

# Suspended Magnet Separators

Models DNE | DNP | DBE | DBP



## Typical Applications

SGM offers multiple sizes for each version of its suspended magnet separators.

- Auto shredder residue
- Demolition rubbles
- Slag
- Foundry sand
- Incinerated domestic waste ash
- Municipal solid waste (MSW)
- Wood scrap
- Glass scrap
- Electronic scrap (WEEE)
- Minerals
- Any application where material travels on a conveyor belt with a need for ferrous removal.

# Suspended Magnet Separators

## Models DNE | DNP | DBE | DBP

### Technical Specifications

The SGM Suspended Magnet separators are used for many industrial applications for the recovery or removal of tramp iron present in material travelling on a conveyor belt. The SGM Suspended magnets are offered in different versions that can be electromagnetic or permanent magnet with each version that can be stationary or provided with a self-cleaning belt.

The choice of the most appropriate suspended magnet will depend on the combination of a variety of elements that are:

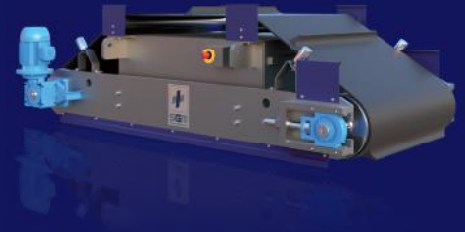
- Minimum and maximum sizes of the ferrous particles to be separated (the smaller the shape, the more demanding the application).
- Typical possible shapes of the ferrous particles (the more spherical vs longitudinal the shape, the more demanding the application).
- Burden depth of the material to be processed (the larger the burden depth, the more demanding the application).
- Bulk density of the material to be processed (the higher the bulk density, the more demanding the application).
- Moisture content of the material (the higher the moisture content, the more demanding the application).
- Speed of the belt that conveys the material (the higher the speed, the more demanding the application).
- Width of the belt that conveys the material that will dictate one of the two dimensions of the separators to be active on the overall width.

The SGM Suspended Magnet separators can either be placed above the conveyor belt of the material or above its head pulley depending on the application and the general assembly of the conveyor belt. The more demanding the application, the more appropriate is to position the suspended magnet separator above the head pulley, allowing the separator to take advantage of the natural opening of the material as it leaves the head pulley.

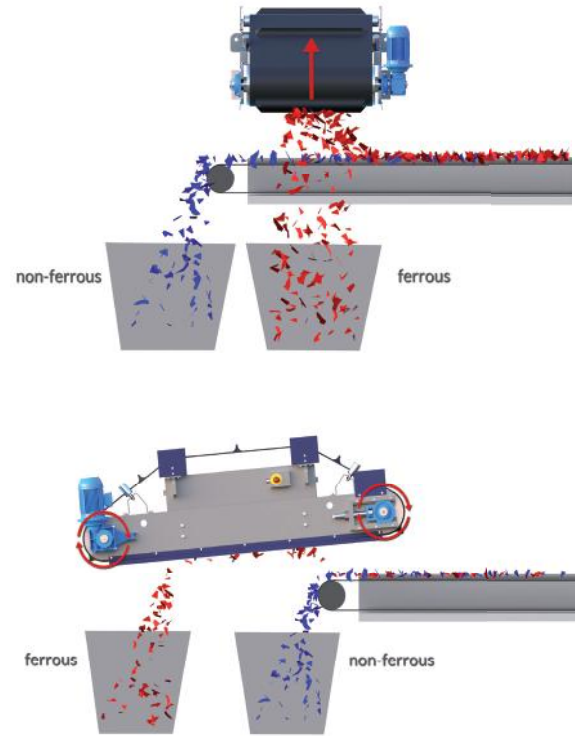
Stationary suspended magnet separators are intended for applications where ferrous is rare.

For the most appropriate choice of your SGM suspended magnet, please refer to SGM's questionnaire and contact us for recommendations.

# Suspended Electro Magnet Separator Self-cleaning Belt - Model DNE



- Designed to maximize the active length of the magnet and its relevant deferrization performance.
- Strong carbon steel frame including a bottom running surface in manganese steel to ease the discharging of ferrous metals.
- External surfaces are coated with Chrome-Zinc and anti-corrosion paint.



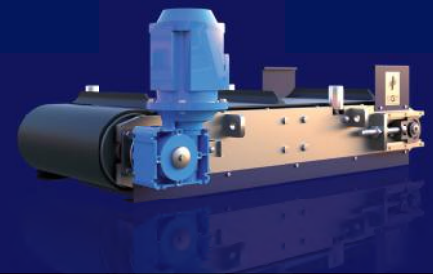
## Optional Features

- RPM belt sensor
- Belt stop buffer sensor
- Protection kit for outdoor installation

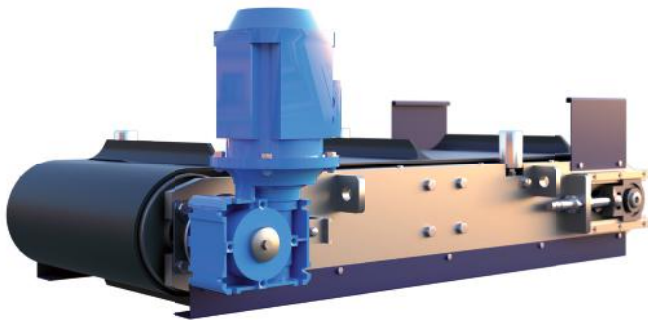
MODEL	OVERBELT SPEED m/sec	MOTOR POWER kW	MAGNET WIDTH mm	LENGTH mm	WIDTH mm	HEIGHT mm
DNE 80/80 L	1,8	2,2	800	1960	1370	590
DNE 80/100 L	1,8	2,2	800	2160	1370	590
DNE 80/120 L	1,8	2,2	800	2360	1370	590
DNE 90/100 L	1,6	2,2	900	2395	1470	650
DNE 90/120 L	1,6	2,2	900	2595	1470	650
DNE 90/140 L	1,6	2,2	900	2795	1470	650
DNE 90/175 L	1,6	2,2	900	3138	1470	650
DNE 90/210 L	1,6	2,2	900	3488	1470	650
DNE 100/100 L	1,6	2,2	1000	2375	1570	680
DNE 100/120 L	1,6	2,2	1000	2595	1570	680
DNE 100/130 L	1,6	2,2	1000	2690	1570	680
DNE 120/120 L	1,7	3,0	1200	2680	1770	710
DNE 120/140 L	1,7	3,0	1200	2880	1770	710
DNE 120/160 L	1,7	3,0	1200	3080	1770	710
DNE 120/210 L	1,7	3,0	1200	3578	1770	710
DNE 140/140	1,5	3,0	1400	2980	1970	780
DNE 140/160	1,5	3,0	1400	3180	1970	780
DNE 140/240	1,5	3,0	1400	3978	1970	780
DNE 160/160	1,5	4	1600	3180	2170	852
DNE 160/240	1,5	4	1600	3980	2170	852



# Suspended Permanent Magnet Separator Self-cleaning Belt - Model DNP

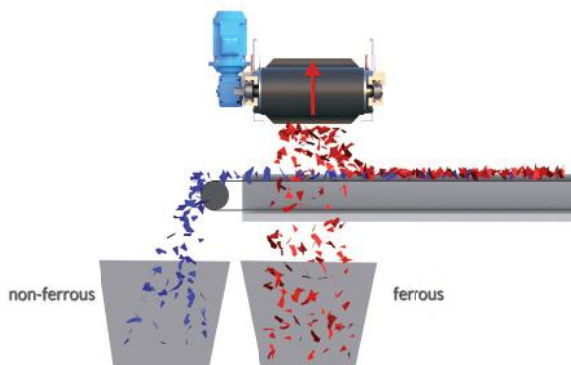
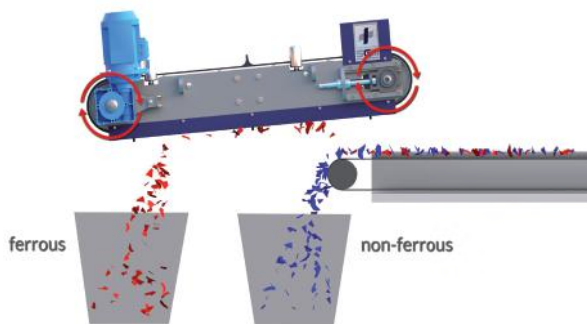


Semi-closed magnetic circuit with permanent magnet blocks between the two polarities for maximum attraction towards the material.



## Optional Features

- RPM belt sensor
- Belt stop buffer sensor
- Protection kit for outdoor installation



MODEL	OVERBELT SPEED m/sec	MOTOR POWER kW	LENGTH mm	WIDTH mm	HEIGHT mm
DNP 50/90	1,4	1,1	1450	870	450
DNP 50/110	1,4	1,1	1830	870	450
DNP 50/130	1,4	1,1	2030	870	450
DNP 50/150	1,4	1,1	2330	870	450
DNP 50/180	1,4	1,1	2530	870	450
DNP 50/200	1,4	1,1	2730	870	450
DNP 50/220	1,4	1,1	1560	1170	635
DNP 65/65	1,7	2,2	1730	1170	635
DNP 65/80	1,7	2,2	1880	1170	635
DNP 65/95	1,7	2,2	2000	1170	635
DNP 65/115	1,7	2,2	2290	1240	635
DNP 75/130	1,7	2,2	1830	1290	635
DNP 80/80	1,7	2,2	2000	1290	635
DNP 80/95	1,7	2,2	2200	1290	635
DNP 80/115	1,7	2,2	2380	1290	635
DNP 80/135	1,7	2,2	2580	1290	635
DNP 80/155	1,7	2,2	2780	1290	635
DNP 80/175	1,7	2,2	2980	1290	635
DNP 80/195	1,7	2,2	2030	1420	700
DNP 95/100	1,7	2,2	2150	1500	700
DNP 100/105	1,7	2,2	2260	1500	700
DNP 100/115	1,7	2,2	2460	1500	700
DNP 100/135	1,7	2,2	2650	1500	700
DNP 100/155	1,7	2,2	2820	1500	700
DNP 100/175	1,7	2,2	3070	1500	700
DNP 100/200	1,7	2,2	3270	1500	700
DNP 100/220	1,7	2,2	2560	1650	700
DNP 115/150	1,7	3	2400	1650	700
DNP 115/130	1,7	3	2560	2050	700
DNP 155/155	1,7	3	2560	2050	700

SGM Magnetics SpA

Separation and Recycling

Via Leno 2/D Manerbio, BS Italy, 0039 0309938400

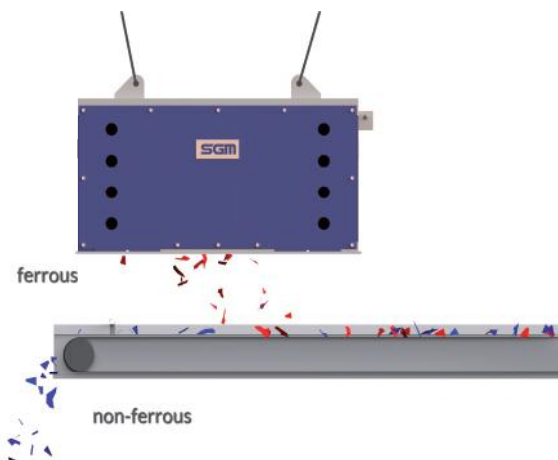
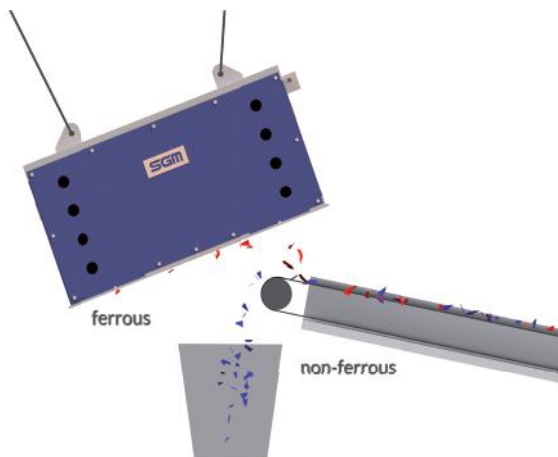
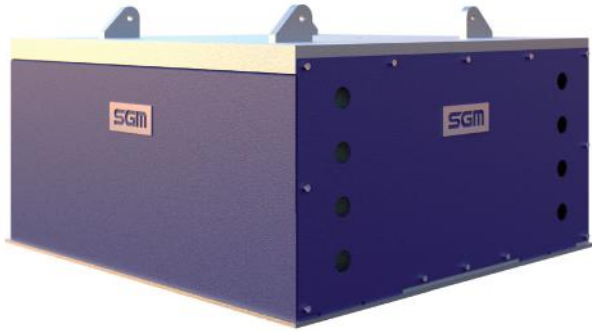
info@sgmmagnetics.com www.sgmmagnetics.com



**SGM**

# Suspended Electro Magnet Separator Stationary Suspended Magnet - Model DBE

# Suspended Permanent Magnet Separator Stationary Suspended Magnet - Model DBP



MODEL	POWER kW	LENGTH mm	WIDTH mm	HEIGHT mm
DBE 60/40	1200	600	400	430
DBE 60/50	1500	600	500	430
DBE 60/60	1700	600	600	430
DBE 80/60	2200	800	600	460
DBE 80/70	2500	800	700	460
DBE 80/80	2900	800	800	460
DBE 90/80	3100	900	800	520
DBE 90/90	3500	900	900	520
DBE 90/100	4000	900	1000	520
DBE 100/100	5000	1000	1000	550
DBE 100/110	5500	1000	1100	550
DBE 100/120	6000	1000	1200	550
DBE 120/120	6500	1200	1200	580
DBE 120/130	7000	1200	1300	580
DBE 120/140	8000	1200	1400	580
DBE 140/140	9000	1400	1400	650
DBE 140/150	9500	1400	1500	650
DBE 140/160	10000	1400	1600	650
DBE 150/160	11500	1500	1600	670
DBE 150/170	12500	1500	1700	670
DBE 150/180	13000	1500	1800	670
DBE 160/180	14000	1600	1800	700
DBE 160/190	14500	1600	1900	700
DBE 160/200	15500	1600	2000	700

MODEL	LENGTH mm	WIDTH mm	HEIGHT mm
DBP 50/40	520	420	150
DBP 50/50	520	520	150
DBP 50/60	520	620	150
DBP 50/70	520	720	150
DBP 60/60	620	620	200
DBP 60/70	620	720	200
DBP 75/70	770	720	220
DBP 75/80	770	820	220
DBP 75/90	770	920	220
DBP 75/100	770	1020	220
DBP 75/110	770	1120	220
DBP 75/120	770	1220	220
DBP 90/100	920	1020	260
DBP 90/120	920	1220	260

