SGM
TECHNOLOGY AND PROXIMITY

DATASHEET

MAGNETIC TECHNOLOGY

DYNAMIC FERROUS SEPARATOR Model DSRP

TECHNICAL SPECIFICATIONS

Unlike a traditional head pulley magnet, the magnetic head pulley of the Dynamic SRP does not drive directly the belt of the separator but rather rotates inside a shell that rotates at a slightly higher speed than the magnetic pulley. Variable Frequency Drives (VDFs) allow to control the speed difference between the magnetic head pulley and belt.

Non-magnetic material travels at the speed of the belt, while magnetic material is subjected to a breaking action resulting from the slower speed of the floating magnetic pulley.

The result is a liberation action of the magnetic material from the non-magnetic one, in a much wider and open flow with respect to a traditional head pulley magnet with the lightly magnetic material (waste) dropping first and the good ferrous dropping last. In order to further clean the valuable fraction of ferrous that drops last, this fraction is passed on a permanent drum magnet that will recover from the distance the valuable ferrous. Both the inclination of the slide to the permanent magnet drum and the position of the drum are adjustable in order to accommodate for material size and purity required for the ferrous recovery.

The use of the SGM Dynamic SRP has some limitations in case of wet material.

SGM US Patent number 8.056.730 (B2).

PRODUCT HIGHLIGHTS

- Variable frequency drive for both belt and floating pulley.
- Possible by-pass of ferrous process in case material is too wet.
- Shaker on slide drum magnet to avoid material sticking on

OPTIONAL FEATURES

- Air knife for splitter and belt cleaning
- Brush cleaning system for belt

MODEL mm - ft	FLOATING PULLEY MAGNET	DRUM MAGNET	BELT SPEED	CAPACITY (*)	LENGTH	WIDTH	HEIGHT	WEIGHT
DSRP 100 40	Ø 300 mm Ø 11.8”	Ø 400 mm Ø 15.7”	0.9-3.0 m/sec 3-10 ft/sec	5-8t/h	3478 mm 130”	1714 mm 67”	1736 mm 72”	2,200 Kg 4,850 lbs
DSRP 150 60	Ø 300 mm Ø 11.8”	Ø 400 mm Ø 15.7”	0.9-3.0 m/sec 3-10 ft/sec	10-13 t/h	3478 mm 130”	1714 mm 67”	2237 mm 92”	2,650 Kg 5,842 lbs
DSRP 200 80	Ø 300 mm Ø 11.8”	Ø 400 mm Ø 15.7”	0.9-3.0 m/sec 3-10 ft/sec	12-16 t/h	4400 mm 58”	1714 mm 67”	3243 mm 112”	4,400 Kg 9,700 lbs

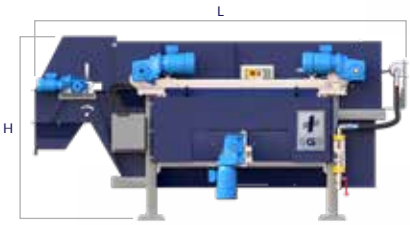
(*) Depending on application, material specific weight and metal content in material

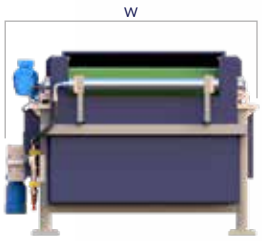
DYNAMIC FERROUS SEPARATOR - Model DSRP

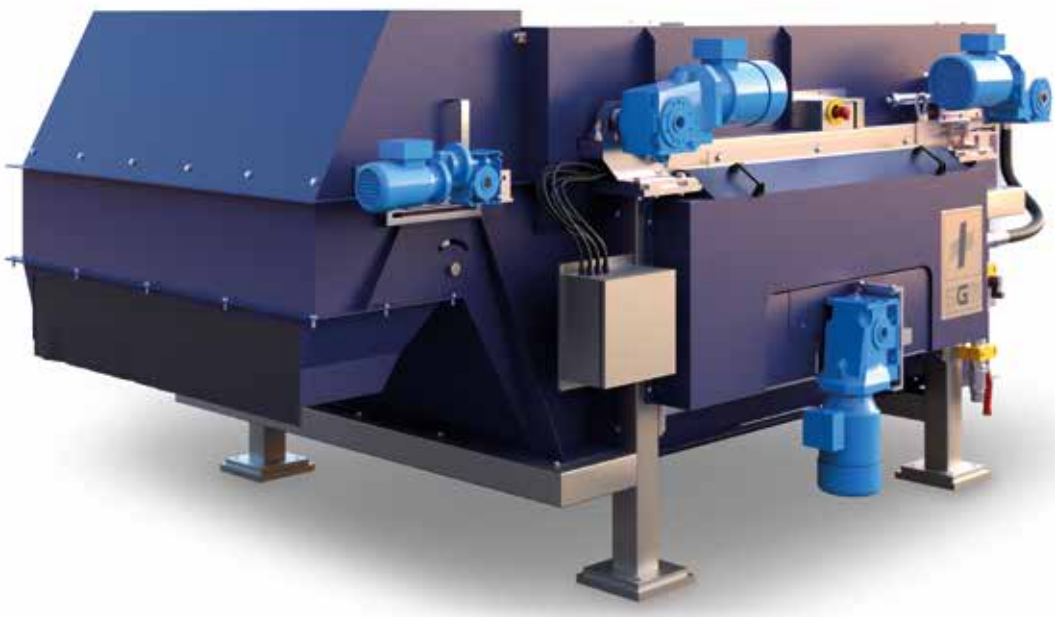
TYPICAL APPLICATIONS

Magnetic waste in Auto shredder residue (ASR) below 40mm - 1 1/2" typically represents approximately 20 to 40% in weight with 5 to 15% good ferrous content that ends up lost in this fraction. The SGM DSRP is designed to recover those valuables pieces of ferrous.

Maximum material size 40mm - 1 1/2"







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