

# PULLEY MAGNET SEPARATOR MODEL DSRP

The SGM Dynamic Magnetic Pulley (Model DSRP) represents the next generation of ferrous separation, offering superior efficiency and precision compared to traditional magnetic pulleys.

Unlike conventional systems, the Dynamic SRP's magnetic pulley operates independently within an external rotating shell that moves at a slightly higher speed than the internal magnetic core. This innovative design enhances ferrous material recovery from scrap, leveraging the differential speed between the conveyor belt and the magnet rotation.

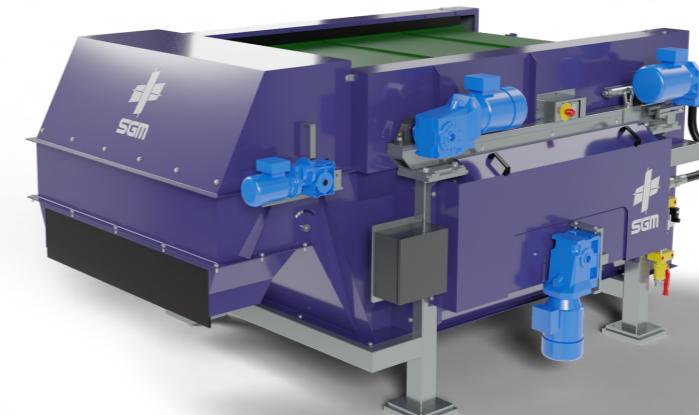
**In Automotive Shredder Residue (ASR) below 40 mm, ferrous residues can account for 20-40% by weight, with 5-15% of valuable ferrous content typically lost. The SGM DSRP is engineered to maximize recovery of these high-value fractions, ensuring improved yield and profitability in recycling operations**

## HOW IT WORKS

Unlike traditional magnetic pulleys that drive the conveyor belt, the Dynamic SRP pulley rotates independently inside an insulating shell that matches the belt speed.

Non-ferrous material moves along with the conveyor belt and is discharged by gravity. Ferrous material experiences increased adhesion due to the higher speed of the magnetic pulley, ensuring effective separation. The variable speed adjustment (VFD – Variable Frequency Drive) allows fine-tuning of the separation intensity based on the material composition.

The SGM DSRP minimizes ferrous loss by utilizing an additional permanent magnet drum, which captures and directs the ferrous material into the dedicated collection hopper. The adjustable drum and splitter inclination further optimize separation efficiency, adapting to different material sizes and purity requirements.



## TYPICAL APPLICATIONS

- Automotive Shredder Residue (ASR)
- Ash from MSW incinerator (IBA)
- Electronic scrap (WEEE)
- Wood waste

MODEL mm - ft	MAGNETIC PULLEY	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