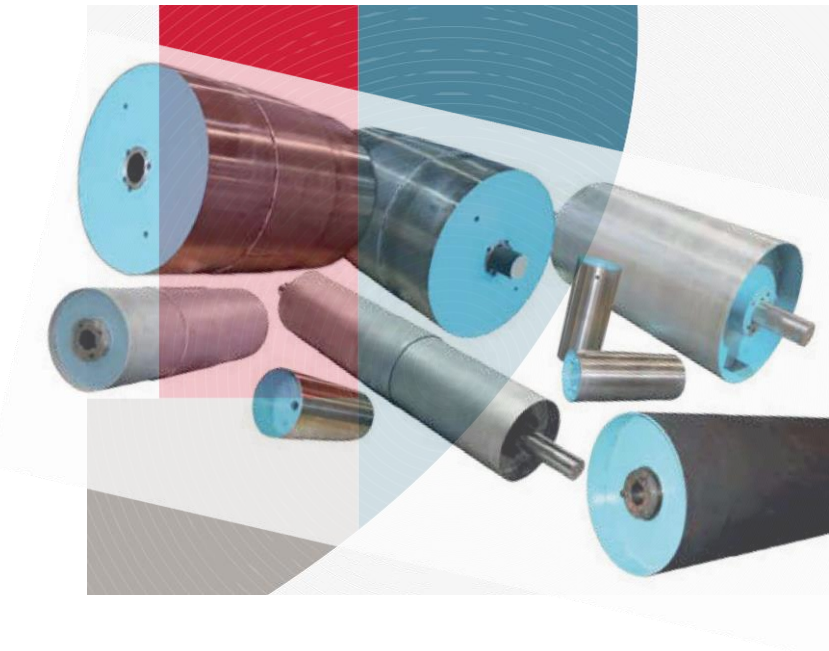


# Magnetic Head Pulleys

**Bunting's Magnetic Head Pulley replaces the standard head pulley of a conveyor to provide continuous separation of disruptive tramp ferrous metal from a conveyed product, it is simple to install and requires minimal maintenance.**



The Magnetic Head Pulley replaces the head pulley of a conveyor and is available as either a Permanent or Electro model. In both designs, the magnetic field covers the entire 360-degree circumference of the pulley, ensuring that conveyed material is fully exposed to the magnetic extraction force at all times.

The Magnetic Head Pulleys are custom built and available in a wide range of diameters and widths. The diameter and width of the pulley is determined by the installation and application.

The Magnetic Head Pulley can be equipped with optional rubber lagging to meet particular specifications.

Magnetic Head Pulleys are commonly used as a second stage metal separator, specifically for the highest demand of ferrous metal recovery or for assuring the quality of non-magnetic material.

The tramp ferrous metal discharge happens on the conveyor's return, the magnetically susceptible metal is moved out of the magnetic field, beyond the centre line of the pulley, and falls, under gravity, into a designated collection area.

To achieve an enhanced separation, a non-magnetic adjustable diverter plate can be positioned beneath the pulley.

## Models

Magnetic Head Pulleys are available in a wide range of diameters and widths to suit a wide variety of applications and installation requirements. The magnetic field is either produced using a permanent magnet or an electromagnetic coil.

### Magnetic Head Pulleys - Permanent

Ideal for applications requiring the removal of nails, screws and bolt-sized tramp ferrous metal. The permanent magnet is either constructed from standard-strength Ceramic Ferrite or high-strength Rare Earth magnets. Ceramic Ferrite models produce deep magnetic fields and are ideal for the recovery of large tramp metal, whilst the magnetic field of the Rare Earth design is shallower but more intense, enabling the capture of small ferrous metal particles.

In both designs, each of the permanent magnetic blocks are individually mounted onto a high permeability steel back bar and fitted with a heavy-duty stainless-steel crowned face cover.

### Magnetic Head Pulleys - Electro

Ideal for the separation of larger or heavier ferrous metals. The extremely heavy-duty design suits difficult and arduous environments such as found in mining and recycling operations. The internal electromagnetic coils are mounted on thick shafts and revolve with the pulley to ensure that the conveyed product is exposed to the strong magnetic field at all times when energised.

A transformer rectifier set is supplied with the Electro Magnetic Head Pulley. For applications where there is a need for selective separation, an optional transformer rectifier set is available with a variable DC voltage (from zero to full voltage).

## Applications

- Quarrying & Mining
  - Installation on Mobile Crushers, Screens and Shredders
  - In quarries and mining operations to protect crushers and screens
- Recycling:
  - Within MRF (Material Recovery Facility) operations
  - Cleansing wood, especially waste wood containing nails, screws, etc
  - Recovering ferrous metals in municipal solid waste recovery plants
  - Removing ferrous contamination from Cullet (crushed recycled glass)
  - Recovery of ferrous metals from kerbside collected waste
  - Separation of ferrous metals in skip waste
  - Ferrous metal recovery from steel slag
- Foundries:
  - In metal foundries to either reclaim ferrous metals or clean sand for reuse;
- Food
  - Removing ferrous metal contamination from conveyed grain and dry granular food;



## CLIENT SAMPLE TESTING FACILITY

Bunting has a sample testing facility and a mineral testing laboratory based in the UK, with experienced staff to ensure that the most suitable and cost-effective machinery is recommended for each application. Our testing facility houses a range of equipment, representing smaller scaled versions of our industrial product range allowing accurate scale up to industrial capacities.

*Bunting has over sixty years experience providing innovative magnetic solutions to industries involved in recycling, demolition and reclamation, mining and quarrying, food processing, ceramics production and powders and minerals processing. The Bunting range of systems are known for their high performance and reliable operations.*

