

PULLEY MAGNET SEPARATOR MODEL SRP

The SGM SRP Separator is an advanced, ultra-high gradient permanent magnet head pulley, engineered to deliver exceptional metal recovery performance. Installed on its own independent frame and paired with a thin, high-efficiency belt, the SRP minimizes the distance between the conveyed material and the magnetic field, thereby maximizing separation effectiveness.

Stainless steel, unlike standard ferrous steel, contains elements such as chromium, nickel, and molybdenum, which reduce its magnetic responsiveness. To overcome this challenge, the SRP features a specially designed magnetic circuit tailored to recover low-magnetic stainless steel scrap with high efficiency. This makes it an ideal solution for operations requiring reliable performance in the separation of weakly magnetic metals, particularly in demanding recycling environments.

HOW IT WORKS

The SGM SRP Separator is equipped with an extended-diameter head pulley, available in 300 mm or 450 mm, incorporating powerful

neodymium permanent magnets arranged in an ultra-high gradient configuration to ensure maximum separation strength.

A key feature of the SRP is its high-performance conveyor belt, just 2.5 mm thick, significantly thinner than conventional belts, which are typically 7 to 9 mm. This reduced thickness allows the material to pass much closer to the magnetic field, increasing the adhesive magnetic force and greatly enhancing the separation efficiency, especially when processing low-magnetic stainless steel and similar materials.

To further optimize performance, the SRP Separator can be equipped with a series of optional systems designed to improve material handling and cleaning:

- Roller separator to enhance downstream sorting.
- Brush cleaning system to maintain optimal belt conditions.
- Air jet system to clean the splitter and conveyor belt.
- Vibrating feeder that ensures uniform material distribution across the belt.

This level of configurability makes the SRP a highly versatile and efficient solution for advanced metal recovery in demanding recycling environments.



TYPICAL APPLICATIONS

- Automotive Shredder Residue (ASR)
- Electronic scrap (WEEE)
- Wood waste
- Upgrade of aluminum scrap

MODEL	MAGNETIC PULLEY	BELT SPEED EU	CAPACITY*	LENGTH	WIDTH	HEIGHT	WEIGHT
SRP 100	Ø300 mm Ø 12"	0.9-2.5 m/s 180-500 fpm	5-8 t/h	2700 mm 106"	1800 mm 70"	1400 mm 55"	1450 Kg 3,200 lbs
SRP 150	Ø300 mm Ø 12"	0.9-2.5 m/s 180-500 fpm	10-13 t/h	3250 mm 128"	2550 mm 100"	1400 mm 55"	1900 kg 4,200 lbs
VSRP 200	Ø450 mm Ø 18"	0.6-1.6 m/s 120-320 fpm	12-17 t/h	4650 mm 183"	2765 mm 110"	1330 mm 50"	3000 kg 6,615 lbs
VSRP 250	Ø450 mm Ø 18"	0.6-1.6 m/s 120-320 fpm	16-22 t/h	4650 mm 183"	3265 mm 130"	1330 mm 50"	3600 kg 7,950 lbs

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