# **Permanent Magnet Head Roller**



# At A Glance



Installed at the discharge end of flat or troughed belt conveyors, permanent magnetic head rollers are designed to remove tramp iron that cannot be removed by either a plate or overband magnet because of the conveyed product depth.

For the best possible protection against tramp metals use permanent magnetic head rollers in conjunction with plate or overband magnets.

Permanent magnetic head rollers are available in two magnetic materials: standard strength, which uses ceramic magnetic material; and high strength, which uses high intensity Rare Earth magnetic material. The latter is the most popular due to its high contamination removal efficiency.

# <image>

# **Benefits**

- No running costs
- Allows difficult products to be screened
  Designed for 24 / 7 operation

3 inches\*, 300 Series = 4 inches\*

High volume capacity
Designed for 24 / 3
Removes large to medium sized contamination

# Performance

| Magnetic Performance<br>Performance reading | 3,000 Gauss<br>On roller sur |
|---------------------------------------------|------------------------------|
| Magnetic field depth                        | 200 Series =                 |
|                                             | 400 Series =                 |
| Temperature                                 | -40°F/ +17                   |

# Suitability Suitable Products All conveyable products, wood chip, biomass, recyclables, aggregates, coal etc Suitable Location Conveyor head roller

'face\*

SOF

5 inches\*



Magnetic Material Cover End Cheeks Shaft Rare Earth Neodymium Iron Boron - (NdFeb) 304 grade stainless steel Painted mild steel Mild steel

# Cleaning

The unit is continuously self cleaning. Contamination enters the roller's magnetic field where it is attracted and held firmly on the belt. When it reaches the underside it passes out of the magnetic field and is discharged separately from the conveyed product, which continues on its normal trajectory.

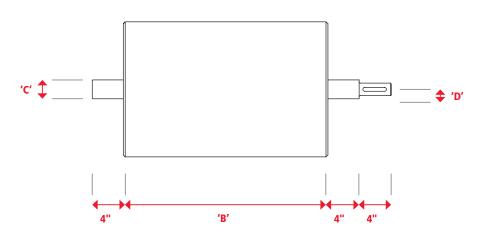
# Options

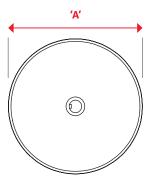
- Ceramic magnetic material
- Crowned detail
- Rubber lagged diamond cut cover
- ed detail
- Protective paint coating
  - Atex Approved



# Permanent Magnet Head Roller







| Part Number (200 Series) | Diameter A (inches) | B (inches) | Dia. C (inches) | D (inches) | Weight (lbs) |
|--------------------------|---------------------|------------|-----------------|------------|--------------|
| HRN2140                  | 8                   | 16         | 1.6             | 1.2        | 154          |
| HRN2150                  | 8                   | 20         | 1.6             | 1.2        | 176          |
| HRN2160                  | 8                   | 24         | 1.6             | 1.2        | 209          |
| HRN2170                  | 8                   | 28         | 1.6             | 1.2        | 242          |
| HRN2180                  | 8                   | 31         | 1.6             | 1.2        | 286          |
| HRN2190                  | 8                   | 35         | 1.6             | 1.2        | 319          |
| HRN21100                 | 8                   | 40         | 1.6             | 1.2        | 352          |

| Part Number (300 Series) | Diameter A (inches) | B (inches) | Dia. C (inches) | D (inches) | Weight (lbs) |
|--------------------------|---------------------|------------|-----------------|------------|--------------|
| HRN3140                  | 12                  | 16         | 2               | 1.6        | 242          |
| HRN3150                  | 12                  | 20         | 2               | 1.6        | 286          |
| HRN3160                  | 12                  | 24         | 2               | 1.6        | 330          |
| HRN3170                  | 12                  | 28         | 2               | 1.6        | 374          |
| HRN3180                  | 12                  | 31         | 2               | 1.6        | 418          |
| HRN3190                  | 12                  | 35         | 2               | 1.6        | 462          |
| HRN31100                 | 12                  | 40         | 2               | 1.6        | 506          |

| Part Number (400 Series) | Diameter A (inches) | B (inches) | Dia. C (inches) | D (inches) | Weight (lbs) |
|--------------------------|---------------------|------------|-----------------|------------|--------------|
| HRN4040                  | 16                  | 16         | 2.4             | 2          | 484          |
| HRN4050                  | 16                  | 20         | 2.4             | 2          | 542          |
| HRN4060                  | 16                  | 24         | 2.4             | 2          | 660          |
| HRN4070                  | 16                  | 28         | 2.4             | 2          | 748          |
| HRN4080                  | 16                  | 31         | 2.4             | 2          | 836          |
| HRN4090                  | 16                  | 35         | 2.4             | 2          | 924          |
| HRN40100                 | 16                  | 40         | 2.4             | 2          | 1012         |

For non-standard sizes, please contact sales@eclipsetoolsinc.com



