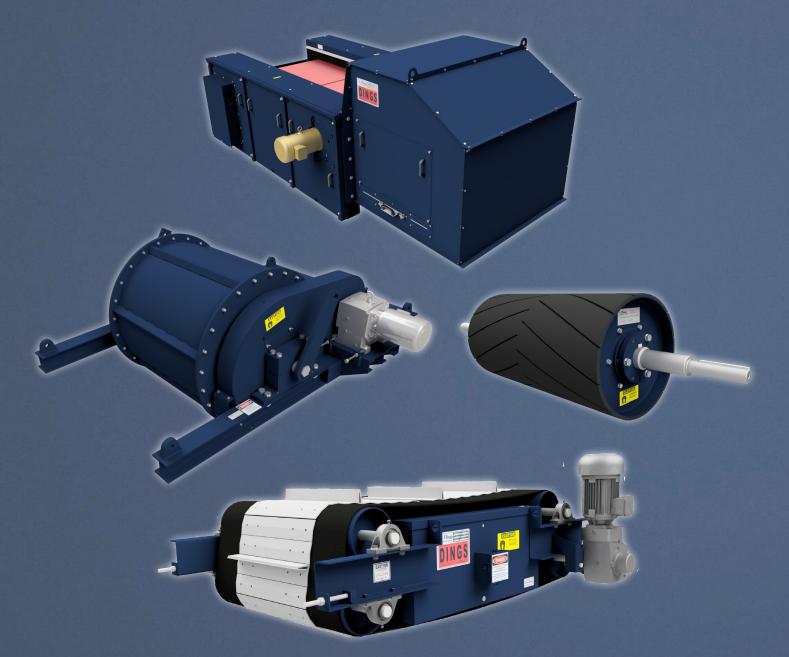
DINGS CO. MAGNETIC GROUP MAGNETIC SEPARATION FOR RECYCLING APPLICATIONS



PREVENT DAMAGE TO PROCESSING EQUIPMENT & COSTLY DOWNTIME RECOVER VALUABLE FERROUS AND NON-FERROUS METAL GENERATE INCOME - ENSURE PRODUCT PURITY

www.dingsmagnets.com

CROSSBELT & INLINE MAGNETS

Electromagnets



- > 20 Year Warranty on coil burnout
- Balanced magnetic circuit
- Endless multi-ply rubber belt with hot vulcanized 1" cleats for superior adhesion (self-cleaning models)
- Terminal connection box is NEMA 4 weather tight
- Stainless steel bottom and center wear plate provides extra protection in the main impact area

20 YEAR WARRANTY

Our electromagnet coils are wound with an anodized aluminum strap; an exclusive design that generates more magnetism than any other on the market and exceeds Class "H" insulation rating! This design outlasts and outperforms 'conventional' round wire coils that can lead to coil burnouts.

Dings Electromagnetic Coils



Oil flow Anodized aluminum strap

Dings Rectifiers

All electromagnets require a DC power supply. Rectifiers converts alternating current (AC) from your local power source to the necessary direct current (DC) needed by electromagnets.



Maintenance-free, overload capacity for short infrequent periods and corrosion protection in extreme environments

Permanent Magnets

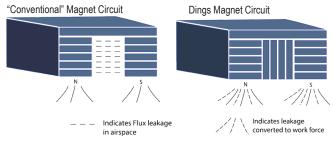


- ► Guarantee Lifetime Warranty on magnetism
- Endless multi-ply rubber belt with hot vulcanized 1" cleats for superior adhesion (self-cleaning models)
- Durable and compact design makes for easy install in portable plants
- ► No power supply needed for magnet
- Maintenance-free design (stationary models)

LIFETIME WARRANTY ON MAGNETISM

We designed our overhead permanent magnets with patented Dings Flux Control (DFC) Circuit Design. DFC eliminates internal leakage between magnetic poles and improves separating performance. The overall strength of the magnet field is stronger, extended deeper and pattern is more uniform.

Dings Flux Control Diagram



Stainless Steel Frame Self-Cleaning Permanent Magnets have a non-magnetic laser cut stainless steel frame. This prevents ferrous metals from collecting on the frame, minimizing cleaning and extending belt life

► Dings Overhead Magnets have penetrating, deep magnetic fields that remove more metal contaminants before they can cause damage to your belts, crushers, conveyors, screens, pulverizers, grinders and other expensive equipment. Dings magnets are engineered with optimum performance reliability and manufactured with rugged construction ensuring reduction in production downtime and significant decreases in costs for repairs and maintenance. Our quality magnetic separators are built to meet the specific needs when crushing concrete and/or excavating aggregate.

EDDY CURRENT SEPARATOR

Dings Eddy Current Separator Eccentric Design

Separates Fractional-Sized Ferrous Metals

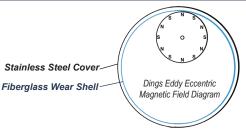


Deep magnetic field increases non-ferrous recovery
Rare earth magnets provide high strength & long life
Generate Income by recovering non-ferrous metals

- SAVE on costs of manual sorting
- The Dings Eddy Current Separator Eccentric's design allows ferrous metal that made it past the magnetic separator to be released from the belt sooner. This reduces damage to the belt and shell while extending rotor life.
- Higher frequency magnetic pole reversal & maximum magnetic strength provide superior product separation.
- Engineered to withstand severe outdoor environments and dusty, dirty surroundings found at many facilities.
- The wear resistant belt is of high quality, endless polyurethane with corrugated side walls for material containment and long life.
- Lifting lugs are readily accessible for easy handling and removable covers allow access to bearings and belt.
- The wear resistant belt is of high quality, endless polyurethane with corrugated side walls for material containment and long life.

DOUBLE LAYER SHELL PROTECTS KEY COMPONENTS

Dings Double shell layers of fiberglass and heavy duty stainless steel protects the "heart" of the eddy current separator, the magnetic rotor assembly. This provides maximum rotor protection that gives the equipment longer life, lower maintenance and repair costs and simplifies maintenance of the equipment.



- Integrated splitter with inspection doors provide access to splitter and bolt together design allows quick, easy reassemble in field.
- The belt gear motor moves with the take-up for easier belt adjustment and eliminates the need for an adjustable torque arm.
- The conveyor belt take-up assembly is easy to adjust and sealed to eliminate problems associated with dirty environments.
- ▶ Non-standard voltages, custom lengths and heights are available.

DEEP DRAW DRUM

Dings Deep Draw Drum (shown with optional frame and drive)



Powerful, Even Magnetic Field

Lifetime Guarantee on magnetism
Heavy-duty, high-volume ferrous recovery
Choice of axial or radial pole designs
Drums can be fed from multiple positions

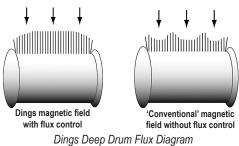
- The Dings Deep Draw Drum's permanent magnet design outperforms electric-powered models and it always operates at top efficiency while maintaining a constant magnetic strength throughout the day.
- Self-cleaning, permanent magnetic separator specifically designed for heavy-duty and highvolume applications.
- Dings Flux Control (DFC) circuit allows the drum to be sized more efficiently for significant cost savings.
- Outer shell has a thick manganese wear cover that can withstand the punishment of continuous pounding by a steady flow of heavy objects.
- Weatherproof, dust-tight construction eliminates moisture in the drum. Only maintenance needed is periodic lube of the bearings, NO oil to fill or maintain.
- Drum can be fed in multiple positions since the internal magnet assembly is adjustable and internal magnet can be manually rotated to adjust magnetic arc position.

LIFETIME WARRANTY ON MAGNETISM

Dings Magnetic Drums are designed with Dings Flux Control (DFC) Circuit, which eliminates leakage that other "conventional" magnet circuits have by strategically placing blocking magnets between the magnetic poles.

DFC circuit improves the overall strength of the permanent magnets in $\underline{3}$ ways:

- 1. The magnetic field is stronger
- 2. The magnetic field extends deeper
- 3. The magnetic field pattern is more uniform



MAGNETIC HEAD PULLEY

Magnetic Head Pulley (shown with optional shaft)



Lifetime Guarantee on magnetism Automatic and continuous separation

★ Easily integrated into existing operation
★ All-welded construction

- Protects processing equipment, ensures product purity & facilitates the collection of ferrous metals
- Cost \$0 (zero dollars) to operate & their permanent magnetic strength is consistent 24/7
- ▶ Optional shaft machined to customer's specifications.
- Shipped ready to install

WHICH PULLEY IS RIGHT FOR YOU?

Since every application has its own specific needs regarding the magnetic depth of field required, Dings is the only company to offer you three different magnetic strengths. THE DFC ULTRA IS OUR STRONGEST PULLEY THROUGH THE ENTIRE BURDEN DEPTH.

HEAD PULLEY MATERIAL TRAJECTORY & STRENGTHS

Dings Standard

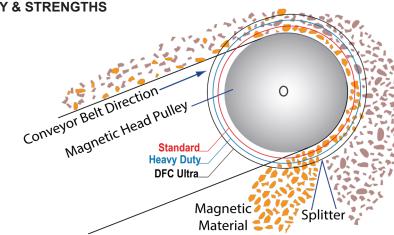
8", 12", 15", 18", 20" & 24" diameters

Dings Heavy Duty

12", 15", 18", 20" 24", 30", 36" & 42" diameters

Dings DFC Ultra

12", 15", 18", 20" 24", 30", 36" & 42" diameters



Magnetic Head Pulleys are permanent magnetic separators that operate as head pulleys on belt conveyors. These self-cleaning magnets remove tramp iron and purify material conveyed in bulk form. When material carried on a conveyor enters the magnetic field surrounding the pulley, pieces of ferrous metal in the material are attracted to the belt. They're held magnetically against the belt until carried to the underside of the pulley, where the belt takes them away from the magnetic field to be discharged. Nonmagnetic material falls away from the pulley in a normal trajectory. Separation is automatic and continuous.



ENGINEERING DRIVEN - CUSTOMER SERVICE FOCUS

CUSTOMER FOCUSED SERVICES

Dings Company Magnetic Group engineering and sales staff work together from our Milwaukee, WI factory to provide outstanding customer service from experts in magnetic separation. We listen to our customers to gain an understanding of their needs and apply our experience in their trade to provide magnetic separation equipment that is sized and positioned for the best possible performance in their specific application.

HEAVY-DUTY CONSTRUCTION

Dings Company Magnetic Group has been providing recycling operations with high quality magnetic separators for over 120 years. Our reputation for robust equipment is valued in recycling applications where low maintenance and reliable operation is essential.

REPLACEMENT PARTS

We offer replacement parts and spare parts for your magnetic separators. Our staff is available to assist in identifying parts needed. Many parts are in stock and available for same day shipment. Ask us about developing a spare parts list for your specific magnetic separators to prevent costly downtime.

ON-SITE SUPPORT

Our factory sales staff and local representatives are available to provide onsite support. Expert advice regarding the positioning, suspension height and maintenance ensures that your magnetic separators are providing optimum performance.

METAL DETECTORS FROM ADVANCED DETECTION SYSTEMS* *A sister company of Dings Co. Magnetic Group

Advanced Detection Systems' SurroundScan Protector HD Ultra 0 0 ANCED DETECTION SYSTEMS PROTECTOR HD ULTRA A sister company of Ding ADVANCED DETECTION SYSTEMS phone: 414-672-0553 www.adsdetection.com

Advanced Detection Systems' SurroundScan Protector HD Ultra is designed and manufactured for recycling applications with 2 times the sensitivity as the Protector HD.

The Protector HD Ultra combines state of the art technology and heavy-duty construction. Our metal detection systems protect processing equipment and prevent costly downtime.



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