Catalog No. 2000



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

Hammermills Grinders Cracking Rolls Feeders Mixers Rotary Air Locks Molding Machines Blenders Shredders Screw Conveyors Bucket Elevators Drag Conveyors Wood Hogs Belt Conveyors

Product Protection

Grain, Flour, Pasta, Cereals Plastics, Chemicals, Minerals Spices, Sugar, Salt Nuts, Fruit, Vegetables Meat Processing Dairy Products Wood Chips, Sawdust Bakery Products Beverages Pet Foods Tobacco Products Stone, Clay, Glass Coffee and Tea Snack Foods Recycled Products

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 conditons 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.



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

Vertical Spout Magnets

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

Air-Vey[®] Magnets

- 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



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

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



Material Handling 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



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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**

Head Pulley Magnets