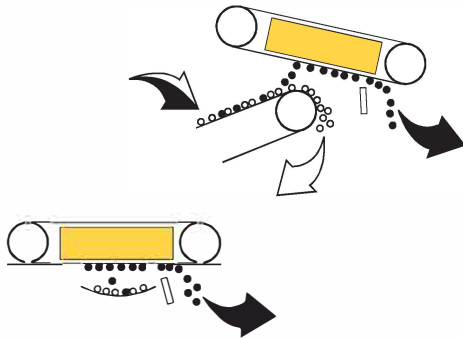


OVE



Used for pick up and removing ferrous metal parts from the bulk materials such as coal, stone, fertilizers, slag, gypsum, ores and similar in order to protect crushers, pulverizers, mills, conveyor belts and other costly equipment in processing plants against too much wear and damage.

OVE Feature and Applications

These Magnets are designed for installation either in-line over the discharge head pulley or for installation across the conveyor belts, vibratory feeders or gravity chutes. Mounting the suspension magnets in-line above the discharge end of the conveyor increases the efficiency of the magnet and facilitates the iron discharge.

Over Belt separator magnets are used when substantial quantities of ferrous metals and or long and bulky pieces are contained in the conveyor burden or where access to the magnet for cleaning is difficult. This material is attracted by the magnet and is carry out of the magnetic field and ejected by the discharge belt running around the magnet. OVE separator consist of magnetic box, supporting structure for the discharge belt with drive drum, tail drum and two additional idlers are mounted on suitable self aligning bearings. A suitable geared motor is used to drive the discharge belt.

For re-tightening the discharge belt, the fixed axle of the tail drum is fitted with a tensioning device.

Suspension lugs and one set of turn buckles and suspension wire rap are normally supplied.

Important factors in OVE separator selection should be considered as Material details(size,type and density), amount and minimum size of tramp iron for removing, Conveyor details (belt width and speed), chute width , Bulk material capacity (t/hr or m3/hr) and burden depth , type of machinery to be protected, Angle trough idlers, Head pulley details (diameter and material) at in-line installation, Ambient temp & Available power supply AC.

DC supply is required for the excitation coils. The rectifiers and the three phase current motors are dimensioned for 415V/50Hz. The units can also be supplied for other voltages and frequencies. The magnets can be used for normal operating conditions in an ambient temp range between -20 and +40 degree centigrade. Where extraordinary operating conditions prevail such as high ambient temperatures (over 40°C), high air humidity, chemically aggressive atmosphere, severe dust pollution, handling of wet and sticky material or very large tramp iron, special magnets are required.

Advantage of Oil Cooling

Oil cold OVE separators in comparing with natural air cold have smaller dimensions and lower weight. The oil of the magnet box allowed the coil's heat to dissipate better from inside of the magnet. Oil cold electromagnets have higher electrical power consumption, and the higher surface temperature, yet it still have the same temperature inside the coil. The oil volume will expand when it heat, Therefore oil cold electromagnets have an expansion container attached to them.

Extended Poles

Extended poles over the entire length of the magnet guarantee secure and trouble-free removal of ferrous items.

Dimensioning Notes

Iron parts needs to be in a magnetic field for at least 0.4-0.5 seconds in order to be magnetized and pulled out of the material flow. The size of the magnet box must be selected accordingly in order to secure enough dwelling time



MAGTM

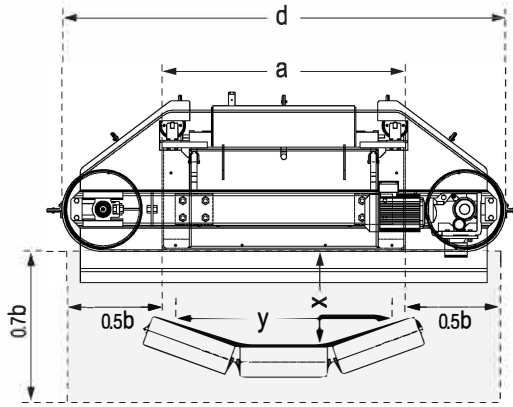
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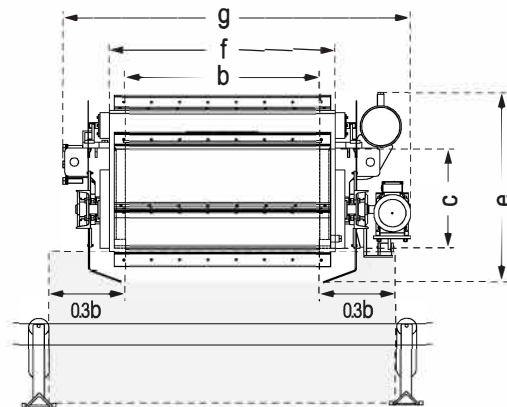
June 2023

Electromagnetic Over Belt Separator

OVE



Area in which only non-magnetic material should be used



Area in which only non-magnetic material should be used

Model	Magnet Cold Wattage	Max. Working Distance x	Belt Width y		Drive	Magnet Dimensions			Magnet Weight Approx.	Overall Dimensions				Total Weight Approx.
			Installation Position			a	b	c		d	e	f	g	
			Across	Inline										
	kw	mm			kw	mm	mm	mm	kg	mm	mm	mm	mm	kg
OVE 25/80	2.5	250	800	650	1.5	800	650	480	866	2,030	680	700	1300	1,254
OVE 25/100	3.1		1,000			970			1,108	2,200				1,508
OVE 25/120	3.6		1,200			1,160			1,387	2,390				1,800
OVE 25/140	4.0		1,400			1,300			1,638	2,530				2,062
OVE 25/160	4.6		1,600			1,500			1,997	2,730				2,434
OVE 30/80	3.1	300	800	800		770	750	520	1,166	2,000	765	800	1400	1,599
OVE 30/100	3.6		1,000			920			1,506	2,150				1,951
OVE 30/120	4.2		1,200			1,170			1,838	2,400				2,298
OVE 30/140	4.8		1,400			1,290			2,189	2,520				2,660
OVE 30/160	5.4		1,600			1,480			2,610	2,710				3,094
OVE 35/80	3.7	350	800	1,000	2.2	900	950	550	1,493	2,130	810	1,000	1600	2,214
OVE 35/100	4.3		1,000			1,070			1,901	2,300				2,638
OVE 35/120	5.0		1,200			1,260			2,252	2,490				3,005
OVE 35/140	5.7		1,400			1,450			2,688	2,680				3,458
OVE 35/160	6.5		1,600			1,650			3,139	2,880				3,926
OVE 40/100	4.4	400	1,000	1,000		950	950	580	1,956	2,380	810	1,000	1600	2,713
OVE 40/120	5.1		1,200			1,140			2,472	2,570				3,246
OVE 40/140	5.9		1,400			1,300			2,951	2,730				3,741
OVE 40/160	6.7		1,600			1,500			3,347	2,930				4,153
OVE 40/180	7.4		1,800			1,700			3,843	3,130				4,666
OVE 45/120	6.3	450	1,200	1,200		1,350	1,150	580	3,237	2,780	810	1,200	1900	4,138
OVE 45/140	7.1		1,400			1,520			3,855	2,950				4,773
OVE 45/160	8.1		1,600			1,700			4,471	3,130				5,406
OVE 45/180	8.7		1,800			1,830			5,008	3,260				5,959
OVE 50/120	6.6		500			1,200			1,200	3.0				1,270
OVE 50/140	7.4	1,400		1,450	4,071	2,880	4,994							
OVE 50/160	8.3	1,600		1,620	4,717	3,060	5,657							
OVE 50/180	9.4	1,800		1,820	5,446	3,250	6,403							
OVE 55/140	8.5	550		1,400	1,400		1,590	1,350			650	4,894	3,020	900
OVE 55/160	9.5		1,600	1,750			5,628		3,180	6,702				
OVE 55/180	10.5		1,800	1,950			6,515		3,380	7,608				
OVE 55/200	11.3		2,000	2,070			7,200		3,500	8,309				
OVE 60/140	9.9		600	1,400			1,600		4.0	1,760		1,550	710	
OVE 60/160	11.0	1,600		1,960	7,140	3,490		8,359						
OVE 60/180	11.9	1,800		2,080	7,962	3,610		9,197						
OVE 60/200	13.2	2,000		2,280	8,915	3,810		10,170						
OVE 60/220	14.2	2,200		2,420	9,747	3,950		11,019						



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