

**Material Handling Magnets** 



Puritan offers a wide range of permanent and electro type magnets, components, and devices for holding, lifting, conveying, and other material handling applications. Puritan's magnetic equipment is available in standard sizes and strengths. Special designs, and engineering assistance are always available for difficult applications.

Puritan's magnetic designs will always deliver optimum performance when properly used for the application. If you are in doubt selecting the proper magnet or it's use, please send us a sketch and available information on the application. Your request will receive our prompt attention.

# A Partial List of Magnet applications

Holding

Positioning

Fixturing

Conveying Steel Products

Press Feed Mechanisms

Paint Racks

Loaders/Unloaders/Sorters

Separate (Fan) Steel Blanks

Hand Tools

Lift Applications

**Door Closures** 

Magnetic Sweepers

Coolant Filters

Scrap Handling

Part Orientation and Control

**Turnover Devices** 

Masking

**Automation Systems** 

Medical Devices

Equipment and Product Protection

#### **Quality Features of Puritan Material Handling Magnets**

- · Rare earth, alnico, ceramic, and electromagnetic designs
- Heavy duty construction to meet most application needs
- Dependable performance for automation, conveying,

supporting, stacking/de-stacking, and other handling systems

- High magnetic "hold" contact surfaces
- Designs have been developed and proven in thousands of O.E.M. and production applications

#### **Unlimited Warranty on Magnetic Strength**

- · Puritan's magnetic designs resist demagnetization
- Permanent magnetic designs will not turn off during a power failure
  - · Little or no maintenance needed
  - 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 Magnetic Devices Rare Earth Magnets

- 10 times stronger than ceramic, and can have 25 times the holding value
- Designed magnetic circuit provides highest energy output
- Delivers optimum performance for size, thus allowing reduction in magnet weight and size
- Available in Neodymium-Iron-Boron and Samarium Cobalt

#### **Alnico Magnets**

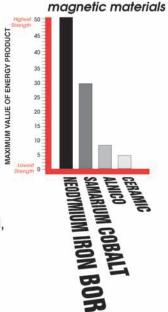
- Good magnetic "reach out"
- Can be effectively used up to 1000 degrees F

#### **Ceramic Magnets**

- Offer good design flexibility
- Can be provided in assemblies with drilled, tapped, and through holes
- Available with special tabs and mounting
- Hold their magnetic strength forever, resisting demagnetization

#### **Electromagnets**

- Low voltage, concentrated, maximum holding power at continuous duty cycle
- Responsive in automated applications
- Ruggedly constructed as a welded assembly and/or high temperature epoxy encapsulation
- Remote control or manually operated
- Ideal for specialized applications



Relative strength of

# **Custom Magnetic Designs**



Overhead / Inverted Convey Systems



**Table Top Conveying Systems** 



**Automatic Ferrous Part Separator** 

## Conveyors



Magnetic and non-magnetic designsTransfer scrap or parts to and from

stamping presses

- Remove chips from metal working machinery
- Automate existing systems
- · Available in belt and belt-free designs
- Custom configurations including horizontal, dogleg, incline, and low profile
- Ceramic and rare earth component options
- Stacking and destacking systems



# Conveying Componenets



- Modify existing systems
- · Stabilize moving parts
- Automate systems
- · Rails and pulleys available in various strengths
- Pulleys and rails are available in a wide range of lengths and diameters
- En masse conveying components also available
- Ceramic, rare earth, and electro magnetic options
- Tabletop, mat top, cable, and other special rail designs are available







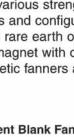


- Improve employee safety in manual blank handling operations
- · Eliminate double blanks
- · Available in various strengths
- Custom sizes and configurations
- · Ceramic and rare earth options
- · Permanent magnet with on/off switch
- Electromagnetic fanners available





Manual On / Off





Permanent Blank Fanners

# Floor and Road Sweepers





- Remove nails and other unwanted ferrous materials from floors, parking lots, roadways, and runways
- Various styles and strengths to chose from
- Fork truck mounted models
- Towable models
- Permanent and electromagnetic designs
- Simplified methods of cleaning



# **Electro Magnets**

- Automated parts transfer
- · Temporary holding and fixturing
- Power supplies provide quick cycling required for automated equipment
- Standard round, square, and rectangular sizes available
- · Power supplies with various control options



## **Lift Magnets**

- · Pick and place steel objects
- · Lift dies, molds, structural steel, and steel plates
- · Permanent magnet requires no external power source
- Standard sizes available with lifting capabilities of 800-6000 lbs.
- · Custom sizes and configurations available
- Battery powered and electric lifts available
- · Remote control options available



## **Additional Products and Services**

**Holding and Fixturing Magnets** 

Magnetic Filters

**Magnetic Hand Tools** 

Custom magnet designs to meet specific customer needs

Engineering and product testing

**Custom sheet metal fabrications** 

Magnetic separation equipment to purify products and protect equipment

For technical assistance or to order

1-800-SUREMAG"

Represented by:

#### 1-800-787-3624

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