

Overbelt electromagnetic separator type STE



FEATURES

- Electromagnet with high magnetic field range and strength adapted for continuous operation S1.
- Electrical winding with reinforced insulation.
- Adaptation to all types of belt conveyors.
- Rugged construction ensuring long service life.
- Leading manufacturers' accessories.

VERSIONS

- Explosion-proof design in accordance with the requirements of the ATEX directive.
- Stainless steel design for operation in aggressive environment.
- Oil cooling design for operation in high temperatures.

EXAMPLE PROJECTS



Removal of tramp iron from coal.



Ferrous scrap recovery from metallurgical slag.



Removal of tramp iron from clinker.



Ferrous scrap recovery from municipal waste.

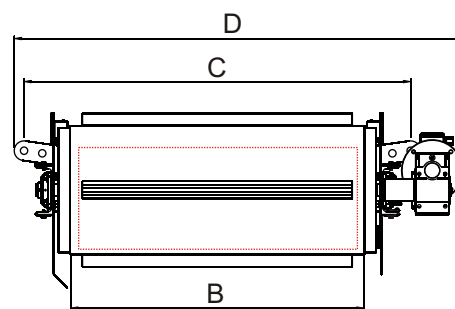
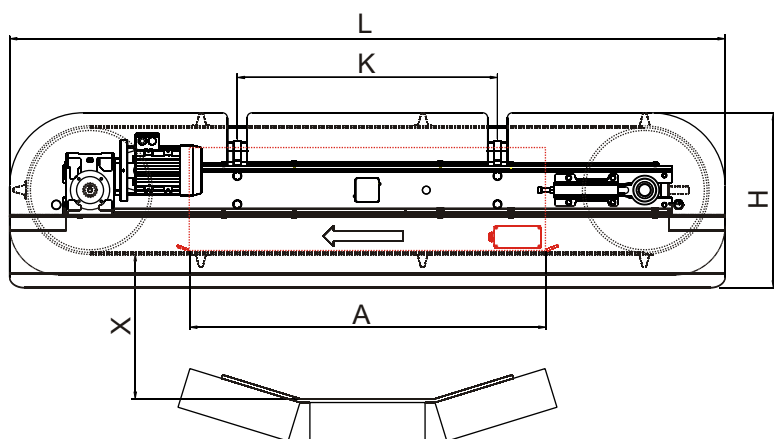
DESIGN AND STANDARD EQUIPMENT

- The electromagnet body made of high magnetic susceptibility steel and tightly welded.
- The electromagnet winding composed by anodized aluminium strip and supplied with DC.
- The winding filled by special mixture with high dielectric insulation properties and high thermal dispersion coefficient.
- The bottom plate made of non-magnetic and wear resistant manganese steel to protect the winding against mechanical damage.
- The short conveyor with the rubber belt equipped with the cleats to remove the captured metals.
- The drive pulley and idler feature a barrel shape for more precise centering a conveyor belt movement.
- The belt drive with SEW geared motor or of other manufacturer's on customer request.
- The control cabinet for power supply, monitoring of the operating states and control of the separator.

OPTIONAL EQUIPMENT

- The pulleys equipped with the replaceable shafts mounted with the expanding rings.
- Reinforced bearings in dustproof housings.
- Guide rollers used when the separator is suspended at angle of $> 20^\circ$
- Automatic lubricators.
- The pulley surfaces covered with rubber lining with diamond shaped groves.
- Belt limit switches signalling the belt sliding off.
- Telemecanique motion sensor signalling the belt drive failure.
- Chain slings.

TECHNICAL DATA



| Type | Range | Magnet power (kW) | Magnet voltage (VDC) | Drive power (kW) | Dimensions (mm) | | | | | | Weight (kg) | |
|-------------|--------|-------------------|----------------------|------------------|-----------------|------|------|------|-----|------|-------------|-------|
| | X (mm) | | | | A | B | C | D | H | K | | L |
| STE 80-100 | 350 | 3,0 | 222 | 1,5 | 980 | 800 | 1180 | 1375 | 650 | 640 | 2190 | 1555 |
| STE 80-110 | | 3,4 | 250 | | 1080 | | | | | 740 | 2290 | 1680 |
| STE 80-120 | | 4,0 | 290 | | 1230 | | | | | 890 | 2440 | 1860 |
| STE 80-160 | | 5,4 | 380 | | 1580 | | | | | 1240 | 2790 | 2290 |
| STE 100-120 | 420 | 4,6 | 170 | 2,2 | 1250 | 1000 | 1390 | 1638 | 650 | 910 | 2460 | 2350 |
| STE 100-140 | | 5,2 | 186 | | 1400 | | | | | 1060 | 2610 | 2605 |
| STE 100-160 | | 6,0 | 220 | | 1550 | | | | | 1210 | 2760 | 2845 |
| STE 100-180 | | 6,6 | 236 | | 1750 | | | | | 1410 | 2960 | 3170 |
| STE 120-140 | 500 | 6,7 | 200 | 3 | 1425 | 1200 | 1575 | 1825 | 800 | 1060 | 2915 | 4100 |
| STE 120-160 | | 7,5 | 222 | | 1575 | | | | | 1210 | 3065 | 4465 |
| STE 120-180 | | 8,4 | 249 | | 1775 | | | | | 1410 | 3265 | 4955 |
| STE 120-200 | | 9,5 | 280 | | 1995 | | | | | 1630 | 3485 | 5500 |
| STE 140-170 | 600 | 10,5 | 300 | 3 | 1670 | 1400 | 1770 | 2020 | 830 | 1310 | 3165 | 5795 |
| STE 140-190 | | 11,6 | 332 | | 1870 | | | | | 1510 | 3365 | 6420 |
| STE 140-210 | | 12,0 | 350 | | 2070 | | | | | 1710 | 3565 | 7010 |
| STE 160-210 | 720 | 14,2 | 194 | 5 | 2120 | 1600 | 1980 | 2255 | 850 | 1710 | 3985 | 10910 |
| STE 160-230 | | 15,4 | 210 | | 2320 | | | | | 1910 | 4185 | 11630 |
| STE 160-250 | | 17,9 | 235 | | 2520 | | | | | 2110 | 4385 | 12355 |
| STE 180-210 | 830 | 17,3 | 233 | 7,5 | 2120 | 1800 | 2180 | 2490 | 850 | 1710 | 3985 | 11760 |
| STE 180-250 | | 23,8 | 295 | | 2520 | | | | | 2110 | 4385 | 13340 |

INSTALLATION METHOD

