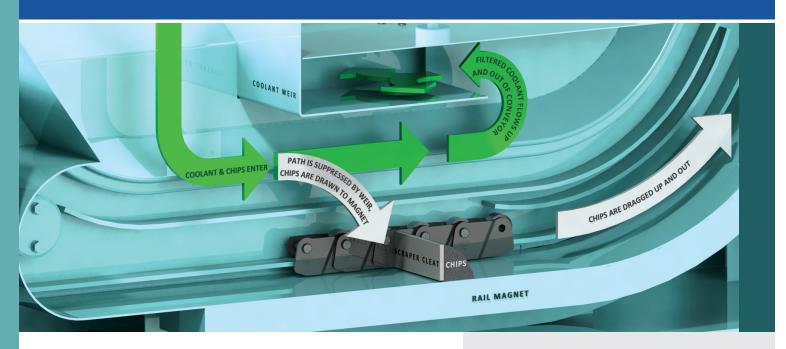


# MAG-DRAG® Magnetic Bed Drag Flight Conveyor



# The Problem

Broken and/or fine cast iron or steel chips in metal-cutting machine tool applications are difficult to remove from coolant.

# The Solution

The Jorgensen MAG-DRAG® magnetic bed drag flight conveyor.

# The Process

Steel or cast iron chips and fines flow with the coolant onto the load section of the conveyor. Gravity causes larger chips to settle to the bottom, while finer chips (still in suspension) are attracted by a series of magnets located underneath the conveyor. All of the chips are then conveyed out by the drag cleats.

# The Benefits

- 1. Reduced build-up of fine chips in clean tank results in less downtime for cleaning.
- 2. Cleaner coolant improves machining accuracy and prolongs tool life.
- 3. Cleaner coolant reduces the costs of coolant replacement and coolant disposal.
- 4. Reduced plugging of through-the-tool or through-the spindle coolant holes reduces the possibility of tool breakage, workpiece damage and unscheduled downtime.

For more information, contact your local Jorgensen representative, or call (800) 325-7705.



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# MAG-DRAG vs. conventional conveyors

# 1. Conventional magnetic conveyors:

A series of magnets attached to the conveyor chain moves material along the top of a stainless steel cover plate. High coolant flow rates cause turbulence which will 'wash" the chips over this type of conveyor and into the clean coolant tank. In addition, many of today's oil-based or water-soluble coolants can hinder the ability of the magnets to carry chips on the surface, causing them to build up and fall back onto the incline of the conveyor.

# 2. Conventional drag flight conveyors:

Fine cast iron or steel chips won't settle in the turbulent coolant and will pass by the conveyor into the clean tank area.

# 3. Conventional hinged steel belt

conveyors: Fine cast iron or steel chips won't settle in turbulent coolant and will pass by the conveyor into the clean tank area. Fines will stick to the metal belt at the discharge end of the conveyor and get carried back into the conveyor where they will pass into the clean tank area or jam the conveyor. The fines can also work their way into the hinge loops of the belt, causing wear and eventual problems.

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