



# Metalworking

EQUIPMENT FOR THE METALWORKING INDUSTRY





### Coolant Handling and Recycling

Long known for the development of magnetic equipment to process and handle ferrous materials, parts, scrap and waste, Eriez offers a full range of fluid management equipment.

Eriez' equipment can extend the useful life of cutting fluids, improve their performance and reduce overall coolant costs by as much as 75%.

### Magnetic Equipment

Magnetic equipment handles all types of steel material throughout the plant. Lifting magnets move and position steel plate, sheet and tubes or fabrications around a shop, while magnetic conveyors easily remove steel chips and swarf from machine tool sumps.

### Feeders and Conveyors

Eriez vibratory feeders and conveyors are capable of moving high volumes of raw materials or providing precise metering.



## TSUBAKI AUTOMOTIVE

**"The Eriez Sump Cleaner literally paid for itself in the first use."**

"With the Eriez Sump Cleaner, it now takes two hours to do the complete job, where it used to take 8 to 11 hours per machine. We re-use the filtered oil at least one time over, which saves us 50 percent on oil consumption. We save almost \$70,000 per year in cutting oil alone. Add in labor savings and reduction in downtime and the total payback is over \$150,000 per year."

# Fluid Management

Eriez offers fluid management solutions to remove chips, tramp oils, and fine particulate, then replenish those used cutting fluids. Equipment maximizes coolant effectiveness and longevity, improving machine tool productivity and reducing disposal costs.



## Applications

- Machining
- Conventional Grinding
- Creep Feed Grinding
- Super Abrasive Machining
- Water Jet Cutting
- Parts Washing



### Oil Skimmers

- Removes surface oils
- 1" and 3" models
- Multiple belt lengths and materials
- Oil removal rate: 1.5 GPH



### Tank Side Coalescer

- Allows oils to naturally rise outside a turbulent sump
- 15-gallon drum with an adjustable skimmer
- Process Rate: 1.5 GPM



### Portable Coalescer

- Removes free oils and fines particulate
- 111 sq. ft. of coalescing area
- Services multiple machines tools
- Process Rate: 1-3 GPM



### Concentration Controls

- Mixing units to balance concentrate
- Refractometers to measure concentrate



### Portable Centrifuge

- Removes free and emulsified tramp oils
- Built in clean coolant discharge pump
- 5-gallon oil container with fluid level detector
- Process Rate: 1-4 GPM



### Low-Speed Centrifuge

- Separation to 15 microns
- Single and double bowl models
- Multiple models and pump pressures
- Process Rate: Up to 20 GPM per bowl



### Drum Top Vacuum

- Machine tool sump cleaning
- Air venturi vacuum generator
- Positive sealing mechanical float for drum overflow protection



### Sump Cleaner

- Vacuums chips from the sump
- Many portable models
- Capacity: up to 1,000 gallons



### SumpDoc Inline Recycling and Filtration

- Clean sumps with no interruption to machining operation
- Removes chips, oils, and fines
- Replenish sump with clean fluid

# Material Handling & Metal Separating

Our lifting magnets safely lift and transfer steel and iron of any shape and weight quickly without slings, hooks or cables.

Eriez also offers magnetic equipment to remove ferrous chips, parts and fine contaminants.

## Applications

- Lifting
- Sheet Metal Handling
- Metal Separation



## Lifting Magnets



### Safehold RPL

- Super compact footprint
- Rare Earth permanent magnets
- Five models available
- Capacity: 250 to 5,000 lbs.



### Safehold XPL

- Manually operated for flats or rounds
- Rare Earth permanent magnets
- Easy to operate handle
- Six models available
- Capacity: 300 to 3,500 lbs.



### Safehold APL

- Hands-free operation
- Crane operated on/off mechanism
- Four models available
- Capacity: 600 to 3,800 lbs.



### Safehold EPL

- Highest rated capacity on the market
- Permanent lifting magnets require no power supply
- Four models available
- Capacity: 450 to 7,500 lbs.



### Safehold MPL

- AC operated permanent lift magnet
- No DC converters or batteries needed
- Pendant Control available
- No risk of dropping load in event of power failure
- Capacity: 3,000 lbs.



### Burn Table Magnets

- Fast, efficient removal of multiple cut parts
- Keeps personnel off table
- Eliminates manual handling of heavy parts
- No dropped parts due to power failure



### Electro Lift Magnets

- DC and AC electrically operated lift magnets
- Round, BiPolar, and multiple unit systems
- Many models available

## Magnetic Separators



### Magnetic Coolant Cleaner

- Removes ferrous contaminants in fluid
- Ceramic magnets
- Four models, multiple widths
- Processes up to 600 GPM



### Magnetic Drum Separators

- Removes ferrous from other materials
- Ideal for separating ferrous parts from abrasive media
- Wide range of sizes and strengths



### Magnetic Grates

- Extracts small and fine ferrous material
- Used in coolants, media and sand blasting
- Ceramic or rare earth strengths
- Many styles for all applications



### Magnetic Traps

- Removes ferrous in liquid lines
- Capture chips and fines from coolant
- Easily installed in machine tool plumbing system

# Magnetic & Vibratory Material Handling

The use of magnetic and vibratory material handling equipment allows large volumes of chips, small parts and other ferrous materials to be collected and fed at specific flow rates. Multiple designs and models make it easy to find a suitable solution to any of your material handling needs.



## Applications

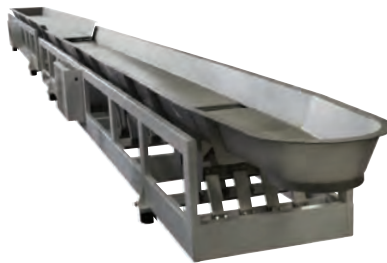
- Feeding
- Conveying
- Screening

## Vibratory Feeders



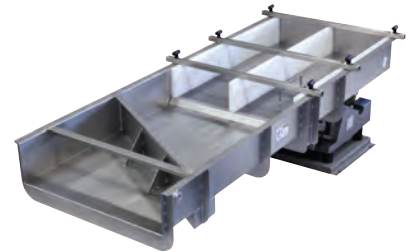
### Electromagnetic Feeders

- Moves any material from low to high volume
- Precision feeding for packaging applications
- High speed and mechanical units available
- Capacity: pounds to tons per hour



### Conveyors

- Handle a wide variety of bulk material with ease
- Single and two-mass vibrating systems available
- Isolated designs for minimal vibration transfer
- Long lengths and low profile designs available



### Screeners

- Separate finish media from parts
- Screen abrasive fines from good media or parts
- Mesh, perforated plate and rod deck screens available

## Magnetic Conveyors



### Chips & Parts Conveyor

- Continuously removes and elevates ferrous materials like chips, turnings and small parts
- Fully enclosed and submersible
- Available in many configurations



### Magnetic Belt Conveyor

- Magnetic conveying solutions for difficult metalworking applications
- Designs based on application
- Convey horizontally, vertically or even upside down



### Magnetic Separation & Conveyor

- Space-saving system to hold materials vertically, inclined or horizontally
- Designs based on application
- Remove large chips and fines from your machining process

## Magnetic Material Handling



### Magna Rolls

- Magnetically feed and handle steel pipe, tubes, bar and sheets
- Located on conveyor lines



### Magnetic Rails

- Hold ferrous parts to conveyor belts at high speeds and steep inclines
- Permanent and electromagnetic models



### Magnetic Sheet Fanners

- Magnetic circuit makes light or heavy-gauge steel separate and fan easily
- Available in 3 strengths and four heights



# ERIEZ

**GLOBAL LEADER IN SEPARATION TECHNOLOGIES**

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