



## DEEP DRAW DRUM MAGNETIC SEPARATOR SPECIFICATIONS AND DATA

### DESCRIPTION

Designed for heavy-duty, high-volume ferrous recovery, the Deep Draw Drum is a permanent self-cleaning separator. Its rugged construction is ideal for separating ferrous metal from material such as shredded cars, slag, crushed ore, and ash at mass burn plants. Its tough, weatherproof design is built for operating outdoors or in any severe-duty, dirty, or dusty environment.

This large and powerful magnetic drum has a nonmagnetic outside shell that is driven around a fixed magnet. Ferrous metal is magnetically drawn out of the material feed, held against the revolving shell, and released when it reaches a discharge point beyond the magnetic field.

Although operation is similar, Deep Draw Drums have heavier duty construction than that required for Dings standard magnetic drums. The drum shell is protected by a thick manganese wear cover which can withstand continuous pounding by a steady flow of heavy objects. It greatly extends the life of the drum, and can be replaced in the field if a new wear surface is ever needed.

### SPECIFICATIONS

#### Magnetic Drum Assembly

- Nonelectric design
- Shell speed: 200-250 FPM
- Standard diameters: 24", 30", 36", 42", 48" and 60"
- Widths: 24"-84"

#### Magnet

- Ceramic VIII magnetic material, highest grade of ceramic available. Completely encapsulated inside stainless steel.
- Choice of magnet arc designs:  
Standard — 150° radial pole;  
Optional — 170° radial pole with extended arc  
Fines — 180° lateral agitating pole.
- Patented flux control magnetic circuit.
- Lifetime warranty: magnetic strength is guaranteed within normal tolerances for the life of the installation.
- Operating temperature for ceramic magnets is -40°F through 250°F (-40°C through 120°C).
- Operating temperature for rare earth magnets is 176°F (80°C) or less.

#### Drum shell

- Nonmagnetic 304 stainless steel revolving shell.
- Replaceable manganese steel wear cover with manganese or stainless steel cleats (Option: additional or custom designed cleats.)
- Mild steel heads.  
(Option: stainless steel heads.)
- Split drive sprocket mounted on head.
- Heavy duty ball or roller bearings in heads are self-aligning and sealed.
- Two supporting split shaft clamps.
- Magnet adjusting arm(s). Magnet can be rotated counterclockwise or clockwise to adjust magnetic arc position.
- Weatherproof, dust-tight construction.
- Option: special paint

## **SPECIFICATIONS**

### **Drum with frame and drive**

Includes magnetic drum assembly, standard frame, and drive components, all sized to the application.

#### Frame:

- Horizontal structural steel support frame.
- Four support lugs are furnished on the frame for a suspended installation.
- Options: motion sensor; winch mounted on frame to adjust magnetic arc; custom frame designs.

#### Drive components:

- TEFC gearmotor
- Motor speed, drum sprocket, and motor sprocket are matched to produce the correct rotational speed for the drum diameter.
- Fabricated sheet metal guards.
- Rollerchain.

**Consult factory on any options not listed.**