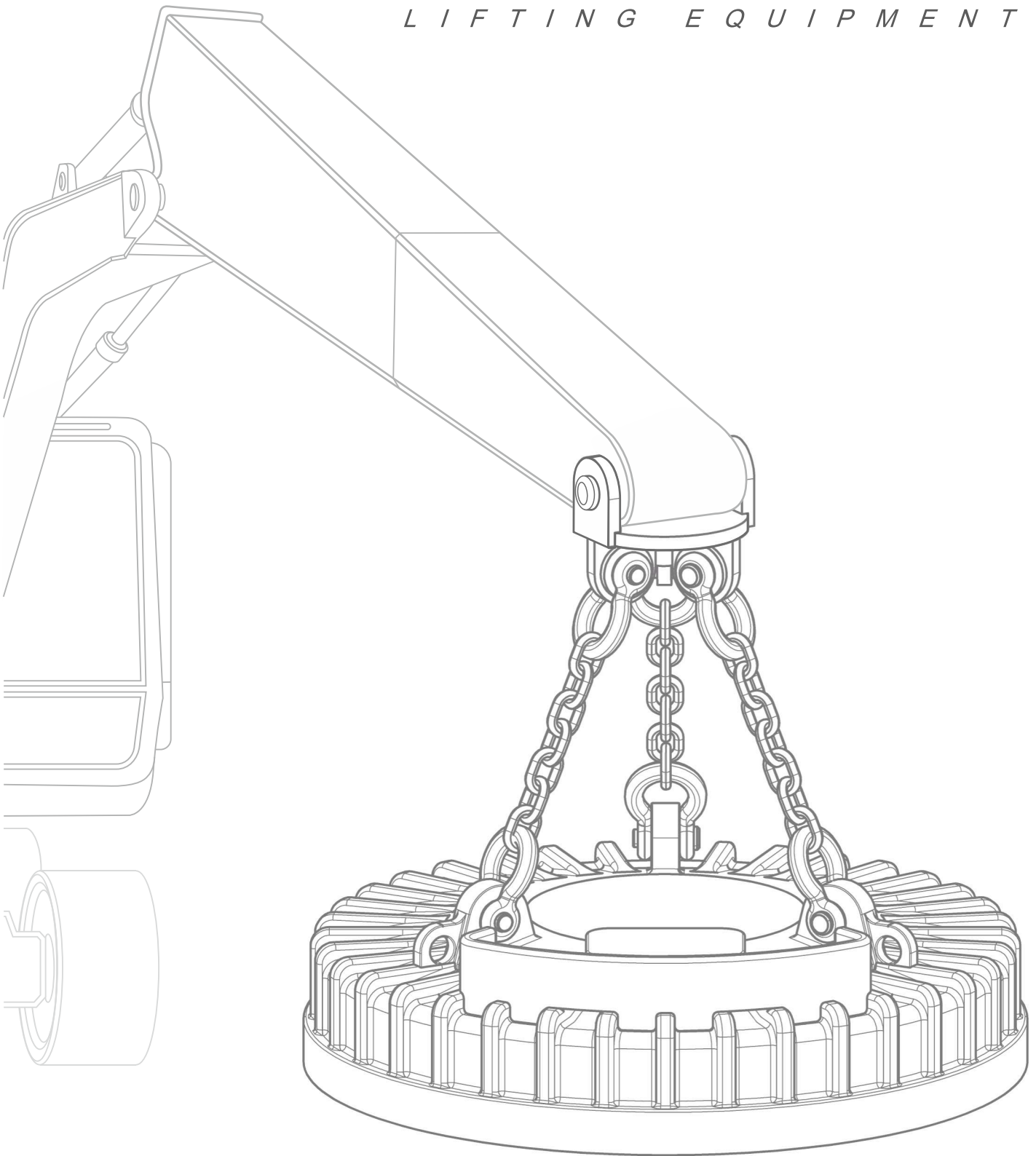


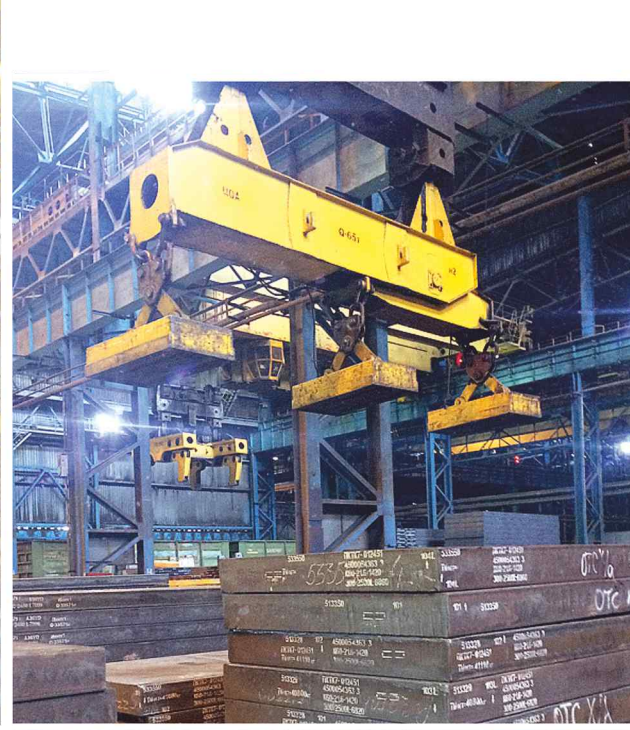
DIMET

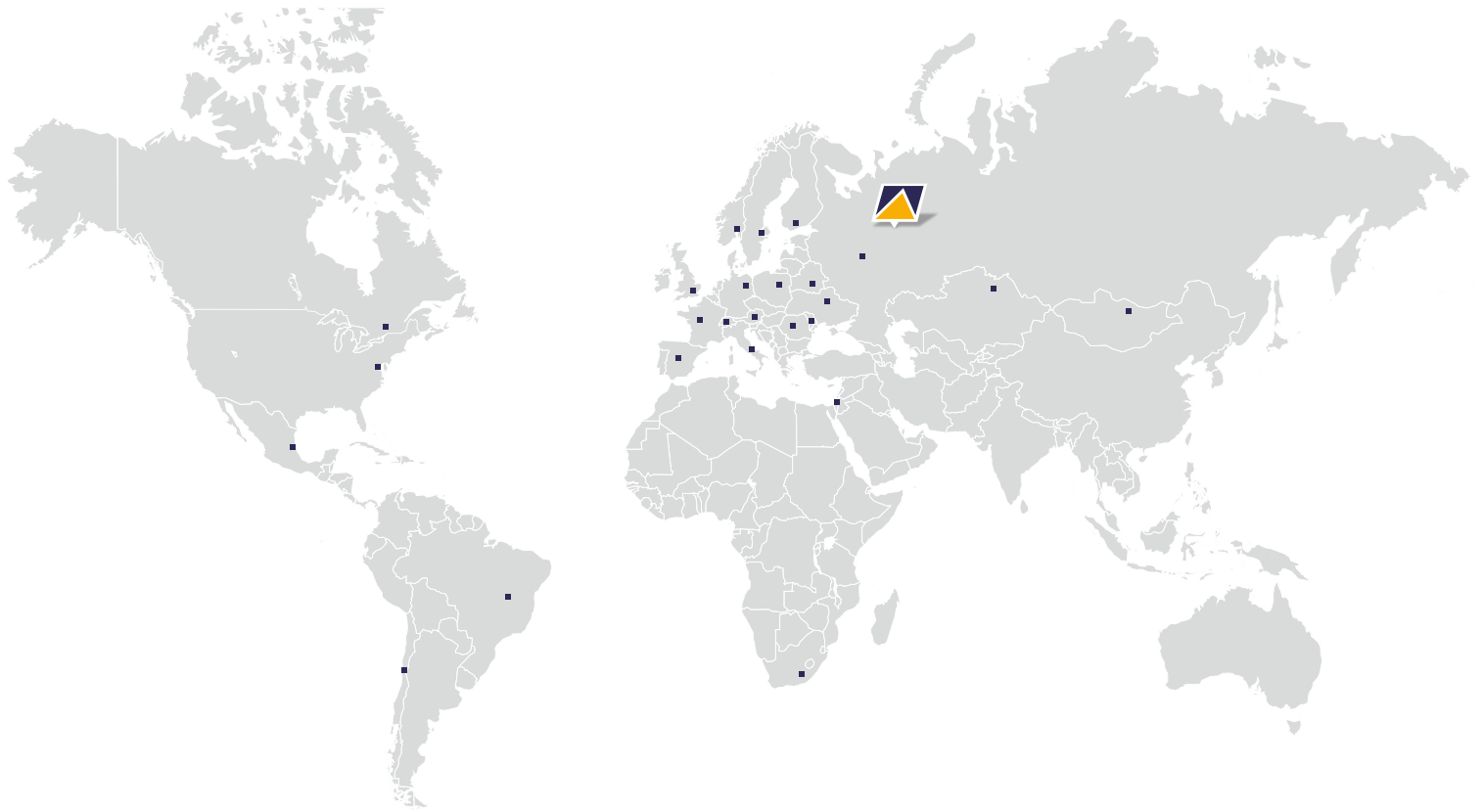
L I F T I N G E Q U I P M E N T



CATALOGUE

EN 2016





We design and develop electromagnetic lifting systems since 2000, offering wide range of solutions for cargo lifting and material handling.

Today our equipment is working all around the globe in the most complex environments, proving its high reliability and performance.

We design and manufacture wide range of lifting magnets, magnetic separators and magnet control systems as well as specially designed lifting equipment.

Being confirmed by CE certificate our magnets meet the European quality standards, while our management system satisfies ISO 9001 requirements.

So whenever your company needs a solution for scrap processing, coil, rail, slab or any other material lifting, here at DIMET we will make every effort to find the best possible one for you!



We are a company with modern engineering base and production facilities, designing and manufacturing products of high quality and technology.

For our customers we offer complex technical solutions using our rich experience and innovative technologies as a basis.

Our key benefit is a team of professionals ready to accept any challenge faced.

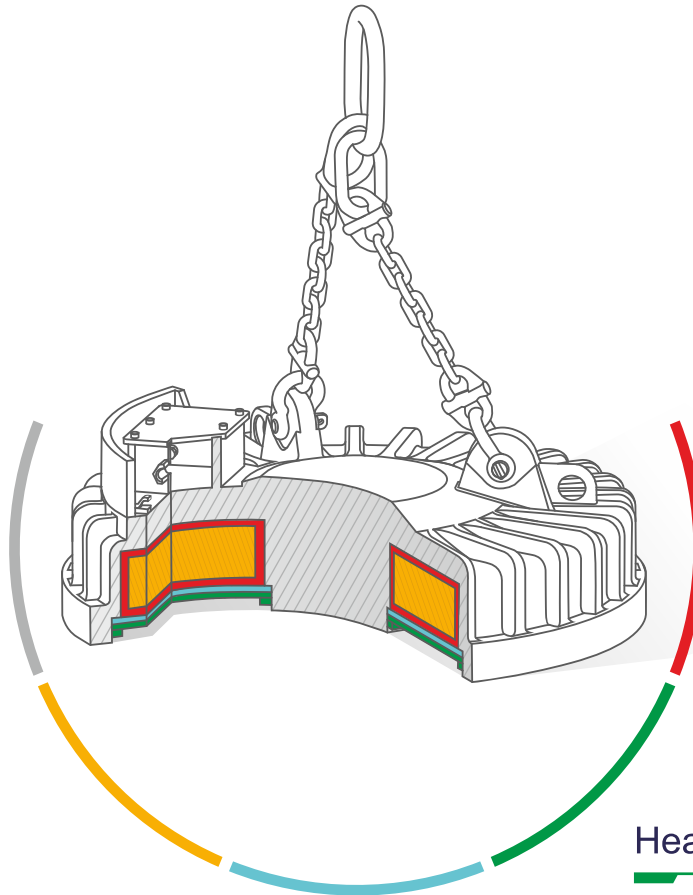
The main goal of our team is to design and manufacture the equipment that will meet the needs of our customers in the best possible way.



Main features of DIMET electromagnets

Rugged cast case

Provides supplementary durability and lowers electromagnet heating.



High-quality sealing compound

Prevents coil damage and reduces heating of electromagnet coil.

Coil design

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

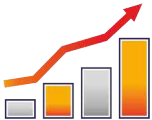
Heavy-duty steel bottom plate

Protects the coil and significantly increases electromagnet service life.

Heat insulation gasket

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

Key benefits of DIMET electromagnets



Productivity increase due to an efficient design of electromagnet.

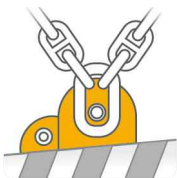


Long service life of electromagnet due to specially designed case and coil.



economy

Lower power consumption due to modern energy-efficient construction of electromagnet.



Can be easily used with any machine due to the universal attachment and connection systems.



Uses:

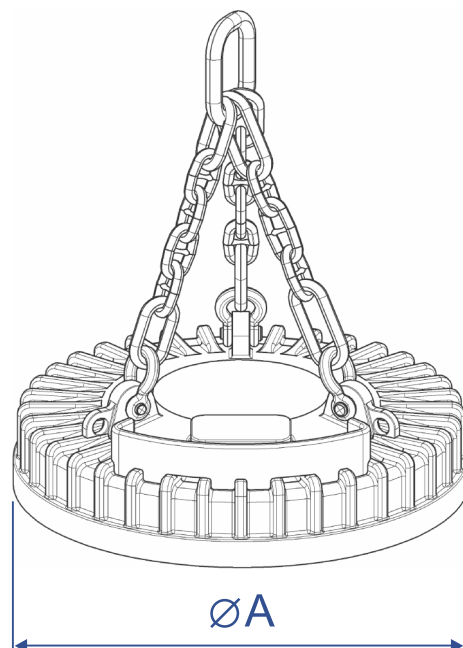
- ▶ Scrap
- ▶ Turnings
- ▶ Burden, metal charge

Applications:

- ▶ Material handling machines
- ▶ Overhead cranes
- ▶ Gantry cranes
- ▶ Railroad cranes

Features & benefits:

- ▶ Lightweight magnets for wide range of applications
- ▶ Hot material handling up to 650° C available as an option
- ▶ Special design for underwater operation available as an option
- ▶ The electromagnet duty cycle is 75%



Lifting electromagnets of SM SERIES

Name	Case diameter Ø A, mm	Weight, kg	Rated current, A	Rated capacity, W	Lifting capacity				
					Slabs, kg	Pig iron, kg	Heavy scrap, kg	Light scrap, kg	Steel tur- nings, kg
EMG 85 SM	850	700	18	3900	6000	460	390	340	180
EMG 105 SM	1050	860	25	5500	8500	540	450	410	220
EMG 115 SM	1150	1120	31	6800	11000	700	580	530	290
EMG 125 SM	1250	1400	39	8600	13000	810	660	580	320
EMG 135 SM	1350	1750	46	10100	15000	1020	830	730	410
EMG 145 SM	1450	2150	52	11400	18000	1200	950	840	480
EMG 155 SM	1550	2700	61	13200	20000	1480	1170	1040	600
EMG 170 SM	1700	3230	72	15800	27500	1800	1500	1300	710
EMG 185 SM	1850	3800	90	19800	33000	2200	1670	1560	840
EMG 200 SM	2000	4500	105	23100	37500	2610	1980	1850	990
EMG 185 SMT	1850	4900	104	23000	41000	2700	2010	1910	930
EMG 200 SMT	2000	5900	109	24000	47000	3250	2420	2300	1120
EMG 215 SMT	2150	6500	118	26000	50000	3580	2670	2540	1240

- ▶ Lifting capacities are based on test under optimum conditions.
Variables in material, operations and/or lifting equipment may affect performance.



Uses:

- ▶ Scrap
- ▶ Turnings
- ▶ Burden, metal charge

Applications:

- ▶ Material handling machines
- ▶ Overhead cranes
- ▶ Gantry cranes
- ▶ Railroad cranes

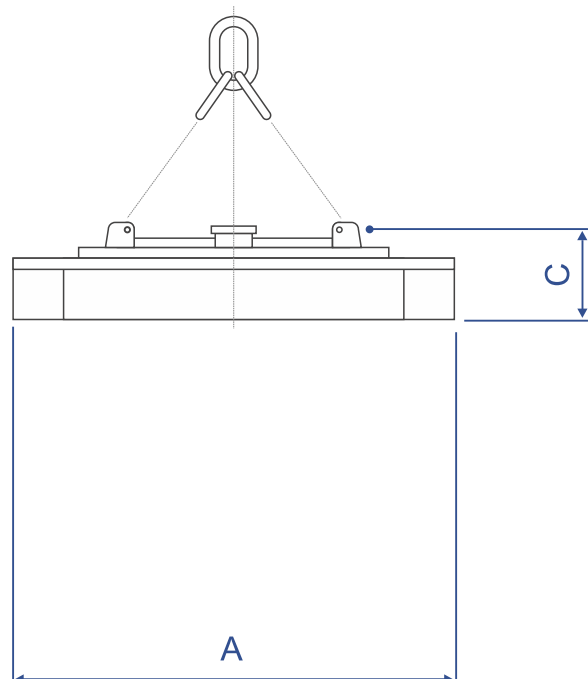


Features & benefits:

- ▶ Specially designed for faster railcar and truck unloading
- ▶ Copper coil as an option

Winding type:

- ▶ Aluminum coil



Lifting electromagnets of EMG CR SERIES (for scrap unloading from railcars)

Parameters	EMG 230-150-46/A-U1	EMG 260-180-48/A-U1	EMG 300-200-52/A-U1	EMG 350-220-58/A-U1
Nominal voltage, V	220	220	220	220
Rated current, A	110	140	180	200
Rated capacity, kW	24,2	30,8	39,6	44
Capacity for heated winding, kW	15,7	20	26	29
Pull-off strength, kg	110000	130000	160000	200000
Lifting capacity for slabs, kg	55000	65000	80000	100000
Lifting capacity, kg, for scrap with density of				
0,8 t/m ³	1600	1800	2200	3000
1,6 t/m ³	2200	2600	3200	4000
2,4 t/m ³	3500	4000	4800	6500
Lifting capacity for steel turnings, kg	1800	2200	2700	3200
Lifting capacity for pig iron, kg	3300	3900	4800	6000
Dimensions AxBxC, mm	2300x 1500x460	2600x 1800x480	3000x 2000x520	3500x 2200x580
Weight, kg	5200	7000	9200	12000





Uses:

- ▶ Scrap
- ▶ Turnings
- ▶ Burden, metal charge

Applications:

- ▶ Material handling machines
- ▶ Overhead cranes
- ▶ Gantry cranes
- ▶ Railroad cranes

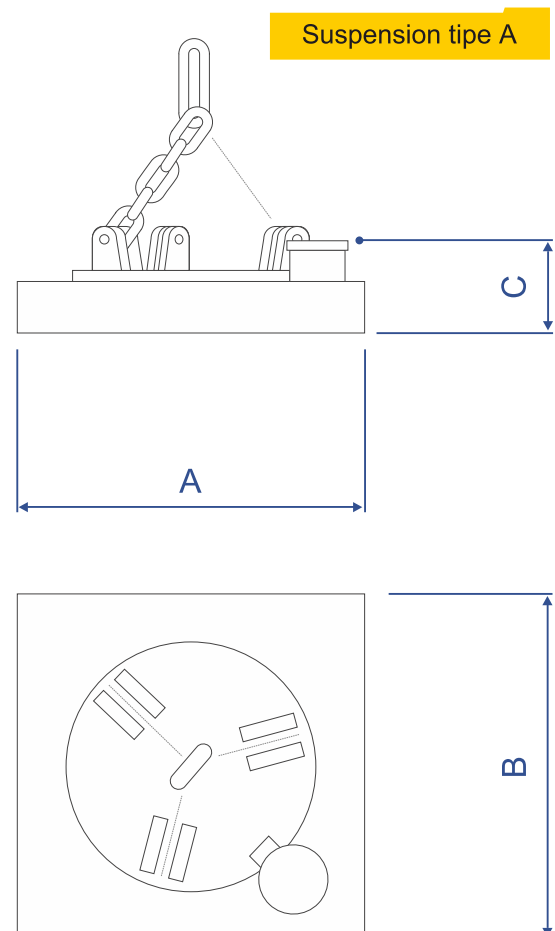


Features & benefits:

- ▶ Specially designed for truck and railcar sweeping
- ▶ Copper coil as an option

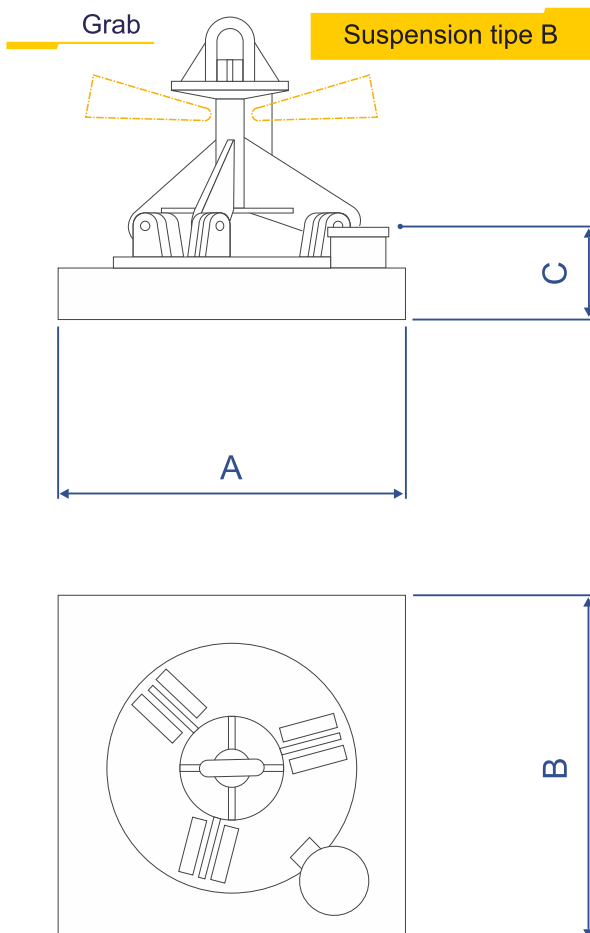
Winding type:

- ▶ Aluminum coil



Lifting electromagnets of CU SERIES (for cleaning of railcars from scrap)

Parameters	EMG 120-120-30/A-U1	EMG 170-170-30/A-U1
Rated current, A	45	52
Rated capacity, W	9900	11400
Capacity for heated winding, W	6600	8800
Pull-off strength, kg	25000	35000
Lifting capacity for slabs, kg	12500	17500
Lifting capacity, kg, for scrap with density of		
0,8 t/m ³	300	400
1,6 t/m ³	600	700
2,4 t/m ³	850	1000
Lifting capacity for steel turnings, kg	250	400
Lifting capacity for pig iron, kg	800	900
Dimensions AxBxC, mm	1200x1200x300	1700x1700x300
Weight, kg	1600	2300





Uses:

- ▶ Slabs
- ▶ Steel blooms and billets
- ▶ Rails
- ▶ Forgings

Applications:

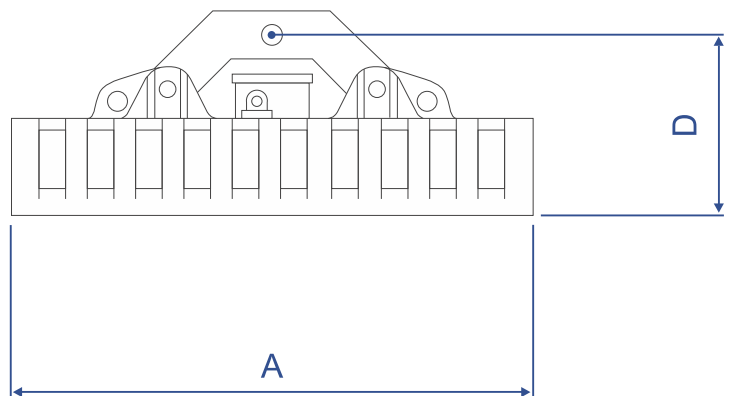
- ▶ Overhead cranes
- ▶ Material handling machines
- ▶ Spreader beams

Features & benefits:

- ▶ Specially designed for steel mill applications
- ▶ Copper coil as an option
- ▶ Hot material handling up to 650° C as an option

Winding type:

- ▶ Aluminum coil



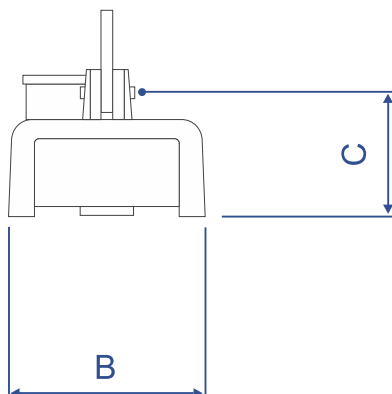
Name	AxB	C	D
EMG 110-64-42	1100x640	420	650
EMG 170-70-41	1700x700	410	700

Rectangular lifting electromagnets (for slabs, rails, forgings)

Name	Pull-off strength, kg	Lifting capacity for slabs, minimum, kg	Rated current, A	Rated capacity, W	Capacity for heated winding, W	Weight, kg	AxBxCxD, mm
EMG 110-64-42/A-U1	20000	10000	18±8%	4000	2600	1500	1100x640x420x650
EMG 170-70-41/A-U1	30000	15000	35±8%	7700	5200	2000	1700x700x410x700

HEAT-RESISTANT ELECTROMAGNETS FOR SLABS are implemented in SPECIAL CAST CASES with extended poles for superheavy operating mode for high-efficiency handling of slabs, forgings and heavy metal billets at metal plants, reloading points and ports, with temperature up to 650°C.

Name	Pull-off strength, kg	Lifting capacity for slabs depending on load t° C, kg			Rated current, A	Rated capacity, W	Capacity for heated winding, W	Weight, kg	AxBxCxD, mm
		200° C	400° C	600° C					
EMG 110-64-ST/AT-U1	28000	14000	12000	8000	18±8%	4000	2600	1900	1100x640x420x650
EMG 170-70-ST/AT-U1	43000	21500	18000	13000	35±8%	6600	4300	2400	1700x700x410x700





Uses:

- ▶ Steel sheets single and bundles
- ▶ Steel billets
- ▶ Pipes

Applications:

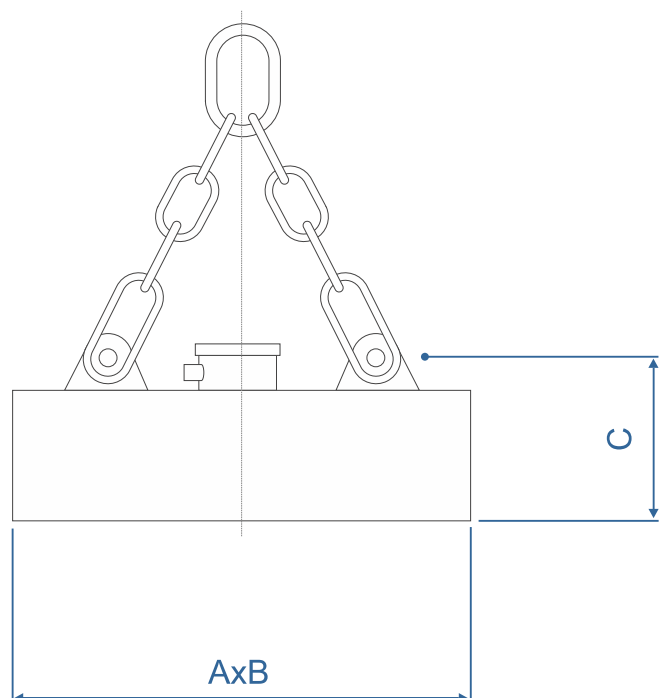
- ▶ Overhead cranes
- ▶ Gantry cranes
- ▶ Spreader beams

Features & benefits:

- ▶ Can be designed according to the customer's specification
- ▶ Copper coil as an option
- ▶ Hot material handling up to 650° C as an option

Winding type:

- ▶ Aluminum coil



Lifting electromagnets of EMGS SERIES (for slabs, sheet products and pipes)

Parameters	EMGS 055-30- 33/A-U1	EMGS 060-40- 32/A-U1	EMGS 080-52- 40/A-U1	EMGS 100-60- 44/A-U1	EMGS 120-64- 46/A-U1	EMGS 140-70- 48/A-U1	EMGS 160-72- 54/A-U1	EMGS 165-74- 50/A-U1
Rated voltage, V	110	220	220	220	220	220	220	220
Rated current of electromagnet at 20° C, A	11	12	16	20	30	40	50	38
Rated power, kW	1,2	2,6	3,5	4,4	6,6	8,8	11	8,4
Steady-state power, kW	0,78	1,7	2,3	2,8	4,3	6	7,2	5,4
Pull-off strength, kg	3000	5000	10000	20000	30000	40000	60000	80000
Lifting capacity for slabs, kg	1500	2500	5000	10000	15000	20000	30000	40000
Lifting capacity for sheets, kg	300	500	1000	2000	3000	4000	6000	8000
Dimensions AxBxC, mm	500x300 x330	600x400 x320	800x520 x400	1000x600 x440	1200x640 x460	1400x700 x480	1600x760 x540	1650x740 x500
Weight, kg	195	360	700	1000	1500	2100	2800	2800

Parameters	EMGS 175-72- 45/A-U1	EMGS 185-38- 38/A-U1	EMGS 200-38- 36/A-U1	EMGS 220-38- 36/A-U1	EMGS 220-62- 44/A-U1	EMGS 250-64- 50/A-U1	EMGS 270-38- 36/A-U1	EMGS 380-38- 38/A-U1
Rated voltage, V	220	220	220	220	220	220	220	220
Rated current of electromagnet at 20° C, A	38	20	20	20	40	60	32	45
Rated power, kW	8,4	4,4	4,4	4,4	8,8	13,2	7	9,9
Steady-state power, kW	5,4	2,8	4,6	2,8	6	8,6	3,3	6,4
Pull-off strength, kg	50000	13000	15000	15000	50000	70000	20000	25000
Lifting capacity for slabs, kg	25000	6500	7500	7500	25000	35000	10000	12500
Lifting capacity for sheets, kg	5000	1300	1500	1500	5000	7000	2000	2500
Dimensions AxBxC, mm	1750x720 x450	1850x380 x380	2000x380 x360	2200x380 x360	2200x620 x440	2500x640 x500	2700x380 x360	3800x380 x380
Weight, kg	2600	850	900	1000	2600	3200	1100	2000



Uses:

- ▶ Bundles of coil, rod, rebar
- ▶ Rod and rebar in coils

Applications:

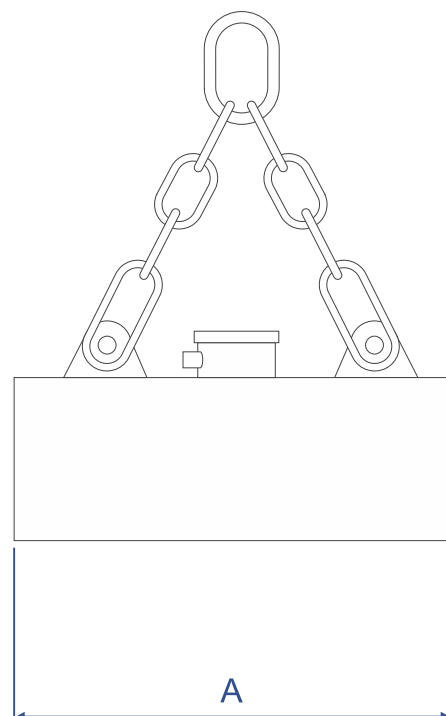
- ▶ Overhead cranes
- ▶ Gantry cranes
- ▶ Spreader beams

Features & benefits:

- ▶ Specially designed for coil and bundle lifting
- ▶ Copper coil as an option
- ▶ Hot material handling up to 650° C as an option

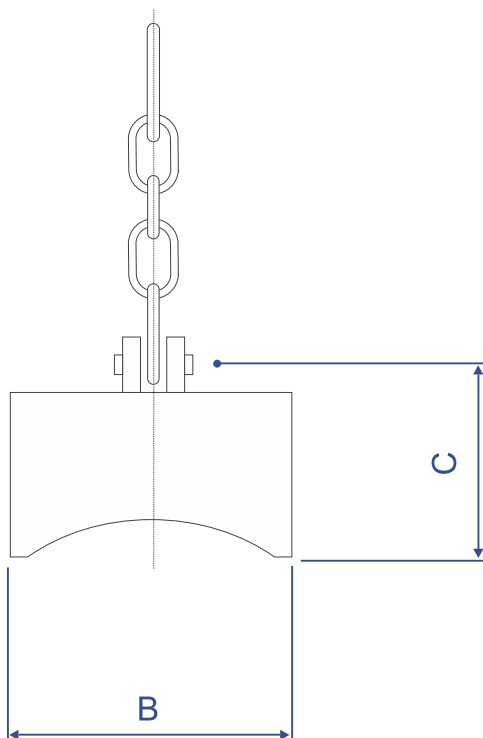
Winding type:

- ▶ Aluminum coil



Lifting electromagnets of EMGK SERIES (for round bar, rod and rolled wire bundles and coils)

Parameters	EMGK 065-46-64 /A-U1	EMGK 105-70-54 /A-U1	EMGK 110-70-51 /A-U1	EMGK 130-70-54 /A-U1	EMGK 150-65-48 /A-U1
Rated voltage, V	220	220	220	220	220
Rated current of electromagnet 20° C, A	14	25	25	40	28
Rated power, kW	3,1	5,5	5,5	8,8	6,1
Steady-state power, kW	2,2	3,8	3,8	6,2	3,9
Lifting capacity, kg	1500	4000	5000	6000	5000
Outer coil diameter, mm	1000-1400	1250	1250	1250	1250
Coil width, max, mm	650	1000	1150	1250	1450
Dimensions AxBxC, mm	660x460x640	1050x700x540	1100x700x510	1300x700x540	1500x650x480
Weight, kg	580	1200	1250	2000	2000





Uses:

- ▶ Bundles of coil, rod, rebar
- ▶ Rod and rebar in bundles

Applications:

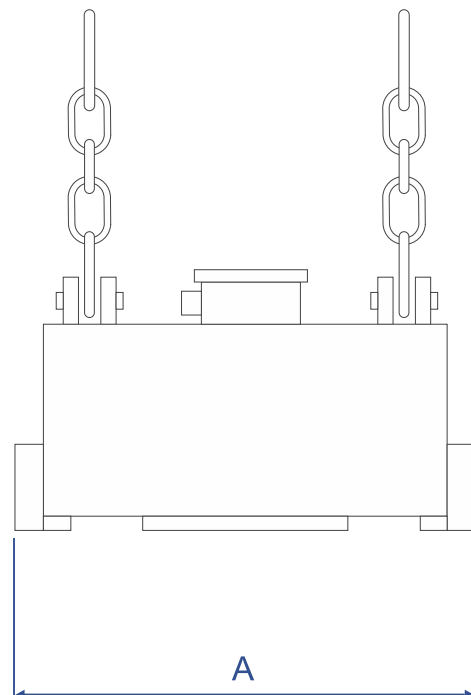
- ▶ Overhead cranes
- ▶ Gantry cranes
- ▶ Spreader beams

Features & benefits:

- ▶ Specially designed for long-length cargo
- ▶ Copper coil as an option
- ▶ Hot material handling up to 650 C° as an option

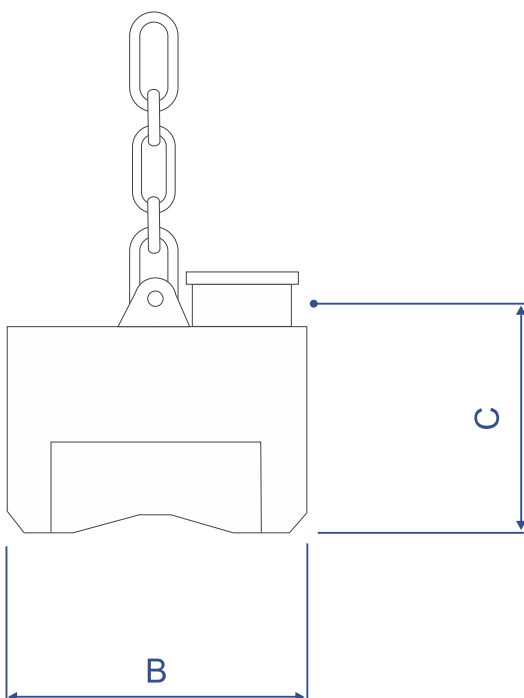
Winding type:

- ▶ Aluminum coil



Lifting electromagnets of EMGP SERIES (for long products in bundles)

Parameters	EMGP 078/A-U1	EMGP 090/A-U1	EMGP 100/A-U1	EMGP 110/A-U1
Rated voltage, V	220	220	220	220
Rated current of electromagnet 20° C, A	22	22	28	35
Rated power, kW	4,8	4,8	6,1	7,7
Steady-state power, kW	3,3	3,3	4,3	5
Lifting capacity for bundles Ø 600 mm, kg	2000	3000	4000	9000
Lifting capacity for rolled bars Ø 600 mm, kg	8000	10000	12000	16000
Dimensions AxBxC, mm	780x610x500	900x650x500	1000x660x520	1100x660x590
Weight, kg	1100	1200	1250	1800





Uses:

- ▶ Steel coils, eye-vertical and eye-horizontal lifting
- ▶ Rod and rebar in coils

Applications:

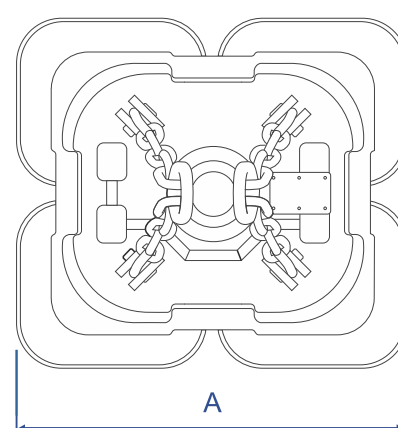
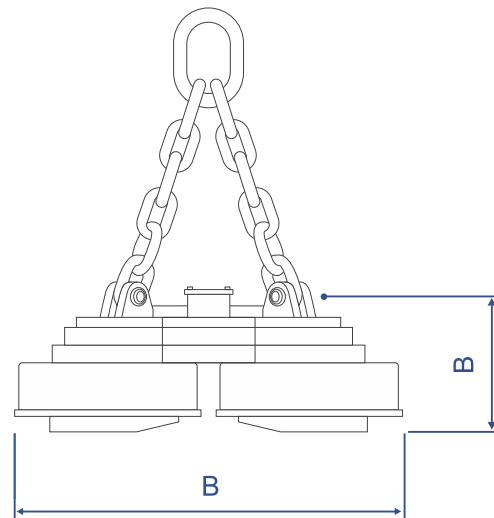
- ▶ Overhead cranes
- ▶ Gantry cranes

Features & benefits:

- ▶ Special universal design
- ▶ Copper coil as an option
- ▶ Hot material handling up to 650° C as an option

Winding type:

- ▶ Aluminum coil



Lifting electromagnets of EMGU SERIES (for eye vertical and eye horizontal lifting of coils)

Parameters	EMGU 160A/A-U1	EMGU 200/A-U1	EMGU 220/A-U1
Rated voltage, V	220	220	220
Rated power, kW	13,2	17,6	17,6
Rated current, A	60	80	80
Pull-off strength for plates, kg	50000	80000	90000
Lifting capacity for plates, kg	25000	40000	45000
Lifting capacity for coil, eye vertical, kg	20000	35000	45000
Lifting capacity for coil, eye horizontal, kg	15000	15000	30000
Maximal outer diameter of coil, mm	1600	2000	2200
Minimal outer diameter of coil, mm	600	600	800
Dimensions, AxBxC mm	1650x1350x520	1850x1650x580	1900x1700x650
Weight, kg	3600	5700	6300





Uses:

- ▶ Coils
- ▶ Rod and rebar in coils

Applications:

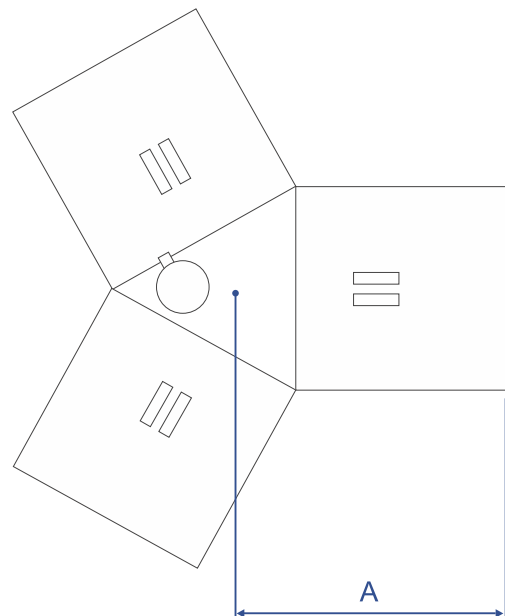
- ▶ Overhead cranes
- ▶ Gantry cranes

Features & benefits:

- ▶ Specially designed for eye vertical coil lifting
- ▶ Copper coil as an option
- ▶ Hot material handling up to 650° C as an option

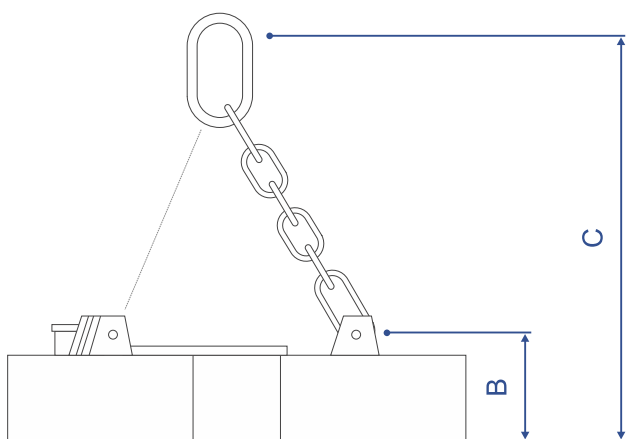
Winding type:

- ▶ Aluminum coil



Lifting electromagnets of EMGR SERIES (for loading of coils from side ends)

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 of electromagnet 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
Coil diameter, max, mm	1500	1600	1800	2000	2200	2500
Lifting capacity for coil, max, kg	10000	15000	25000	32000	36000	42000
Dimensions AxBxC, mm	750x420x1500	800x460x1600	900x500x1700	1000x550x1800	1080x580x2000	1230x580x2100
Weight, kg	2200	3000	4500	5500	6000	7000





Uses:

- ▶ Coils

Applications:

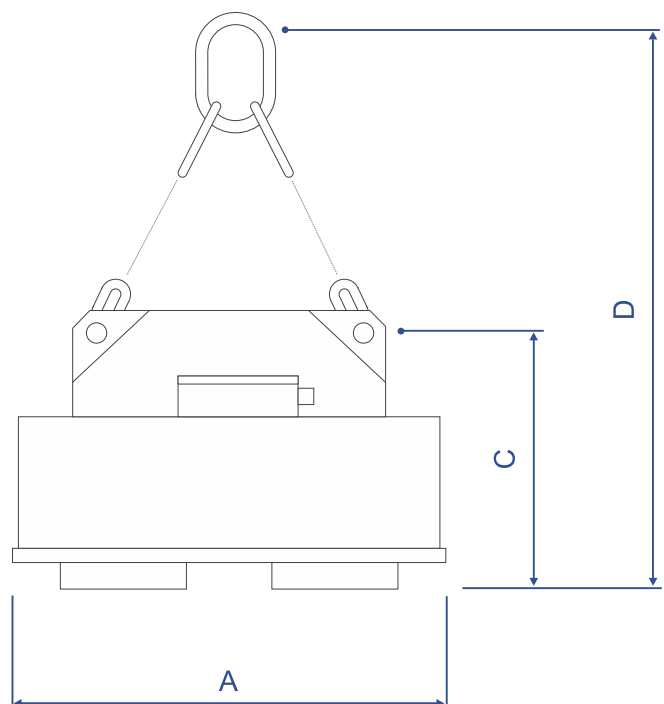
- ▶ Overhead cranes
- ▶ Gantry cranes

Features & benefits:

- ▶ Specially designed for eye horizontal coil handling
- ▶ Copper coil as an option
- ▶ Hot material handling up to 650° C as an option

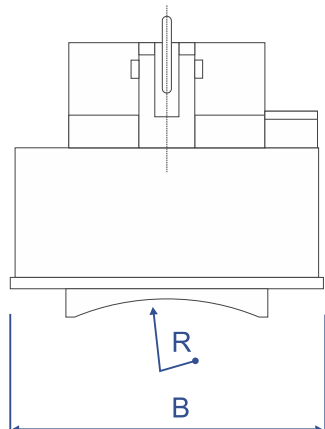
Winding type:

- ▶ Aluminum coil



Lifting electromagnets of EMGB SERIES (for loading coils from lateral sides)

Parameters	EMGB 090/A-U1	EMGB 110/A-U1	EMGB 150/A-U1
Rated voltage, V	220	220	220
Rated current of electromagnet at 20° C, A	30	60	80
Rated power, kW	6,6	13,2	17,6
Steady-state power, kW	4,3	8,6	11,5
Coil diameter, max, mm	1100	1600	2000
Lifting capacity for coil, max, kg	8000	15000	30000
Dimensions AxBxCxDxR, mm	900x580x575x1300x550	1160x820x620x1480x800	1500x960x780x1700x1000
Weight, kg	1200	2400	4500





Uses:

- ▶ Large diameter pipes

Applications:

- ▶ Material handling machines
- ▶ Overhead cranes
- ▶ Gantry cranes
- ▶ Spreader beams

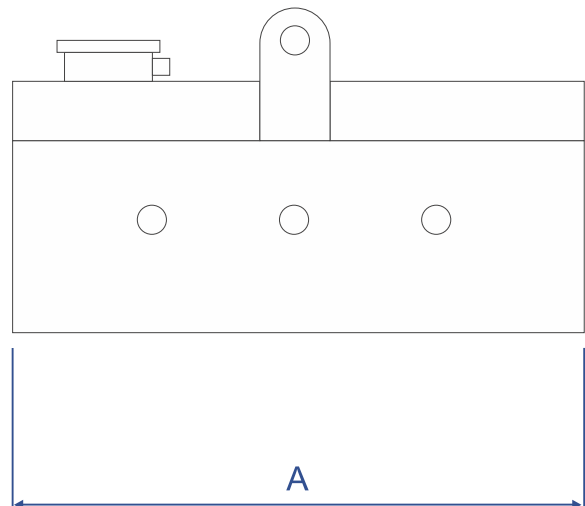


Features & benefits:

- ▶ Specially designed for large diameter pipe lifting
- ▶ Copper coil as an option
- ▶ Hot material handling up to 650° C as an option

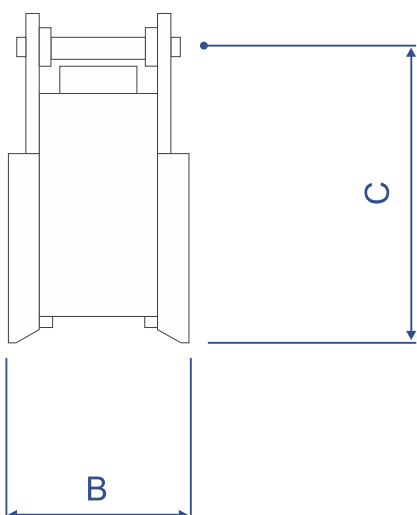
Winding type:

- ▶ Aluminum coil



Lifting electromagnets of EMGT SERIES (for large-diameter pipes)

Parameters	EMGT 100/A-U1	EMGT 120/A-U1	EMGT 140/A-U1
Rated voltage, V	220	220	220
Rated current of electromagnet 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





Uses:

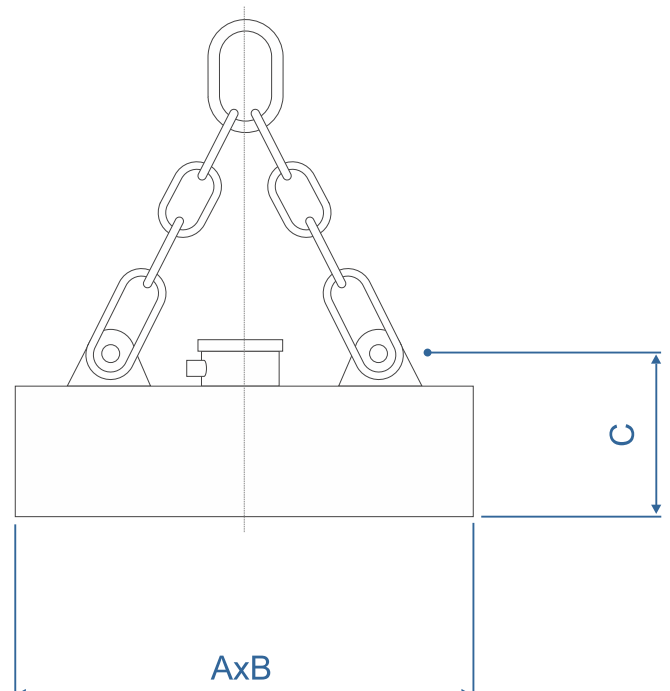
- ▶ Sheet steel in packs or single
- ▶ Slabs

Applications:

- ▶ Cranes
- ▶ Spreader beam

Features & benefits:

- ▶ Electro-permanent magnets; current is supplied to the coil only to activate or deactivate the magnet
- ▶ A magnetized load may be held by the electromagnet as long as required
- ▶ Energy efficiency
- ▶ High safety level
- ▶ Ease-of-operation
- ▶ High level of operating efficiency



Electro-permanent magnets (for handling of sheet steel in packs or single, slabs)

Parameters	IMG 6,3	IMG 0,8	IMG 10	IMG 12,5	IMG 16	IMG 20	IMG 25	IMG 32	IMG 40	IMG 50
Rated lifting capacity for 80 mm smooth plates, t	6,3	8	10	12,5	16	20	25	32	40	50
Pull-off strength for plates, t	19	24	30	37,5	48	60	75	96	120	150
Weight, kg	970	1050	1300	1600	1900	2300	3100	3600	4500	5600
Length, mm A	800	950	1150	1400	1720	1600	1900	2000	2200	2400
Width, mm B	400	485	485	420	500	700	850	850	900	900
Height, mm, C	350	400	400	400	400	400	350	450	450	500
Load temperature, C°	-40/+80									
Coil current, A	20	20	30	30	30	50	60	80	80	100





ELECTRO-PERMANENT MAGNETS (for pipes and round billets)

Uses:

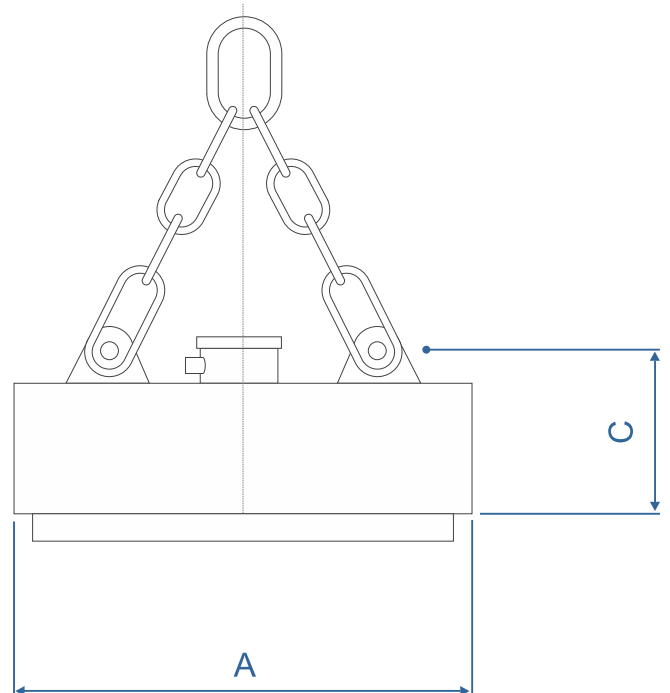
- ▶ Round billets
- ▶ Pipes

Applications:

- ▶ Cranes
- ▶ Spreader beam

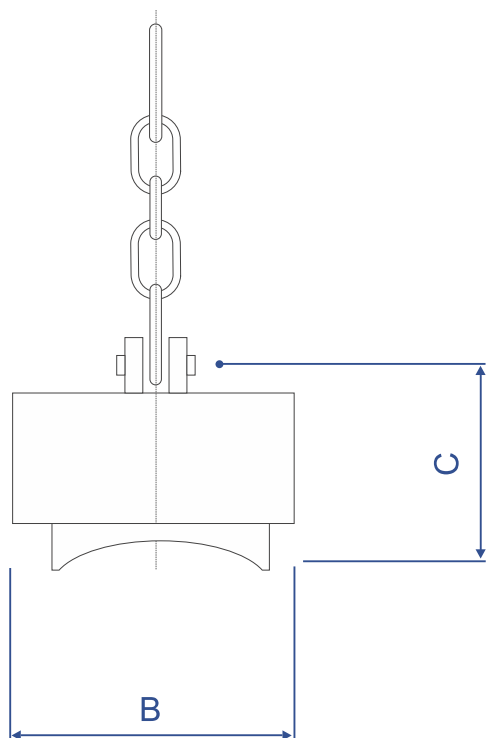
Features & benefits:

- ▶ Electro-permanent magnets; current is supplied to the coil only to activate or deactivate the magnet
- ▶ A magnetized load may be held by the electromagnet as long as required
- ▶ Energy efficiency
- ▶ High safety level
- ▶ Ease-of-operation
- ▶ High level of operating efficiency



Electro-permanent magnets (for handling of round billets apiece)

Parameters	IMGK-170	IMGK-200
Rated pulse current, A	40	80
Rated pulse voltage, V	400	400
Rated pulse power, kW	16	32
Lifting capacity for a round max, kg	15000	28000
Minimum diameter of a round, mm	400	400
Maximum diameter of a round, mm	600	600
Dimensions AxBxC, mm	1690x840x410	4000x600x350
Weight, kg	2900	5000
Maximum load temperature, C°	80	80





Uses:

- ▶ Slabs
- ▶ Forgings
- ▶ Steel blooms and billets

Applications:

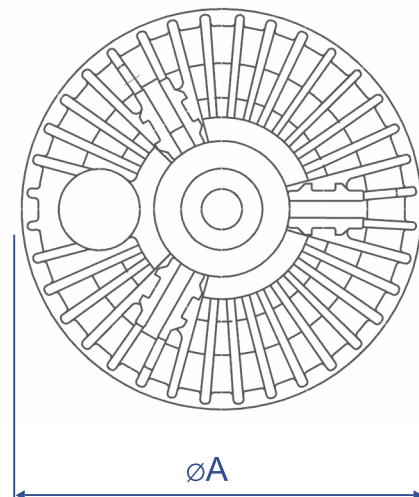
- ▶ Overhead cranes
- ▶ Material handling machines
- ▶ Spreader beams

Features & benefits:

- ▶ Specially designed for slab lifting
- ▶ Copper coil as an option
- ▶ Hot material handling up to 650° C as an option

Winding type:

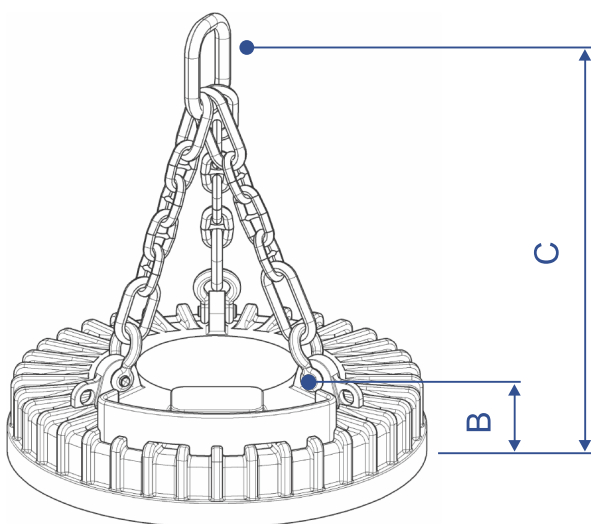
- ▶ Aluminum coil



Lifting electromagnets of EMG SL SERIES (slabs, forgings)

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

HEAT-RESISTANT ELECTROMAGNETS FOR SLABS are implemented in SPECIAL CAST CASES with extended poles for superheavy operating mode for high-efficiency handling of slabs, forgings and heavy metal billets at metal plants, reloading points and ports, with temperature up to 650°C.





ELECTROMAGNET ATTACHMENT FOR SCRAP HANDLER

Uses:

- ▶ Allows to grab electromagnet with the grab of scrap handler

Applications:

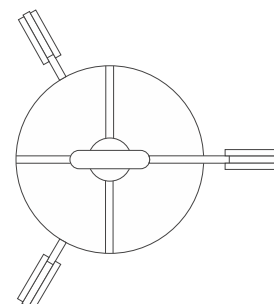
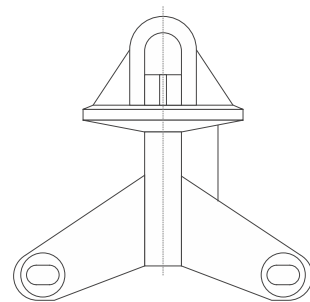
- ▶ Mobile handlers

Features & benefits:

- ▶ Producibility of attachments under customer's specific applications
- ▶ Workability, time saving and labor productivity increase



Name	Lifting capacity, t	Compatible electromagnets	Weight, kg
PG-6-078	6	EMG 078-30	41
PG-10-100	10	EMG 100-32	96
PG-10-117	10	EMG 117-32 EMG 117-39	109
PG-10-130	10	EMG 130-34	113
PG-12,5-140	12,5	EMG 140-35	136
PG-12,5-155	12,5	EMG 155-38	141
PG-16-165	16	EMG 165-42	180





Uses:

- ▶ Module for handling, capture and sorting of scrap metal and steel

Applications:

- ▶ Electromagnet
- ▶ Mobile scrap handler

Features & benefits:

- ▶ Ease of use
- Easy and fast assembly and disassembly, which allows you to quickly make change working bodies scrap loader



Technical data

Name	Pull-off strength, kg	Lifting capacity, kg		Rated current, A	Rated capacity, W	Weight, kg
		Scrap	Steel turnings			
SG 117	27000	500	400	45±8%	9900	2000

The given system can be developed for any DIMET electromagnet.



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