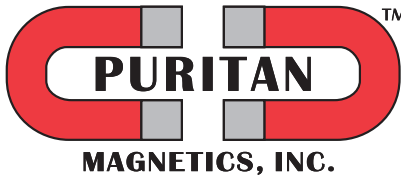


**Magnetic Protection  
for Products & Equipment**

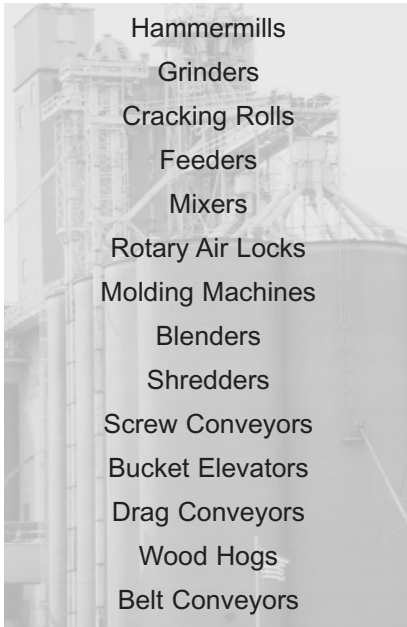


Puritan offers a wide range of magnetic separation products for capturing, controlling and removing ferrous tramp metal contaminants from products and processing systems. Puritan's magnetic separation products are available in standard sizes and strengths with effective designs to meet most conditions and applications. Special designs, and engineering assistance is available for difficult applications.

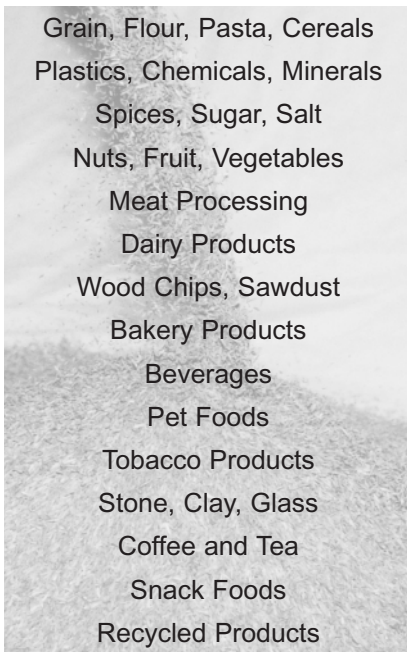
Puritan's magnetic separation products are designed for rugged use and easy installation in mechanical, gravity, or pneumatic conveying systems. Optimum performance is achieved when placed at proper locations within the processing system.

## A partial list of magnet applications

### Equipment Protection



### Product Protection



## Quality Features of Puritan Separation Magnets

- E-Z CLEAN™ and POW-R CLEAN™ designs for minimum labor effort
- Maximum permanent magnetic strength to resist demagnetization
  - Rare earth, alnico, ceramic, and electromagnetic designs
  - Positive seal, hinge, and latch designs
- Stainless steel, all-welded, rugged construction
  - Sanitary constructions options
- Standard and non-standard sizes and designs available with 316L stainless steel and other alloys
  - High capture and hold magnetic surfaces
  - Pre-engineered for fast field installation
  - Custom inlet/outlet transitions available
- Total commitment to quality backed by a staff of magnet technicians with over 100 years of experience

## Unlimited Warranty on Magnetic Strength

- Puritan magnetic designs resist demagnetization
- Permanent magnetic design will not shut down during a power failure
  - Little or no maintenance, except for periodic cleaning

Note: Puritan magnets will retain their full magnetic strength unless subjected to extreme adverse conditions or used improperly. Contact Puritan for detailed information.

## Magnetic Materials Used in Puritan Permanent Type Separation Products

### Rare Earth Magnets

- ▶ 10 times higher energy than ceramic, and can have 25 times the holding value
- ▶ Can handle high flow rates with optimum capture, especially on ferrous fines
- ▶ Delivers optimum separation performance for size, thus allowing reduction in magnet weight and size
- ▶ Puritan products utilize the highest grade magnetic materials available
- ▶ Available in Neodymium-Iron-Boron and Samarium Cobalt

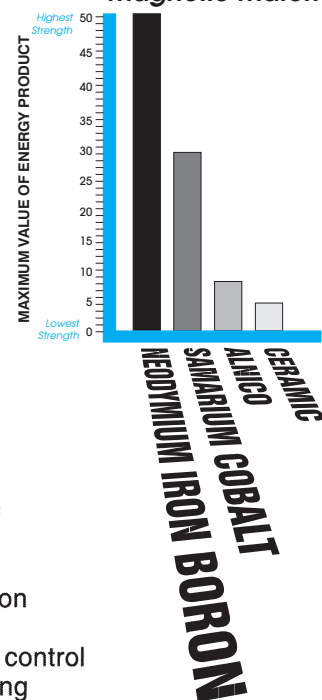
### Alnico Magnets

- Good magnetic reach out for capture of contaminants
- Can be used effectively up to 1000° F
- Separation capabilities are similar to ceramic

### Ceramic Magnets

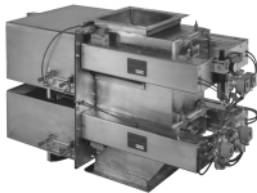
- Offer good design flexibility in most separation applications
- Provide a strong, dense field for capture and control
- Holds their magnetic strength forever, resisting demagnetization

Relative strength of magnetic materials



\* Trade names applied for.

# Custom Magnet Designs



5 Row POW-R CLEAN™ Drawer Magnet



30" x 45" Dual Acting POW-R CLEAN™ Drawer Magnet



Double Rotating Drum Magnet with Vibratory Feeder

## Plate Magnets

*Used in applications involving angled spouts or suspended over conveyors*

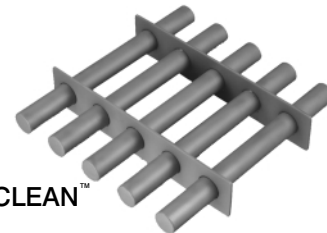
- Rare earth or ceramic designs
- Trapfaced: Single Trap™, Twin Trap™
- Available in a wide range of strengths
- All stainless steel, welded construction
- Replaceable wear surface options
- Special designs available
- E-Z CLEAN™ or POW-R CLEAN™ options



## Tube and Grate Magnets

*Used directly in the product stream for optimum separation within the flow*

- Rare earth, ceramic, and alnico designs
- Optional tube spacing
- All stainless steel, welded construction
- E-Z CLEAN™ or POW-R CLEAN™ options available
- Sanitary construction options



## Hump Magnets

*Used in gravity flow or pneumatic applications forcing product flow into the magnetic fields*

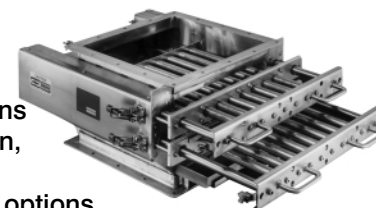
- Rare earth or ceramic designs
- Dust tight, food grade gasketing
- E-Z CLEAN™ or POW-R CLEAN™ options
- All stainless steel, welded construction
- Available in a wide range of plate magnet styles and strengths
- Sanitary construction options



## Drawer Magnets

*Used in gravity flow lines for quick access to magnets*

- Rare earth and ceramic designs
- Single, double, and multiple drawer options
- Pre-engineered for fast field installation
- All stainless steel, welded construction
- E-Z CLEAN™ and POW-R CLEAN™ options
- Dust tight construction, food grade gaskets
- Sanitary construction options
- Rear access door for inspection and maintenance



## Angled Spout Magnets

*Used for unobstructed product flow in spouts and lines*

- Rare earth or ceramic designs
- All stainless steel, welded construction
- Strong magnetic field covers product flow
- E-Z CLEAN™ and POW-R CLEAN™ options
- Custom transitions available
- Sanitary construction options



## Liquid Plate and Trap Magnets

*Used in liquid and slurry applications*

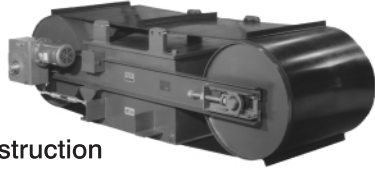
- Rare earth, ceramic, and alnico magnet designs
- Magnetic tube or plate style options
- Tri-clamp, weld ends, bevel seat, John Perry and IDF line connections
- E-Z CLEAN™ options available
- Sanitary construction



## Suspended Belt Magnets

*Used over trough or flat belt conveyors to quickly snap tramp metal out of product flow*

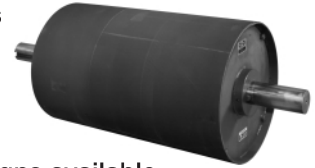
- Deep reaching magnetic field
- Permanent magnet and electromagnetic designs
- E-Z CLEAN™ and POW-R CLEAN™ options
- Heavy duty support frame option
- Rugged all welded construction
- Several mounting options available



## Head Pulley Magnets

*Used with belt conveyors to continuously remove and discard tramp metal from product flow*

- Rare earth or ceramic options
- Maintenance free
- Radial and axial magnetic design
- Flat faced, crowned, and lagged options
- Sizes to fit most conveyors
- Fixed or removable shaft options
- Magnetic take-off rails available
- Special shaft and hub designs available



## Vertical Spout Magnets

*Used in vertical flow products for difficult, high volume applications where bridging and choking occur*

- Rare earth or ceramic designs
- E-Z CLEAN™ or POW-R CLEAN™ options
- 2x and 4x powered for intense magnetic field
- All stainless steel, welded construction
- Sanitary construction options
- Custom transitions available



## Rotating Drum Magnets

*Used where continuous product cleaning is necessary in high volume applications*

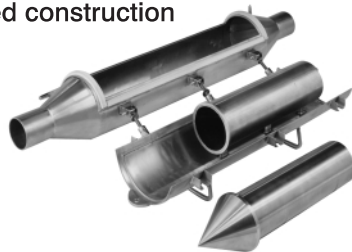
- Rare earth and ceramic options
- Continuous POW-R CLEAN™ design
- Dust tight design
- All stainless steel, welded construction
- Motor driven
- TEFC or explosion proof motors available



## Air-Vey™ Magnets

*Used in dilute phase pneumatic systems for tramp metal removal*

- Rare earth or ceramic designs
- All stainless steel, welded construction
- Easy access cleaning
- E-Z CLEAN™ options
- Easily installed with compression couplings
- Strong magnetic field
- Covers entire cross section of product flow



## Material Handling Magnets

*Contact PURITAN for all your other magnetic needs*

**Magnetic Conveyors**  
**Magnetic Rails and Pulleys**  
**Magnetic Blank Fanners**  
**Lift Magnets**  
**Magnetic Hand Tools**  
**Magnetic Floor and Road Sweepers**  
**Holding and Fixturing Magnets**  
**Magnetic Materials: Rare Earth, Ceramic, Alnico, and Flexible Rubber**  
**Electromagnets and Power Supplies**  
**Electronic Equipment**  
**Custom Magnetic Designs and Services**

For technical assistance or to order  
**1-800-SUREMAG™**  
Represented by:

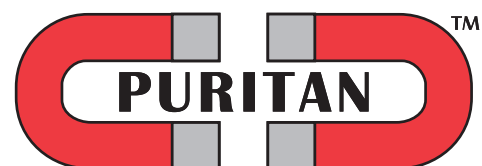
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*Solutions To Your Magnetic Needs*



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