

MAGNETIC

SHEET FANNERS



AUTOMATION

Reduce Costs & Increase Safety While Magnetically Separating Oily, Sticky or Thin Steel Sheets

Permanent and Electromagnetic Sheet Fanners:

- A powerful magnetic field automatically separates sheets
- As the top sheet is removed, the next sheet instantly fans up
- Prevents prying apart sticky, oily, pre-finished or polished sheets
- Eliminates die-damaging double blanking in automated operations

Permanent Magnetic Sheet Fanners:

Permanent Magnetic Fanners handle steel sheets of almost any length, width or shape. The sheets near the top of the stack separate instantly from a 3/4" to 1-1/2" gap, depending on sheet thickness and size.

- Three powerful designs for optimum fanning performance (based on sheet thickness)
- Pre-tapped holes for mounting to your equipment
- Bolt on angle base plate and handle with mounting hardware included
- Durable welded construction

SheetSeeker® - Ergonomic Permanent Magnetic Fanners:

IMI's SheetSeeker® is a breakthrough in magnetic sheet fanner technology. The magnetic circuit is lifted and locked into place for introduction to a stack of sheet steel. Once the stack is in place, the sliding magnet is unlocked and automatically centers on the top of the stack, fanning the sheet stock. As each sheet is lifted away, the magnet indexes down automatically, fanning to the bottom of the stack.

Magnetic PinFanners™ - Permanent Magnetic Fanners:

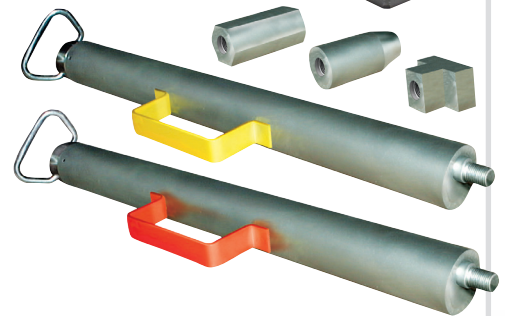
Use pallet mount Permanent Magnetic PinFanners™ with Hex, Round or T-Slot Pallet Pins in Stacking/Destacking, Blanking Lines and Press Feeding applications. PinFanners™ can be used to separate curved edge or odd shaped blanks. PinFanners™ stay right on the pallet, from the blanking line to the press, without any extra set up! Adjustable magnet positions ensure direct contact with the blank for maximum fanning ability. Mounted directly to the pallet, PinFanners™ reduce maintenance down time on blanking lines.

Electromagnetic Sheet Fanners

The on/off capability of Electromagnetic Sheet Fanners provides operator safety during steel blank stacking and unbanding. In automated presses, the electromagnetic fanners can be controlled to operate simultaneously with other destacking equipment. Electromagnetic Sheet Fanners require special IMI power supplies that can provide for operation of single or multiple fanners. These power supplies (see Tech Sheet AG-10B) can be equipped with a variable output to adjust the magnetic strength to handle a variety of metal thicknesses.

- Safe and easy set-up with fanner turned off
- One size unit can handle a variety of metal thicknesses
- Ideal for automated presses

Pictured: (from top to bottom) Permanent Fanner, Sheet Seeker®, PinFanners™ with mounting options and Electromagnetic Fanner.



STANDARD DESIGN WITH VERSATILE MOUNTING FOR EASY INSTALLATION!

- Powerful fanning action • Durable welded construction
- Includes handle, 3" angled base & mounting hardware

Easy to mount design gives you more options to match your application needs. Use the handle and base plate for portable applications, or use the tapped holes to bolt the fanner to your equipment or tooling.

OPTIONS:

- Custom designs and mounting plates available
- Center wear strip for round or odd shaped blanks
- Custom designed wear strips
- Additional handles and bases

Many sizes in stock for fast shipment!

Details Ref. Tech Sheet AG-05A



SHEET SEEKER® - ERGONOMIC PERMANENT MAGNETIC SHEET FANNER

IMI's Sheet Seeker® is a breakthrough in magnetic sheet fanner technology. The magnetic circuit is lifted and locked into place for introduction to a stack of sheet steel. Once the materials are in place, the sliding magnet is unlocked and automatically centers on the top of the stack, fanning the sheet stock. As each sheet is lifted from the stack, the magnet indexes down automatically, fanning to the bottom of the stack.

FEATURES & BENEFITS:

- Powerful, Rare Earth, automatic-indexing magnetic circuit
- Up to 60% lighter than standard sheet fanners with the same fanning strength
- Automatically adjusts downward to ensure optimum fanning down to the last sheet
- Light-weight design and convenient top mounted carry handle allows for user-friendly transport
- Minimum height of 12" with custom designs and options available
- Fans from 30 gauge sheets to 3/16" plate
- Durable stainless steel construction
- Break Away Bar

SPECIFICATIONS:

- Self-centering floating magnet load
- Slide handle locks in upper position
- 3/16" angle base with second carrying handle
- 7/16" diameter mounting holes
- Slide handle for positioning the fanning circuit

MAGNETIC BASE:

The optional magnetic base provides fast set up for blanking and stamping line change over. Simply turn the locking magnet handle to the "OFF" position allowing for easy removal or repositioning of the fanner. The magnetic base holds the fanner securely to steel pallets for operation. To order Optional Magnetic Base add an "M" to the end of the Fanner Part Number.

OPTIONS:

- Magnetic base
- Custom mounting brackets or bases
- Custom circuits for difficult applications
- Extra wear bars for round blanks
- Custom housings for odd shaped blanks
- Round, Hex or T-slot pallet compatible bases



FHD22M

Shown with optional magnetic base.

U.S. Patent No. 6,845,976

NOTE: When selecting a sheet fanner, it's height must be 2 to 3 inches higher than the height of the stack.

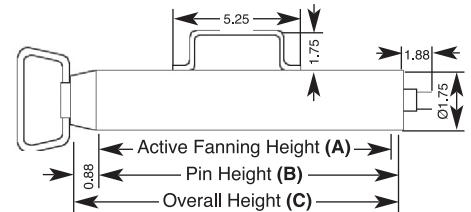
Details Ref. Tech Sheet AG-05A



MAXIMIZE PRODUCTION WITH PALLET-MOUNTED PINFANNERS™

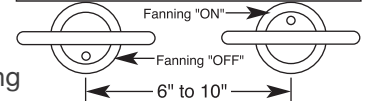
IMI's Magnetic PinFanners™ are designed to separate stacks of steel sheets or blanks on "Hex", "Round" or "T-Slot" pallets. These fanners have dual functionality; they act as guides for aligning parts as they come off the blanking press and also as magnetic sheet fanners that fan, or separate, multiple sized or shaped blanks for the manual or automatic loading of a press.

- PinFanners™ function as both pallet pins and sheet fanners
- Magnetic circuit rotates 180° internally to suppress the fanning action
- Pallet mounted fanners require less maintenance time on the line
- Assured contact with blank to maximize fanner performance
- Works with multiple sizes and shapes of blanks
- Powerful, Rare Earth permanent magnetic circuit
- Standard "Hex Pin", "Round Pin" or "T-Slot" mounting available
- Offset mounting for optimal pin to stack positioning
- Pin Fanners work best when used in North-South Pairs



OPTIONS:

- Custom heights
- Custom mounting



Point the indicator on top of the pins towards the stack to fan the sheets, and away from the stack to stop the fanning action or to remove the fanners.
Details Ref. Tech Sheet AG-05A

ELECTROMAGNETIC SHEET FANNER

Magnetic Sheet Fanners (Separators) are designed to reduce costs and increase safety when destacking steel sheet stock. A powerful electromagnetic field automatically separates the sheets. As fast as the top sheet is removed, the next sheet instantly moves up. Sheet Fanners eliminate die-damaging, double-blanking problems in automated sheet handling operations.

The on/off capability of the Electromagnetic Sheet Fanners provide operator safety during steel blank stacking and unbanding. This on/off control makes cleaning around magnets easier when sheets are not fanned. For automated presses, the electromagnetic fanners are controlled to operate simultaneously with other destacking equipment.

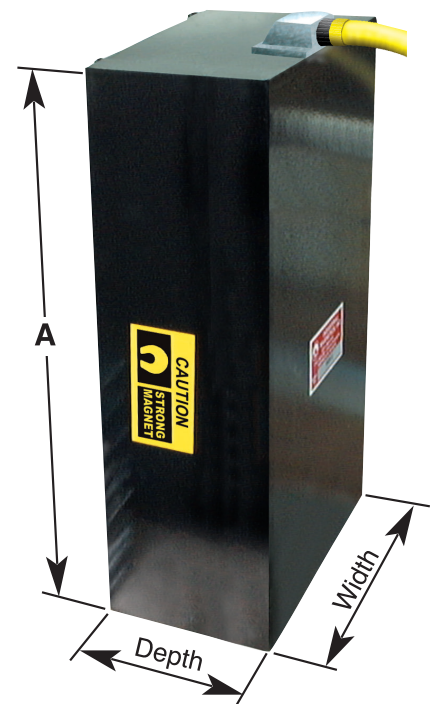
Electromagnetic Sheet Fanners require conversion from AC to DC voltage. IMI power supplies are designed to properly convert voltage and provide for operation of single or multiple fanners. IMI power supplies (see Tech Sheet AG-10B) can be equipped with a variable output to adjust the magnetic strength to handle a variety of metal thicknesses.

BENEFITS:

- Safe and easy set-up with fanner turned off
- One size unit can handle a variety of metal thicknesses
- Ideal for automated presses
- 3 pin automotive-style connection on top of magnet

OPTIONS:

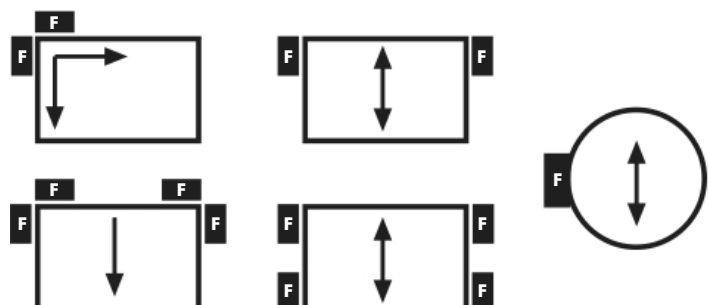
- Custom sizes
- Drilled and tapped mounting holes
- Mating electrical cables
- Alternate electrical connection location
- Externally mounted rectifier for 120 VAC operation
- Power supply



Details Ref. Tech Sheet AG-05A

SHEET FANNER LOCATION GUIDE

1. For best results, locate the fanner at the corners of large sheets and in the center of the width or length on smaller sheets.
2. Fanners placed opposite each other on small sheets will actually float the sheet.
3. Heavy Sheets may require extra fanners to separate corners
4. Arrows represent the best direction for removing the illustrated sheet from the fanner(s).
5. Fanners are indicated with the letter "F".



AIR CYLINDER PERMANENT MAGNETIC FANNER

Air Actuated Sheet Fanners have an air cylinder system that positions the magnet against or away from the face of the fanner for easy and safe removal of the fanner from the stack. Permanent Magnetic Fanners handle steel sheets of almost any length, width or shape. The sheets near the top of the stack separate instantly from a 3/4" to 1-1/2" gap, depending on sheet thickness and size.

Air Actuated Sheet Fanners:

- Reduce costs & increase safety for destacking steel sheet stock
- A powerful, Rare Earth magnetic field automatically separates sheets
- As the top sheet is removed, the next sheet instantly fans up
- Prevents prying apart sticky, oily, pre-finished or polished sheets
- Eliminates die-damaging double blanking in automated operations
- ON/OFF of an electromagnet with the benefit of a permanent magnet
- Allows for mid stack change over

SPECIFICATIONS:

- 3/8 NPT Ports
- 80 - 100 psi - clean dry air required
- Requires control valve for operation (not supplied by IMI)



Details Ref. Tech Sheet AG-05B

AIR SPRING PERMANENT MAGNETIC FANNER

Air Spring Fanners have an air spring system that pushes the magnet inside toward the face of the fanner when air pressure is present. When the air pressure is turned off or disconnected the air spring will deflate and the magnet will move away from the face of the fanner creating air gap that in essence turns the magnet off. This removes the risk of having metal accidentally attracted to the fanner during transportation or stack changeovers.

FEATURES & BENEFITS:

- Powerful, Rare Earth, magnetic circuit
- On/Off capability helps prevent injury when introducing new materials to the fanner
- "Fail-Safe" mode automatically returns the magnet to the "Off" position with loss of air pressure
- Durable stainless steel welded cover construction
- Fans from 30 gauge sheets to 3/16" plate
- On/Off Indicator

SPECIFICATIONS:

- 1/4 NPT Air Connection
- 60 - 100 PSI - Clean dry air required
- Valve Requirement - 3-Way, 2 Position

OPTIONS:

- Custom mounting hole patterns
- Custom circuits for difficult applications



Details Ref. Tech Sheet AG-05B

AIR KNIFE FANNERS

Permanent Magnet Sheet Fanners with Air Knives allow for ferrous and non-ferrous sheets to be separated in stacking/destacking applications. While the magnet force will work with all ferrous metals, the air knives separate all non-ferrous metal by pushing air in between the sheets causing them to rise up from one another.

Permanent Magnetic Fanners handle steel sheets of almost any length, width or shape. The sheets near the top of the stack separate instantly.

Air Knife Sheet Fanners:

- Reduce costs & increase safety for destacking ferrous and non-ferrous sheets
- A magnetic field automatically separates ferrous sheets
- Powerful air knives automatically separate non-ferrous sheets
- As the top sheet is removed, the next sheet instantly fans up
- Prevents prying apart sticky, oily, pre-finished or polished sheets
- Eliminates die-damaging double blanking in automated operations



Details Ref. Tech Sheet AG-05B

