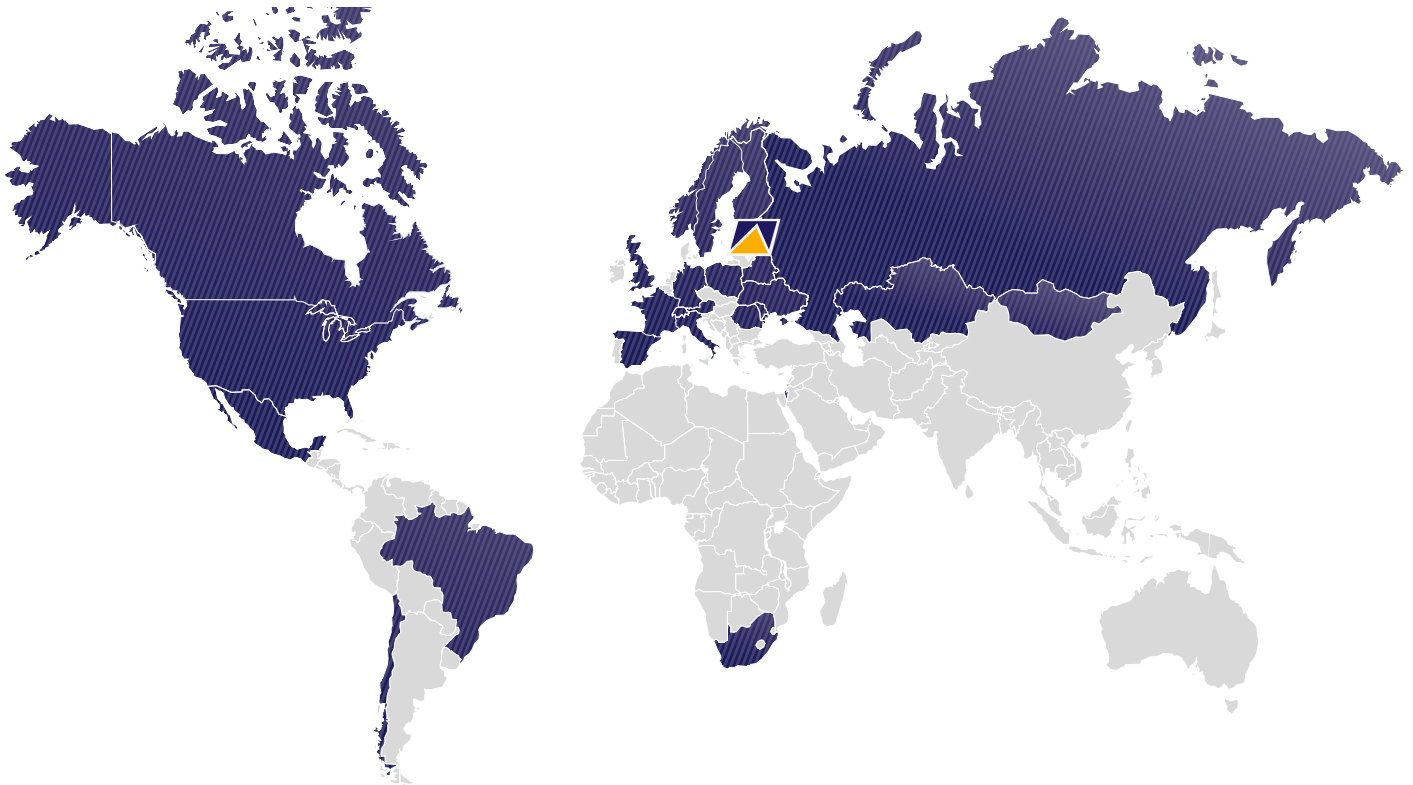


2021



CONTENTS

About company	02
Key features and advantages of DIMET electromagnets	
LIFTING ELECTROMAGNETS	03
1) EMG-SM and EMG-HC SERIES Scrap handling magnets	04
2) EMG SCRAP-B SERIES Rectangular scrap magnets	06
3) EMG SCRAP-Z SERIES Magnets for cleaning	08
4) EMG SLAB-T SERIES Round electromagnets for slabs	10
5) EMGM SERIES for mild slab turning	12
6) EMG SERIES for handling of blooms, rails, forgings	14
7) EMGS SERIES	
- Electromagnets for sheet steel in pieces and in packs	16
- For reloading of square and round blanks, packs of rebars, tubes, long steel products	18
8) EMGK SERIES for bundles	20
9) EMGP SERIES for long products	22
10) Electromagnets for steel in coils	
- EMGR SERIES	24
- EMGB SERIES	26
11) EMGT SERIES Electromagnets for large diameter tubes	28
12) ELECTROPERMANENT MAGNETS	
- IMG SERIES for steel sheets and slabs	
- IMGK SERIES for large diameter round blanks	
- IMGS SERIES for reloading of steel sheets in single pieces	30
13) Electromagnetic spreader beams for long items of cargo	32
14) Electromagnetic spreader beams for mild slab turning	33
15) SG Unified lifting system	34
Electromagnet control systems	
1) PN-500 SERIES Voltage converters	35
2) PN-500-G SERIES Voltage converters	36
3) Uninterrupted power supply systems for electromagnets	37



DIMET GmbH & Co.KG is a one of the leading producers of lifting magnets with headquarter in Germany and sales network worldwide.

Established in 2000 as an engineering company, DIMET has developed into a modern high-technology enterprise with extensive production and designing capabilities, offering wide range of solutions for cargo lifting and material handling.

We design and manufacture wide range of lifting electromagnets, electro-permanent lifting magnets, electromagnetic spreader beams, iron separators, control systems, grab buckets and a wide range of lifting equipment.

CE, EAC confirmed. The company's management system satisfies ISO 9001 requirements.

So whenever your company needs a solution for scrap processing, coil, rail, slab or any other material handling, we will find the best possible one for you.

OUR ADVANTAGES

- ▶ High-qualified personnel
- ▶ Strong R&D capability and engineering excellence
- ▶ Own inventions, some of them are patented
- ▶ High-quality pre-sales & after-sales technical services

KEY FEATURES OF DIMET ELECTROMAGNETS

Rugged cast case

Provides supplementary durability and lowers electromagnet heating

Coil design

High quality wire in advanced insulation reduces possibility of turn-to-turn short circuit

Heat insulation gasket

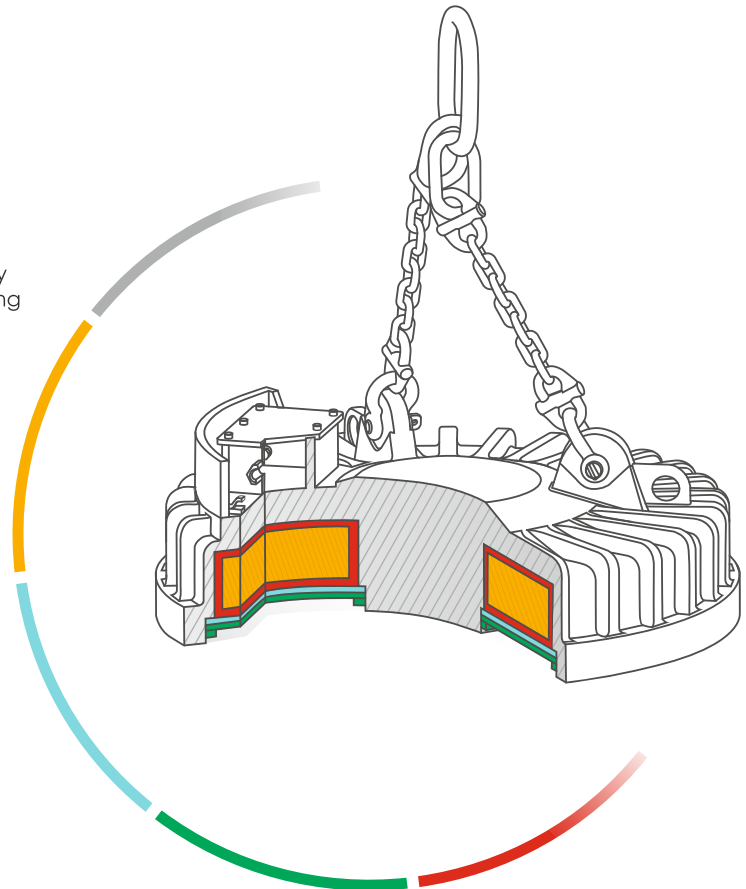
Provides additional coil protection during operations with hot loads up to 650 °C

Heavy-duty steel bottom plate

Protects the coil and significantly increases electromagnet service life

High-quality sealing compound

Prevents coil damage and reduces heating of electromagnet coil



YOUR BENEFITS OF USING DIMET ELECTROMAGNETS



Productivity increase due to efficient design of electromagnet.



Long service life of electromagnet due to specially designed case and coil.



Energy saving due to cutting-edge energy-efficient construction of electromagnet.



Compatible with all modern equipment through universal attachment and connection system.

TRANSPORTED CARGO

- ▶ Scrap
- ▶ Turnings
- ▶ Metal charge

COMPATIBLE EQUIPMENT

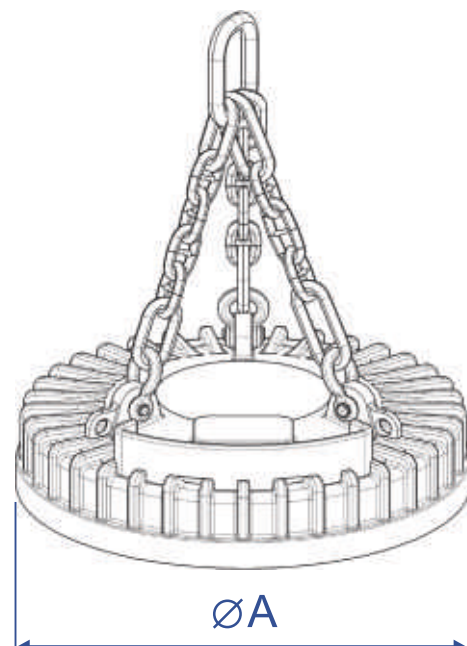
- ▶ Mobile material handlers
- ▶ Overhead cranes
- ▶ Portal cranes
- ▶ Gantry cranes
- ▶ Railway cranes

KEY FEATURES

- ▶ Long continuous operating period
- ▶ Special design for operation in underwater conditions as an option
- ▶ Heat-resistant version (cargo temperature up to 650°C) as an option

WINDING TYPE

- ▶ Aluminium coil



EMG-SM SERIES (lightweight scrap, steel turnings)

Model	Pull-off force kg, at least	Generator power, kW	Weight, kg	Rated current, A	Rated power, W	Diameter ØA, mm	Lifting capacity, kg				
							Plates	Ingots	Steel turnings	Light scrap	Heavy scrap
EMG 085SM	12000	5	700	18	3900	850	6000	460	180	230	350
EMG 105SM	17000	7,5	860	25	5500	1050	8500	540	220	290	460
EMG 115SM	22000	10	1120	31	6820	1150	11000	700	290	380	610
EMG 125SM	26000	10	1400	39	8580	1250	13000	870	350	540	850
EMG 135SM	30000	15	1750	46	10120	1350	15000	1020	410	620	1030
EMG 145SM	36000	15	2150	52	11440	1450	18000	1200	480	790	1230
EMG 155SM	40000	15	2700	61	13400	1550	20000	1480	600	1000	1510
EMG 170SM	55000	20	3230	72	15840	1700	27500	1800	710	1180	1740
EMG 185SM	66000	25	4000	85	18700	1850	33000	2200	840	1440	2190
EMG 200SM	75000	25	4500	105	23100	2000	37500	2610	990	1670	2670

EMG-HC series (heavy scrap, bundles, ingots)

Model	Pull-off force kg, at least	Weight, kg	Rated current, A	Rated power, W	Diameter ØA, mm	Lifting capacity, kg				
						Plates	Ingots	Steel turnings	Light scrap	Heavy scrap
EMG 125HC	40000	2100	50	11000	1250	20000	510	1300	800	1250
EMG 145HC	56000	3500	65	14300	1450	28000	800	2050	1280	2000
EMG 170HC	74000	5500	85	18700	1700	37000	1220	3080	2000	2950
EMG 185HC	110000	8000	100	22000	1850	55000	1760	4560	3000	4480
EMG 210HC	130000	10200	114	25000	2100	65000	2300	5700	3800	5600
EMG 230HC	180000	14500	140	30800	2300	90000	3150	8000	6600	7900

With cargo temperature up to 650° C (depending on the steel grade)

TRANSPORTED CARGO

- ▶ Scrap
- ▶ Turnings
- ▶ Metal charge

COMPATIBLE EQUIPMENT

- ▶ Mobile material handlers
- ▶ Overhead cranes
- ▶ Portal cranes
- ▶ Gantry cranes
- ▶ Railway cranes

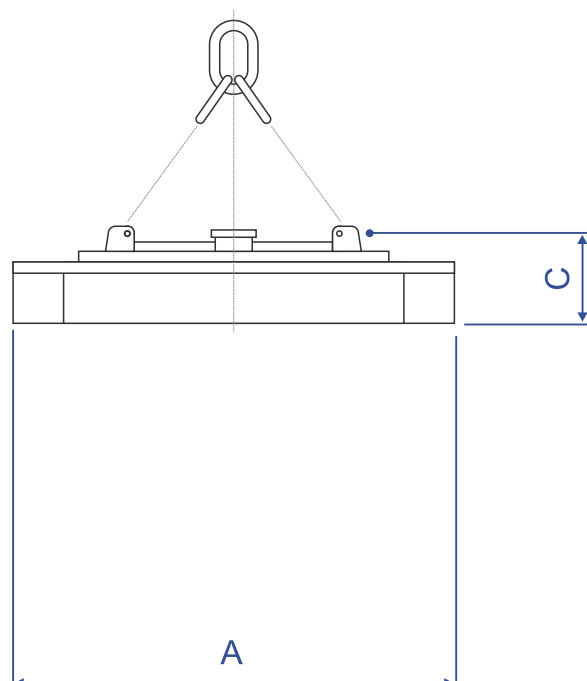


KEY FEATURES

- ▶ Used for unloading of scrap out of the railcar
- ▶ High stability of lifting operations
- ▶ Special design for operation in underwater conditions as an option
- ▶ Heat-resistant version (cargo temperature up to 650°C) as an option

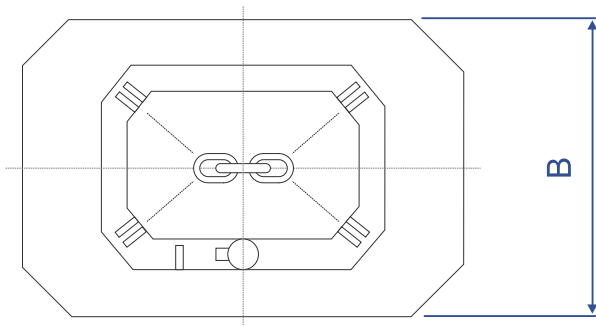
WINDING TYPE

- ▶ Aluminium coil



EMG SCRAP-B SERIES Rectangular scrap magnets

Parameters	EMG 230-150- 50/A-U1	EMG 260-180- 50/A-U1	EMG 300-200- 52/A-U1	EMG 350-220- 52/A-U1
Rated voltage, V	220	220	220	220
Rated electromagnet current at 20° C, A	110	140	170	200
Rated power, kW	24,2	30,8	37,4	44
Steady-state power, kW	15,7	20	26	29
Pull-off force, kg	110000	130000	160000	200000
Dimensions AxBxC, mm	2300x1500x500	2600x1800x500	3000x2000x520	3500x2200x520
Weight, kg	5500	7500	10000	12700
Lifting capacity, kg				
Plates	55000	65000	80000	100000
Ingots	1800	2000	2400	3200
Light scrap	2200	2800	3500	4000
	3500	4200	5000	6000



With cargo temperature up to 650° C (depending on the steel grade)

TRANSPORTED CARGO

- ▶ Scrap
- ▶ Turnings
- ▶ Metal charge

COMPATIBLE EQUIPMENT

- ▶ Mobile material handlers
- ▶ Overhead cranes
- ▶ Portal cranes
- ▶ Gantry cranes
- ▶ Railway cranes

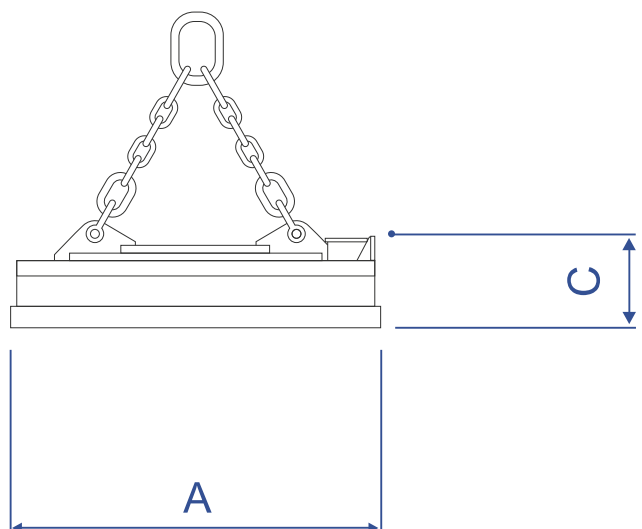


KEY FEATURES

- ▶ Used for railcar cleaning
- ▶ Stability of lifting operations
- ▶ Special design for operation in underwater conditions as an option
- ▶ Heat-resistant version (cargo temperature up to 650° C) as an option

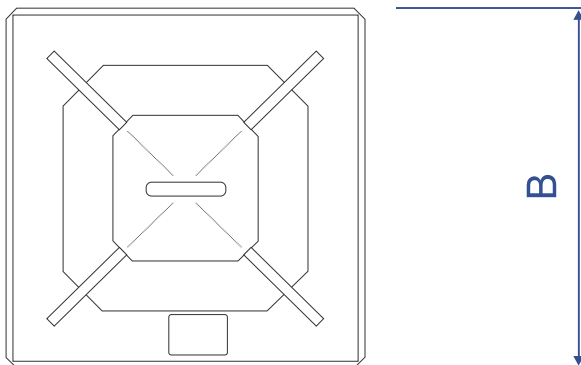
WINDING TYPE

- ▶ Aluminium coil



SCRAP-Z SERIES (for cleaning of wagons from scrap)

Parameters	EMG 120-120-32/A-U1	EMG 170-170-32/A-U1
Rated current at 20° C, A	45	52
Rated power, W	9900	11400
Steady-state power, kW	6600	8800
Pull-out force, at least, kg	27000	35000
Dimensions AxBxC, mm	1200x1200x320	1700x1700x320
Weight, kg	1600	2500
Lifting capacity, kg		
Plates	13500	17500
Steel turnings	250	400
Ingots	800	900
Light scrap	600	700
Heavy scrap	850	1000



With cargo temperature up to 650° C (depending on the steel grade)

TRANSPORTED CARGO

- ▶ Slabs
- ▶ Forgings
- ▶ Heavy-weight metal blanks

COMPATIBLE EQUIPMENT

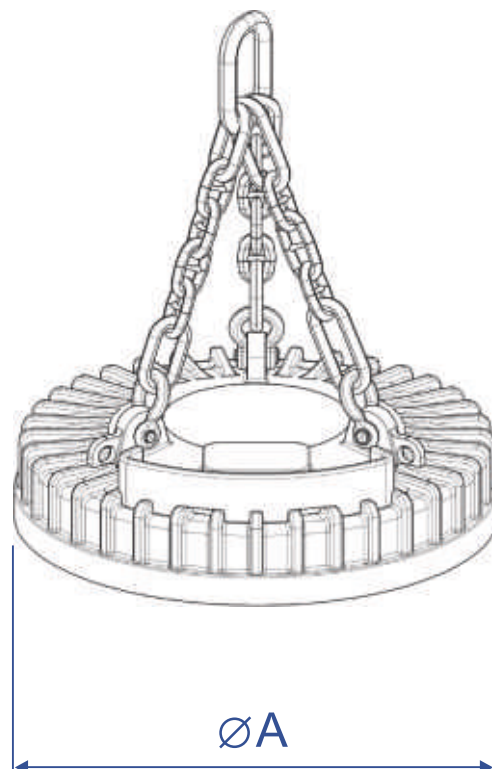
- ▶ Cranes
- ▶ Spreader beams

KEY FEATURES

- ▶ Energy saving as per ton of the transported cargo
- ▶ Heat-resistant version (cargo temperature up to 650° C) as an option

WINDING TYPE

- ▶ Aluminium coil

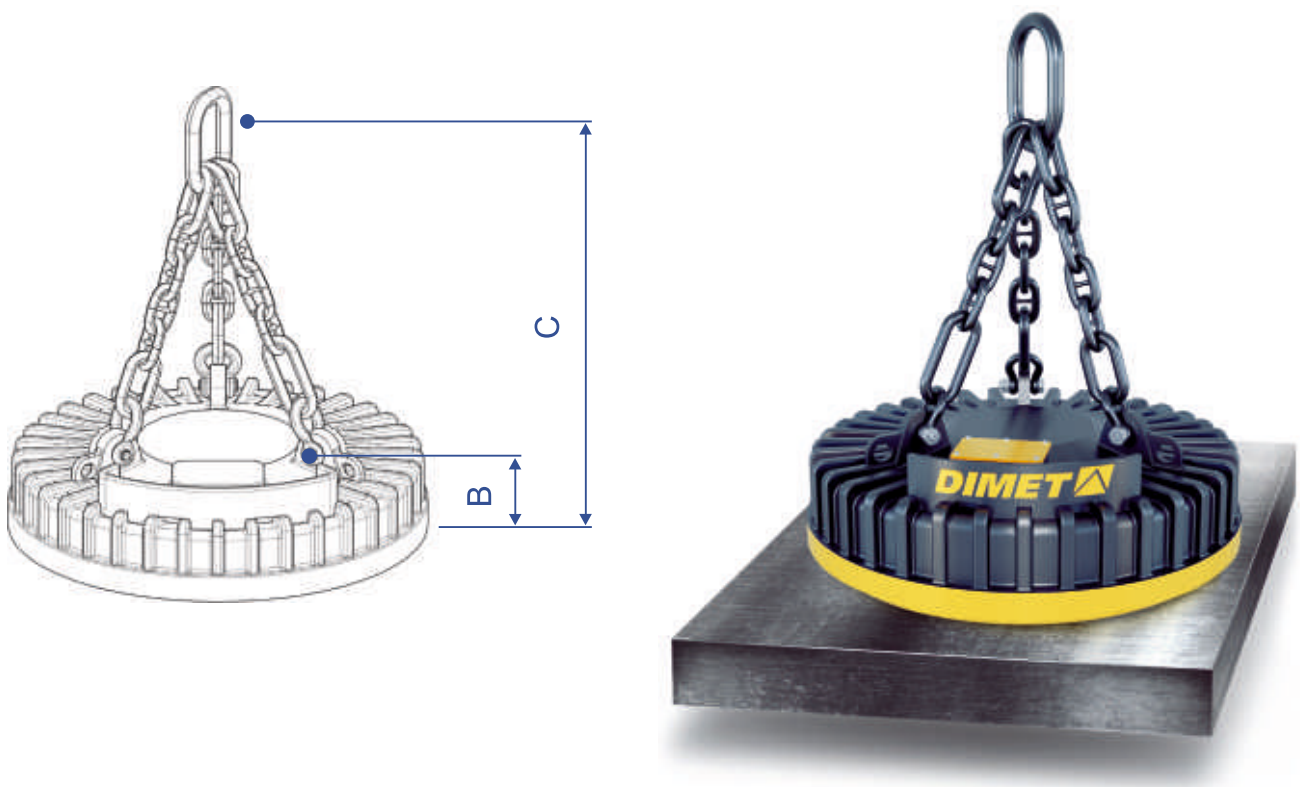


SLAB-T SERIES (handling of slabs, forgings)

Model	Pull-off force kg, at least	Power with the heated coil, W	Weight, kg	Rated current, A	Rated power, W	ØAxBxC, mm	Lifting capacity for slabs (kg) temperature kg current, A		
							200° C	400° C	600° C
EMG 100ST/AT-U1	25000	1050	22±8%	4800	3400	1000x320x1100	12000	11000	9500
EMG 120ST/AT-U1	35000	1550	38±8%	8400	5800	1200x320x1350	17000	16000	13500
EMG 140ST/AT-U1	50000	2150	58±8%	12800	8900	1400x380x1400	24000	22500	19700
EMG 160ST/AT-U1	70000	3700	70±8%	15400	10800	1600x540x1700	33500	31800	28000
EMG 180ST/AT-U1	100000	5000	82±8%	18000	12700	1800x480x1650	48000	45500	40000

SLAB-T SERIES HEAT-RESISTANT ELECTROMAGNETS

developed in special cast cases with extended poles for extremely heavy operating mode for high efficient handling of slabs, forgings, heavyweight metal blanks at steel mills, marine terminals and EPC companies, with the cargo temperature up to 650° C.



With cargo temperature up to 650° C (depending on the steel grade)

TRANSPORTED CARGO

- ▶ Slabs
- ▶ Compatible equipment
- ▶ Cranes
- ▶ Spreader beams



KEY FEATURES

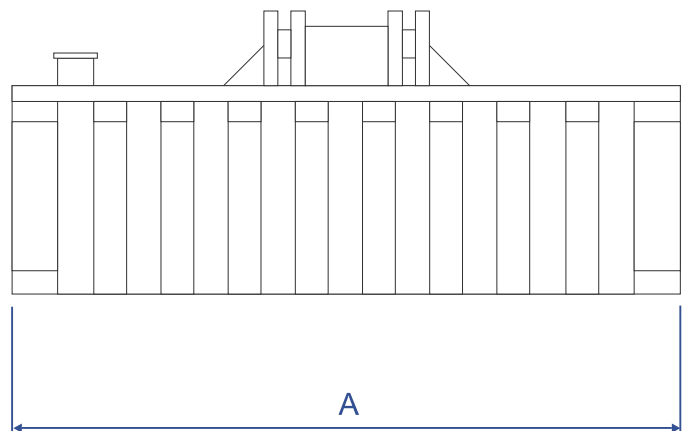
- ▶ Special designed wear-resistant case for long-term operation
- ▶ Special magnet shape with pole for secure slabs turning

ADVANTAGES

- ▶ Fast slab turning
- ▶ Safety during operation
- ▶ Cost effective
- ▶ Low noise level during operation

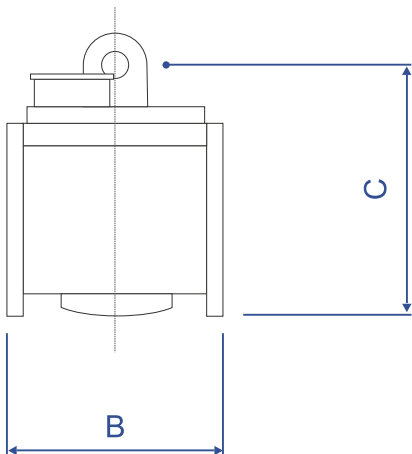
WINDING TYPE

- ▶ Aluminium coil



EMGM SERIES (electromagnets for mild slab turning)

Parameters	EMGM 175-77-54/MT-U1	EMGM 240/76-90/AT-U1
Rated voltage, V	220	220
Current, A	60	100
Rated power, kW	13,2	22
Pull-off force for flat plate, at least, kg	50000	100000
Lifting capacity for plate, up to, kg	25000	50000
Dimensions, mm	1780x770x540	2410x770x800
Weight (without straps), kg	3850	7000
Maximum cargo temperature, °C	500	500
Protection degree IP	54	54
Ambient temperature, °C	-20...+45	-20...+45



With cargo temperature up to 650° C (depending on the steel grade)

Transported cargo

- ▶ Slabs
- ▶ Blooms
- ▶ Rails

Compatible equipment

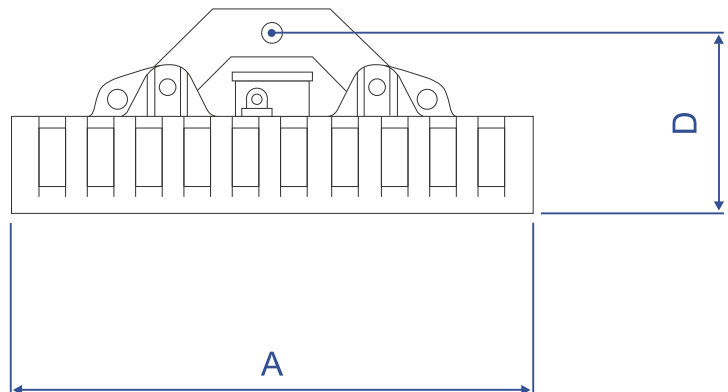
- ▶ Cranes
- ▶ Spreader beams

Key features

- ▶ Energy saving
- ▶ Cargo temperature up to 650° C

Winding type

- ▶ Aluminium coil



EMG SERIES Rectangular electromagnets (for reloading of blooms, rails, forgings)

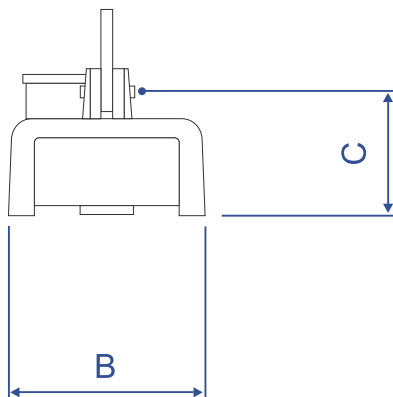
Substitution of PM15, PM25, PM26 SERIES

Model	Pull-off force kg, at least	Power with the heated coil, W	Weight, kg	Rated current, A	Rated power, W	AxBxCxD, mm	Lifting capacity, at least, t° C
							Slabs
EMG 110-64-42/A-U1	20000	2600	1500	18±8%	4000	1100x640x420x590	10000
EMG 170-70-41/A-U1	30000	5200	2000	35±8%	7700	1700x700x410x580	15000

HEAT-RESISTANT SERIES OF ELECTROMAGNETS FOR SLABS, BLOOMS AND RAILS

developed in special cast cases with extended poles for superheavy operating mode for high efficiency handling of slabs, forgings, heavyweight metal blanks at steel mills, marine terminals and EPC companies, with the cargo temperature up to 650° C.

Model	Pull-off force kg, at least	Power with the heated coil, W	Weight, kg	Rated current, A	Rated power, W	AxBxCxD, mm	Lifting capacity, at least, t° C		
							200° C	400° C	600° C
EMG 110-64-ST/AT-U1	28000	2600	1900	18±8%	4000	1100x640x420x590	14000	12000	8000
EMG 170-70-ST/AT-U1	43000	4300	2400	30±8%	6600	1700x700x420x590	21500	18000	13000



With cargo temperature up to 650° C (depending on the steel grade)

TRANSPORTED CARGO

- ▶ Slabs
- ▶ Sheet steel in packs or in single pieces
- ▶ Rectangular metal blanks
- ▶ Tubes in packs

COMPATIBLE EQUIPMENT

- ▶ Cranes
- ▶ Spreader beams

KEY FEATURES

- ▶ High reliability and durability of the winding
- ▶ High stability of lifting operations
- ▶ Special design for use in underwater conditions as an option
- ▶ Heat-resistant version (cargo temperature up to 650° C) as an option

WINDING TYPE

- ▶ Aluminium coil



EMGS SERIES (for reloading of sheet steel in pieces)

Model	Voltage, V	Current, A	Rated power, W	Weight, kg	Pull-off force, kg	Lifting capacity for plates, kg	Lifting capacity for sheets, kg
EMGS 055-30-33/A-U1	220	3,6	800	180	2000	1000	700
EMGS 060-40-32/A-U1	220	11,8	2600	360	5000	2500	1700
EMGS 100-34-37/A-U1	220	12,5	2750	480	9000	4500	2300
EMGS 110-34-35/A-U1	220	11	2400	460	8000	4000	2000
EMGS 120-34-36/A-U1	220	11	2400	700	12000	6000	3500
EMGS 185-38-38/A-U1	220	20	4400	850	13000	6500	4000
EMGS 200-38-36/A-U1	220	20	4400	900	15000	7500	5000
EMGS 220-38-36/A-U1	220	20	4400	1000	15000	7500	5000
EMGS 270-36-37/A-U1	220	15	3300	1200	20000	10000	6000

EMGS SERIES (for reloading of sheet steel in packs)

Model	Voltage, V	Current, A	Rated power, W	Weight, kg	Pull-off force, kg	Lifting capacity for plates, kg	Lifting capacity for pack of sheets, kg
EMGS 080-54-40/A-U1	220	16	3500	700	10000	5000	1500
EMGS 100-60-44/A-U1	220	20	4400	1050	20000	10000	2000
EMGS 110-60-50/A-U1	220	19	4200	1350	25000	12500	2700
EMGS 120-64-46/A-U1	220	30	6600	1550	30000	15000	3500
EMGS 140-70-48/A-U1	220	40	8800	2200	40000	20000	5000
EMGS 160-76-54/A-U1	220	50	11000	3000	60000	30000	7500

With cargo temperature up to 650° C (depending on the steel grade)

TRANSPORTED CARGO

- ▶ Round metal blanks
- ▶ Rectangular metal blanks
- ▶ Blooms and rails
- ▶ Tubes in packs
- ▶ Rebars in packs

COMPATIBLE EQUIPMENT

- ▶ Cranes
- ▶ Spreader beams

KEY FEATURES

- ▶ High reliability and durability of the winding
- ▶ High stability of lifting operations
- ▶ Special design for use in underwater conditions as an option
- ▶ Heat-resistant version (cargo temperature up to 650° C) as an option

WINDING TYPE

- ▶ Aluminium coil



EMGS SERIES (for reloading of square and round blanks)

Model	Voltage, V	Current, A	Rated power, W	Weight, kg	Pull-off force, kg	Lifting capacity, kg				
						Plates	Square blanks	Hot square blanks (500 °C)	Round blanks	Hot round blanks (500 °C)
EMGS 110-60-50/AT-U1	220	19	4200	1350	25000	12500	10000	7500	-	-
EMGS 110-69-52/AT-U1	220	20	4400	1600	28000	14000	12000	9000	9500	7000
EMGS 120-76-52/AT-U1	220	30	6600	2000	40000	20000	18000	15000	13000	11000
EMGS 130-75-52/AT-U1	220	30	6600	2400	48000	24000	22000	17000	14000	12000
EMGS 135-71-51/AT-U1	220	25	5500	1900	30000	15000	14000	9000	10000	7500
EMGS 140-97-63/AT-U1	220	34	7500	3400	60000	30000	26000	19500	15000	11500
EMGS 145-66-49/AT-U1	220	34	7500	2300	50000	25000	22000	17000	14000	12000

EMGS SERIES (for reloading of packs of rebars, tubes, long steel products)

Model	Voltage Current, V	Current, A	Rated power, W	Weight, kg	Lifting capacity, kg		
					Packs of rebars	Packs of sections	Packs of pipes
EMGS 070-74-48/A-U1	220	17	3750	1050	4500	3500	3000
EMGS 110-86-45/A-U1	220	28	6200	1600	5000	4500	4000
EMGS 120-86-48/A-U1	220	30	6600	2000	6000	5000	4500
EMGS 140-80-48/A-U1	220	40	8800	2150	8000	6000	5000



With cargo temperature up to 650° C (depending on the steel grade)

TRANSPORTED CARGO

- ▶ Bundles of rebars, circle, rolled wire

COMPATIBLE EQUIPMENT

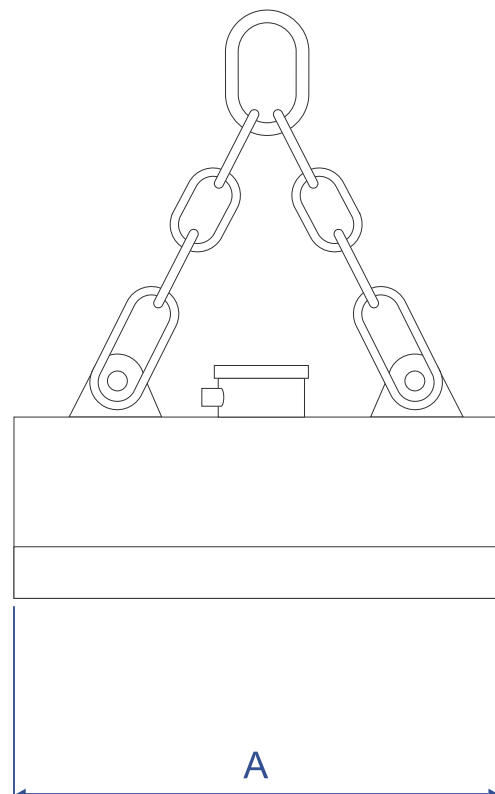
- ▶ Cranes
- ▶ Spreader beams

KEY FEATURES

- ▶ High reliability and durability of the winding
- ▶ High stability of lifting operations
- ▶ Special design for use in underwater conditions as an option
- ▶ Heat-resistant version (cargo temperature up to 650°C) as an option

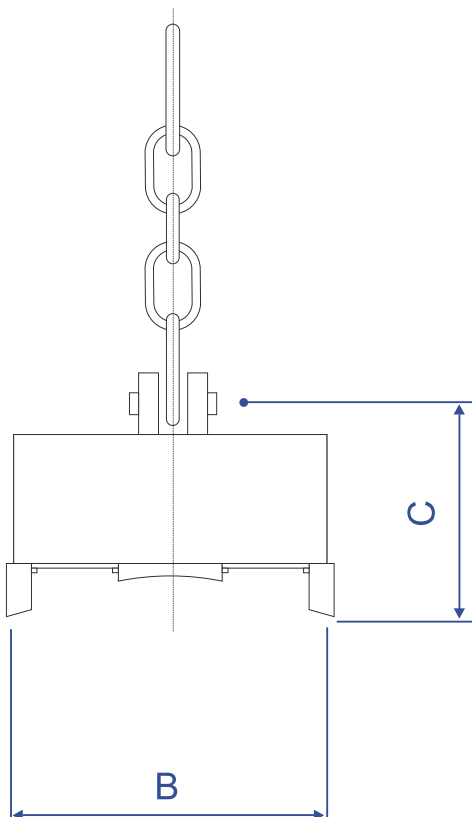
WINDING TYPE

- ▶ Aluminium coil



EMGK SERIES (for lifting of packs and bundles of rebars, circle, rolled wire)

Parameters	EMGK 105-70-54/A-U1	EMGK 110-67-54/A-U1	EMGK 120-65-52/A-U1	EMGK 130-65-54/A-U1	EMGK 140-65-52/A-U1	EMGK 160-65-54/A-U1	EMGK 180-65-51/A-U1
Rated voltage, V	220	220	220	220	220	220	220
Rated current at 200 C, A	25	28	28	30	30	35	32
Rated power, kW	5,5	6,2	6,2	6,6	6,6	7,7	7,7
Bundle outside full diameter, mm	1250	1250	1250	1250	1250	1250	1250
Lifting capacity at most, kg	4000	4500	4500	5000	5500	6300	6500
Bundle height at most, mm	1100	1200	1300	1400	1500	1700	1900
Dimensions AxBxC, mm	1050x690x540	1100x670x540	1200x670x520	1300x650x540	1400x650x520	1600x650x540	1800x650x510
Weight, kg	1380	1550	1650	1800	1900	2200	2400



With cargo temperature up to 650°C (depending on the steel grade)

TRANSPORTED CARGO

- ▶ Long rolled steel
- ▶ Packs of tube blanks, circle, pipes

COMPATIBLE EQUIPMENT

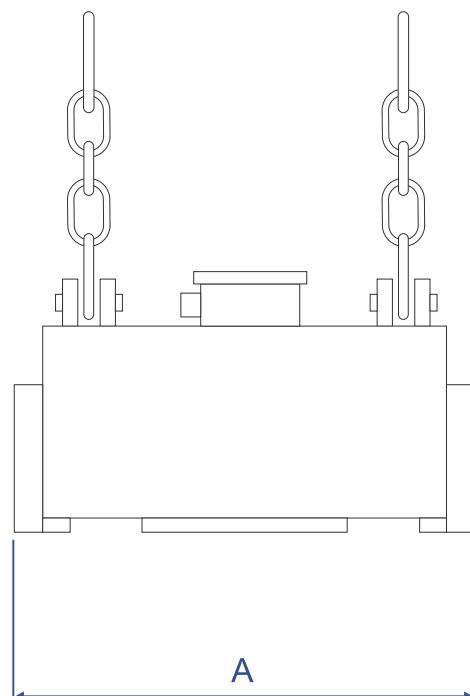
- ▶ Cranes
- ▶ Spreader beams

KEY FEATURES

- ▶ High reliability and durability of the winding
- ▶ Energy saving as per ton of the transported cargo
- ▶ Special design for operation in underwater conditions as an option
- ▶ Heat-resistant version (cargo temperature up to 650° C) as an option

WINDING TYPE

- ▶ Aluminium coil

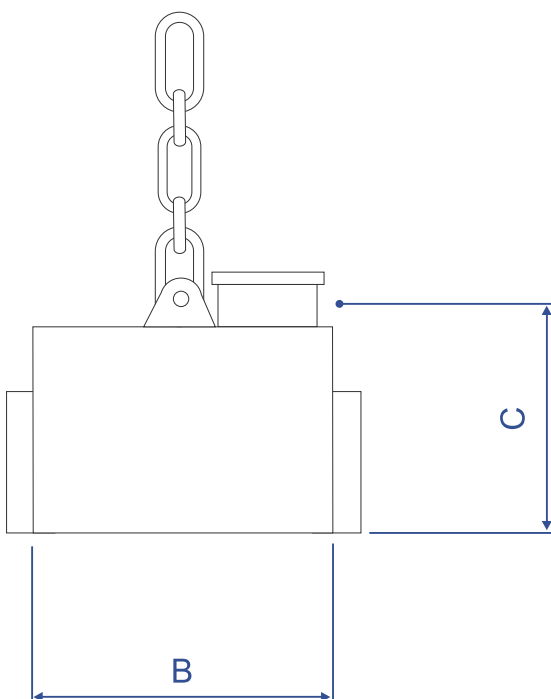


EMGP SERIES (for long rolled products in packs)

Parameters	EMGP 088-62-51/A-U1	EMGP 090-65-57/A-U1	EMGP 110-68-60/A-U1
Rated voltage, V	220	220	220
Rated current at 20° C, A	20	22	27
Rated power, kW	4,4	4,8	6,0
Lifting capacity for pack of rolled products, kg	2000	3000	6000
Lifting capacity for pack of rebars, kg	3000	4000	9000
Lifting capacity for circle Ø 400-600 mm, kg	6000	10000	16000
Dimensions AxBxC, mm	880x620x510	910x650x570	1100x680x600
Weight, kg	1100	1300	1800

EMGP SERIES (for circle)

Parameters	EMGP 112-88-56/A-U1	EMGP 160-110-65/A-U1
Rated voltage, V	220	220
Rated current at 20° C, A	28	41
Rated power, kW	6,2	9,0
Lifting capacity for circle Ø 400-600 mm, kg	10000	20000
Dimensions AxBxC, mm	1120x880x560	1600x1100x650
Weight, kg	1800	4900



With cargo temperature up to 650° C (depending on the steel grade)

TRANSPORTED CARGO

- ▶ Sheet steel in coils
- ▶ Rolled wire coils, rebar coils, circle from the end side

COMPATIBLE EQUIPMENT

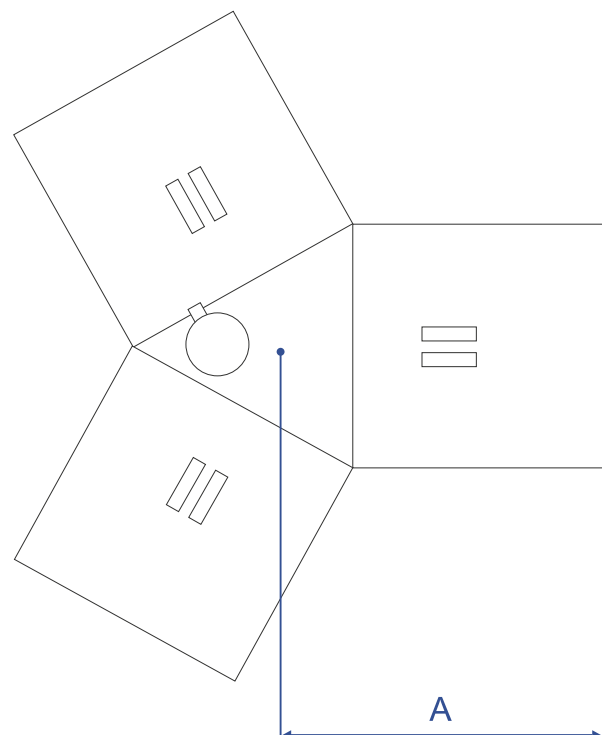
- ▶ Cranes
- ▶ Spreader beams

KEY FEATURES

- ▶ High reliability and durability of the winding
- ▶ High stability of lifting operations
- ▶ Special design for operation in underwater conditions as an option
- ▶ Heat-resistant version (cargo temperature up to 650° C) as an option

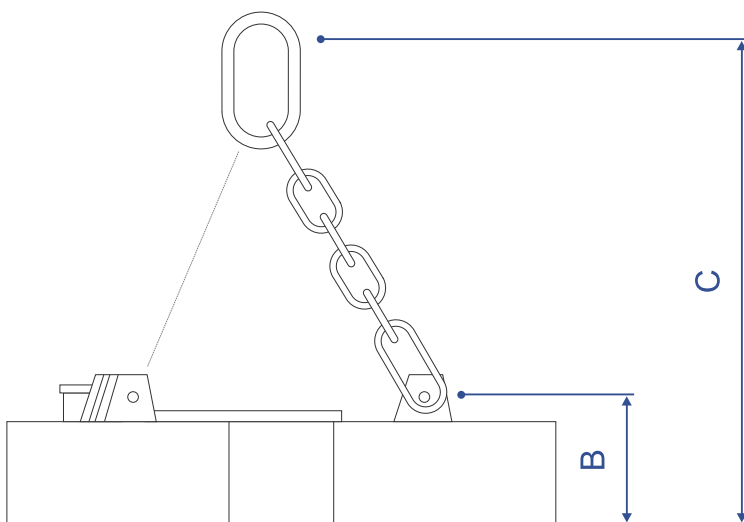
WINDING TYPE

- ▶ Aluminium coil



EMGR SERIES (for lifting of coils from the end side)

Parameters	EMGR 150/A	EMGR 160/A	EMGR 180/A	EMGR 200/A	EMGR 220/A	EMGR 250/A
Rated voltage, V	220	220	220	220	220	220
Rated current at 20° C, A	45	60	80	90	90	120
Rated power, kW	9,9	13,2	17,6	19,8	19,8	26,4
Steady-state power, kW	6,4	8,4	11,5	12,9	12,9	17,2
Maximum coil diameter, mm	1500	1600	1800	2000	2200	2500
Lifting capacity for coil, at least, kg	10000	15000	25000	32000	36000	42000
Dimensions AxBxC, mm	750x420x1500	800x460x1600	900x500x1700	1000x550x1800	1080x580x2000	1230x580x2100
Weight, kg	2200	3000	4500	5500	6000	7000



With cargo temperature up to 650° C (depending on the steel grade)

TRANSPORTED CARGO

- ▶ Sheet steel in coils, lifting from the lateral side

COMPATIBLE EQUIPMENT

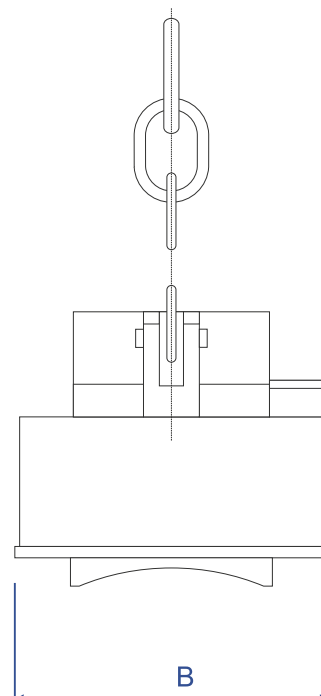
- ▶ Cranes
- ▶ Spreader beams

KEY FEATURES

- ▶ High reliability and durability of the winding
- ▶ High stability of lifting operations
- ▶ Special design for use in underwater conditions as an option
- ▶ Heat-resistant version (cargo temperature up to 650° degrees C) as an option

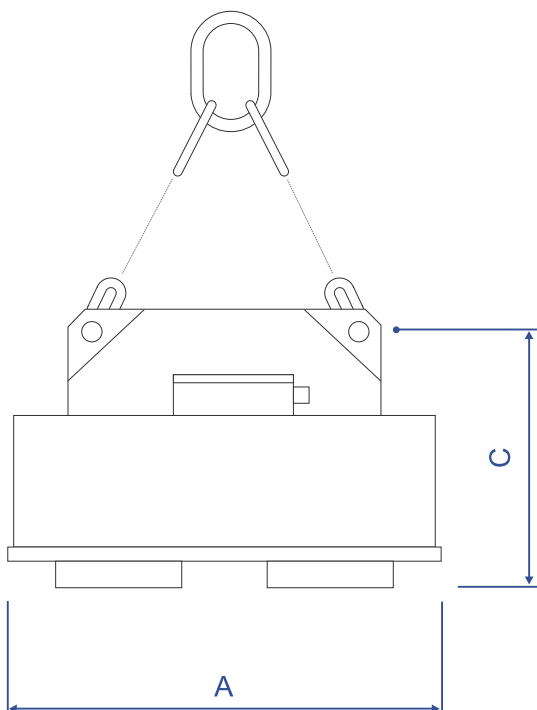
WINDING TYPE

- ▶ Aluminium coil



EMGB SERIES (for lifting of coils from the lateral side)

Parameters	EMGB 100-98-60/A-U1	EMGB 116-84-65/A-U1	EMGB 120-98-75/A-U1	EMGB 145-153-85/A-U1
Rated voltage, V	220	220	220	220
Rated current at 20° C, A	45	60	60	80
Rated power, kW	9,9	13,2	13,2	17,6
Maximum coil diameter, mm	1400	1600	1800	2000
Lifting capacity for coil, up to, kg	12000	15000	18000	30000
Dimensions AxBxC, mm	1030x980x600	1160x840x650	1200x980x750	1450x1530x850
Electromagnet weight, kg	2300	2800	3700	8000



With cargo temperature up to 650° C (depending on the steel grade)

TRANSPORTED CARGO

- ▶ Large diameter tubes

COMPATIBLE EQUIPMENT

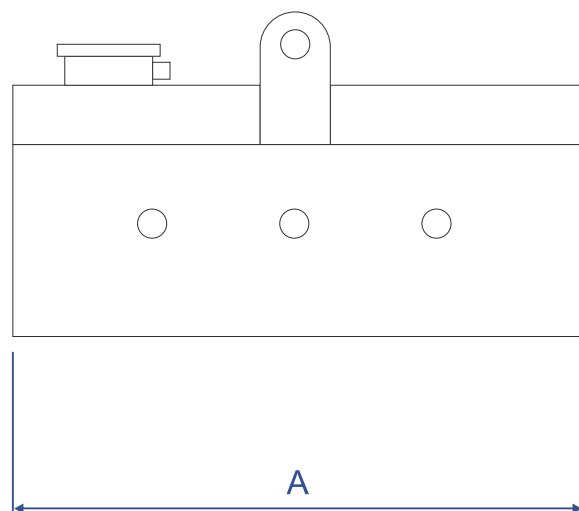
- ▶ Cranes
- ▶ Spreader beams

KEY FEATURES

- ▶ High reliability and durability of the winding
- ▶ High stability of lifting operations
- ▶ Special design for use in underwater conditions as an option
- ▶ Heat-resistant version (cargo temperature up to 650° C) as an option

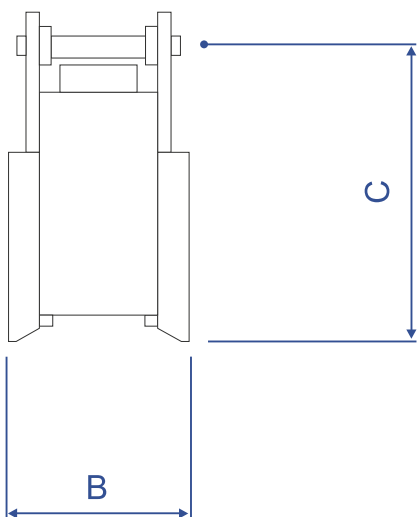
WINDING TYPE

- ▶ Aluminium coil



EMGT SERIES (for handling of large diameter tubes)

Parameters	EMGT100/A-U1	EMGT 120/A-U1	EMGT 140/A-U1
Rated voltage, V	220	220	220
Rated current at 20° C, A	22	45	54
Rated power, kW	4,8	9,9	11,9
Steady-state power, kW	3,4	6,9	8,3
Lifting capacity, kg	3000	6000	10000
Pipe diameter, mm	400-800	700-1400	1000-2000
Dimensions AxBxC, mm	1000x310x600	1200x360x620	1400x420x640
Weight, kg	800	1250	2000



With cargo temperature up to 650 °C (depending on the steel grade)

TRANSPORTED CARGO

- ▶ Sheet steel in packs or in single pieces
- ▶ Slabs

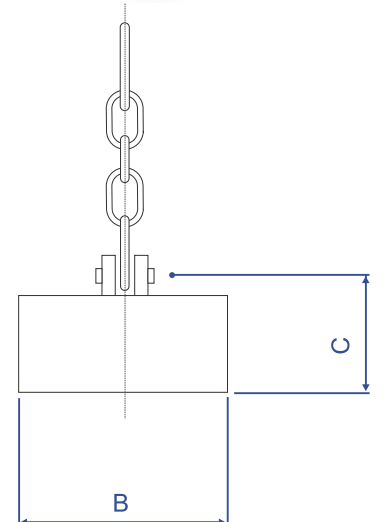
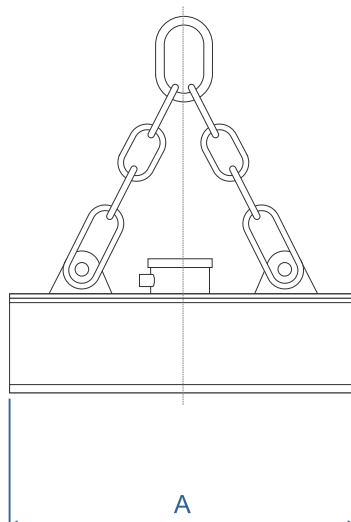


COMPATIBLE EQUIPMENT

- ▶ Cranes
- ▶ Spreader beams

KEY FEATURES

- ▶ The electro-permanent magnet can be switched with pulse without requiring continuous current
- ▶ The magnetized cargo hold by the magnet as long as required
- ▶ Energy saving
- ▶ High safety level
- ▶ Easy control
- ▶ High level of labor efficiency



1. IMG SERIES Electropermanent magnets (for reloading of sheet steel in packs, slabs)

Parameters	IMG 120-60-32-U1	IMG 130-70-35-U1	IMG 150-76-37-U1
Impulse voltage, V	230	230	230
Impulse current, A	20	32	30
Impulse power, W	4600	7360	6900
Weight, kg	1200	1850	2300
Pull-off force, kg	30000	45000	51000
Lifting capacity for plates, kg	10000	15000	17000
Lifting capacity for square blanks, kg	6500	10000	11500
Dimensions, mm	1200x600x320	1300x700x350	1500x760x370

2. IMGK SERIES Electropermanent magnets (used for grabbing and reloading of large diameter round blanks)

Parameters	IMGK 160-70-40-U1	IMGK 220-66-40-U1	IMGK 400-66-44-U1
Impulse voltage, V	230	230	230
Impulse current, A	40	65	90
Impulse power, W	9200	15000	20700
Weight, kg	2200	2750	5600
Pull-off force for circle, kg	24000	33000	84000
Lifting capacity for circle, kg	8000	11000	28000
Minimum circle diameter, mm	300	400	400
Maximum circle diameter, mm	430	550	600
Dimensions, mm	1600x700x400	2200x660x400	4000x660x440

3. IMGS SERIES Electropermanent magnets (used for reloading of sheet steel in single pieces)

Parameters	IMGS 075-25-23-Y1	IMGS 130-37-30-U1	IMGS 180-48-31-U1
Impulse voltage, V	230	230	230
Impulse current, A	10	15	32
Impulse power, W	2300	3500	7400
Weight, kg	250	750	1450
Pull-off force, kg	7800	19000	40500
Lifting capacity for plates, kg	2600	6300	13500
Lifting capacity for sheets, kg	1500	3600	7000
Minimum sheet thickness, mm	4	4,5	6
Dimensions, mm	750x250x230	1300x370x300	1800x480x310

APPLICATION

- ▶ Long cargo transfer
- ▶ Handling of pipes, slabs, sheet products in packs or in piece
- ▶ Removing sheets from plasma cutting machines

COMPATIBLE EQUIPMENT

- ▶ Cranes

KEY FEATURES

- ▶ Spreader beams designed and manufactured for specific customer needs
- ▶ Convenience during operation, time and cost saving, improved labour efficiency



APPLICATION

- ▶ Electromagnetic spreader beam used for mild slab turning. It consists of the traverse, two special electromagnets and uninterrupted power supply system. The spreader beam significantly speeds up the slab turning process compared to stationary hydraulic devices for slab turning

COMPATIBLE EQUIPMENT

- ▶ Cranes

KEY FEATURES

- ▶ Fast slab turning
- ▶ Safety during operation
- ▶ Cost effective
- ▶ Low noise level during operation



APPLICATION

- ▶ Module for reloading, grabbing and sorting of scrap and steel

COMPLETE SET

- ▶ SM SERIES Electromagnet
- ▶ DYNASET Generator

KEY FEATURES

- ▶ Easy installation and possibility to quick change during operation



Technical data

Model	Electromagnet	Generator power, kW	Rated current, A	Weight, kg	Lifting capacity, kg				
					Plates	Ingots	Steel turnings	Light scrap	Heavy scrap
SG 085SM-DNS06	EMG 085SM	6	3900	1250	6000	460	180	230	350
SG 105SM-DNS06	EMG 105SM	6	5500	1410	8500	540	220	290	460
SG 115SM-DNS10	EMG 115SM	10	6800	1870	11000	700	290	380	610
SG 125SM-DNS10	EMG 125SM	10	8600	2150	13000	870	350	540	850
SG 135SM-DNS12	EMG 135SM	12	10100	2550	15000	1020	410	620	1030
SG 145SM-DNS12	EMG 145SM	12	11400	2950	18000	1200	480	790	1230

This system can be developed for any DIMET electromagnet

APPLICATION

- ▶ Power supply and control of lifting direct current electromagnets of any power, and simultaneous supply of several electromagnets, the total current of which does not exceed the permissible values. The types of the supplied electromagnets: all DIMET electromagnets, as well as electromagnets of any other manufacturers

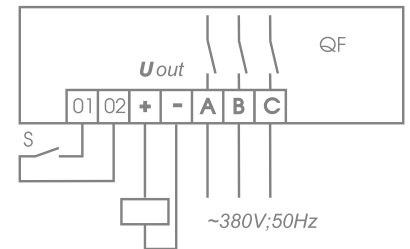


COMPATIBLE EQUIPMENT

- ▶ Electromagnets
- ▶ Cranes

MAIN TYPES OF PROTECTION

- ▶ Limitation of the maximum output voltage at the level of 220-230 V
- ▶ Protection from short circuit under load
- ▶ Protection from core-to-core fault and earth fault
- ▶ Feeding cable breakdown alarm
- ▶ Alarm of surface-leakage current excess in the electromagnet circuit (in case of electromagnet overheating)
- ▶ Alarm of occurrence of interturn short circuits in the electromagnet
- ▶ Alarm of excess of the maximum permissible current



Parameters	PN-500-3-100A	PN-500-3-150A	PN-500-3-200A	PN-500-3-250A
Power supply	three-phase	three-phase	three-phase	three-phase
Supply voltage, V	380±60	380±60	380±60	380±60
Frequency, Hz	50	50	50	50
Output voltage regulation range, V	10-230	10-230	60-230	60-230
Demagnetizing time, at most, s	3	3	5	5
Duty cycle, %	75, 100	75, 100	75, 100	75, 100
Maximum permissible current at duty cycle – 75%, A	100	150	200	250
Maximum permissible current at duty cycle – 100%, A	50	80	110	125
Overall dimensions, mm	360x150x375	360x150x375	450x200x375	450x200x375
Coupling sizes, mm	255x350	255x350	255x350	255x350
Weight, at most, kg	12,2	12,5	16	17

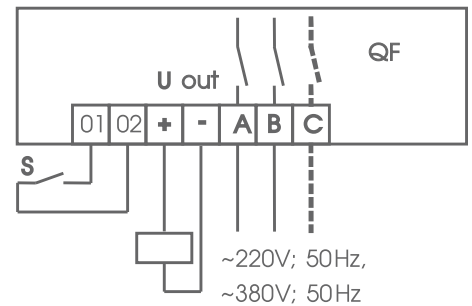
APPLICATION

- ▶ Operation with generators, installed on the crane facilities and scrap handlers when the fixed network is absent. Intended for supply and control of lifting direct current electromagnets of any power and for combined operation with generators of 220 or 380 V. Types of the supplied electromagnets: all the DIMET electromagnets, as well as electromagnets of any other manufacturers



COMPATIBLE EQUIPMENT

- ▶ Electromagnets
- ▶ Cranes
- ▶ Scrap handlers



MAIN TYPES OF PROTECTION

- ▶ Limitation of the maximum output voltage at the level of 220-230 V
- ▶ Protection from short circuit under load
- ▶ Protection from core-to-core fault and earth fault
- ▶ Feeding cable breakdown alarm
- ▶ Alarm of surface-leakage current excess in the electromagnet circuit (in case of electromagnet overheating)
- ▶ Alarm of occurrence of interturn short circuits in the electromagnet
- ▶ Alarm of excess of the maximum permissible current



Available as an option

Parameters	PN-500-G-50A	PN-500-G-100A	PN-500-G-150A
Power supply	generator	generator	generator
Voltage supply, V	220/380±60	220/380±60	220/380±60
Frequency, Hz	50	50	50
Control range of output voltage, V	10-230	10-230	10-230
Demagnetization time, max, sec	3	3	3
Maximum allowable current at DC-75%, A	50	100	150
Dimensions, mm	360x150x375	360x150x375	360x150x375
Coupling size, mm	255x350	255x350	255x350
Weight at most, kg	12,0	12,2	12,5

APPLICATION

- ▶ Standby power supply for electromagnet

MAJOR TASKS

- ▶ Provision of operation safety, prevention from emergency cargo release after supply voltage blackout
- ▶ Control of voltage supply on all the three network phases
- ▶ Alarm of disappearance of the main supply and switch of the electromagnet operation to standby power supply from batteries
- ▶ Connected parallel to electromagnet



KEY FEATURES

- ▶ Convenience of operation: application of unattended accumulators (service life up to 10 years) in the circuit of uninterrupted power supply, status monitoring of each battery, automatic battery recharge
- ▶ Limitation of the maximum output voltage at the level of $220\pm 5\%$ V, which prevents from electromagnet breakdown
- ▶ Alphanumeric display of the current parameters, working modes and emergency shutoffs, audio alarm of emergency situations secures the convenience of operation of this equipment

Parameters	IBPN-500-100A	IBPN-500-150A	IBPN-500-200A	IBPN-500-250A
Power supply	three-phase	three-phase	three-phase	three-phase
Voltage supply, V	380 ± 60	380 ± 60	380 ± 60	380 ± 60
Frequency, Hz	50	50	50	50
Permanent output voltage, V	$220\pm 5\%$	$220\pm 5\%$	$220\pm 5\%$	$220\pm 5\%$
Battery operation at least, min	15	15	15	15
Max. permissible current, A	100	150	200	250
Overall dimensions at most, mm	1595x1020x640	1595x1020x640	1320x1805x580	1320x1805x580
Weight at most, kg	410	430	640	660



DIMET GmbH & Co. KG

✉ Dirnismaning 38, 85748 Garching, Germany

☎ +49-89-201 977 86

✉ info@dimetm.com

🌐 dimetm.com

