

FANNERS

MAGNETIC SHEET FANNERS

Magnetically Separate Oily, Sticky or Thin Steel Sheets

Permanent and Electromagnetic Sheet Fanners:

- Reduce costs & increase safety for destacking steel sheet stock
- 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

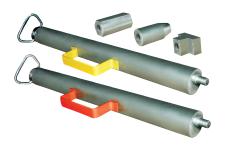
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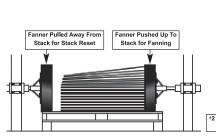


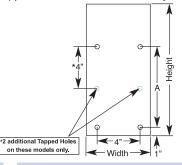
PERMANENT MAGNETIC SHEET FANNERS

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.





Thin Gauge Fanner (TNF) - 20 to 30 gauge 0.036" (0.914 mm) to 0.012" (0.305 mm) - 6-1/4" Wide - 1-11/16" Thick - 3/8-16 Tapped Mounting Holes

Part		Height	Weight
	No.	(In.)	(Lbs.)
	TNF06	6-1/4	15
	TNF09	9-1/4	21
	TNF12	12-1/4	27
	*TNF15	15-1/4	34

Medium Gauge Fanner (MGF) - 12 to 22 gauge	
0.105" (2.667 mm) to 0.030" (0.762 mm)	
- 6-1/4" Wide - 2-11/16" Thick	
• 3/8-16 Tanned Mounting Holes	

Part	Height	Weight
No.	(In.)	(Lbs.)
MGF09	9-1/4	31
MGF12	12-1/4	40
*MGF15	15-1/4	50
*MGF18	18-5/16	60
*MGF21	21-5/16	69

Selection Note: Choose a fanner with a height 2 to 3 inches taller than your maximum stack height.

OPTIONS:

Custom designs and mounting plates available

Bolt On Handle

Tapped Holes For Easy Mounting

Mounting Hardware Included

Bolt On Base –

- Center wear strip for round or odd shaped blanks
- » Custom designed wear strips
- » Additional handles and bases

Thick Gauge Fanner (TKF) - 7 to 12 gauge 0.179" (4.546 mm) to 0.105" (2.667 mm) • 8-7/32" Wide • 2-11/16" Thick • 3/8-16 Tapped Mounting Holes

	3	
Part No.	Height (In.)	Weight (Lbs.)
TKF09	9-1/4	40
TKF12	12-1/4	53
*TKF15	15-1/4	65
*TKF18	18-5/16	78
*TKF21	21-5/16	97
*TKF24	24-5/16	110

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.

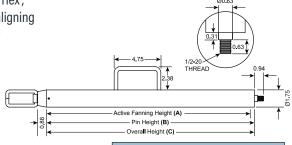
- » PinFanners™ function as both pallet pins and sheet fanners
- » Magnetic circuit rotates 180° internally to suppress the fanning action
- » Pallet mounted fanners require less maintenance time on the line
- » Assured contact with blank to maximize fanner performance
- Works with multiple sizes and 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

	PART NO.	FANNING HT. (A)	PIN HT. (B)	OVERALL HT. (C)	
Т	FP14(N/S)(H/R/T)	12.5"	13.13"	14.0"	
	FP18(N/S)(H/R/T)	16.5"	17.13"	18.0"	

Example Part Number: FP14NH

Polarity: (N) North, (S) South

Mounting Style: (H) Hex Pin, (R) Round Pin, (T) T-Slot



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.

Fanning "ON" Fanning "OFF" 6" to 10"

OPTIONS:

- » Custom heights
- » Custom mounting



FHD22M Shown with optional magnetic base

FANNERS

MAGNETIC SHEET SEEKER®

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.

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.

FEATURES:

- » 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

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

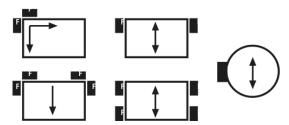
1.75" HEGGS 7" 9.46" 1.75"

Shown with optional magnetic base

Notes:

- 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
- Arrows represent the best direction for removing the illustrated sheet from the fanner(s).
- 5. Fanners are indicated with the letter "F".

Sheet Fanner Location Guide



PART NO.		WEIGHT (LBS.)
FHD12	12"	16
FHD15	15"	17
FHD18	18"	19
FHD22	22"	22
FHD24	24"	23

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

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SHEET FANNERS

ELECTROMAGNETIC SHEET FANNERS

Electromagnetic Fanners prevent die damaging double blanking in destacking applications. 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.

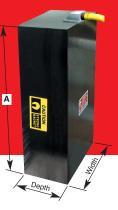
Electromagnetic Sheet Fanners require conversion from AC to DC voltage. IMI power supplies are designed to properly convert voltage and provide for operation of single or multiple fanners. IMI power supplies (see Tech Sheet AG-10B) can be equipped with a variable output to adjust the magnetic strength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

FEATURES:

- » Corrosion resistant enclosure
- » Durable welded construction

OPTIONS:

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



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

ELECTROMAGNETIC FANNER DIMENSIONS:

ELECTROMAGNET HEAVY DUTY 10"wide X 7.5"deep					ELECTROMAGNET EXTRA HEAVY DUTY 13"wide X 7.5"deep				
Part No.	Ht. (A)	Volts DC	Watts	Wt. (Lbs.)	Part No.	Ht. (A)	Volts DC	Watts	Wt. (Lbs.)
EHD12	12"	110	250	155	EXHD12	12"	110	315	250
EHD18	18"	110	400	210	EXHD18	18"	110	450	525

Sheet Fanner Selection Factors and Application Guide

Sheet Fanner Selection Guide Key:

- A. Permanent Magnetic Thin Gauge Fanner (TNF)
- B. Permanent Magnetic Medium Gauge Fanner (MGF)
- C. Permanent Magnetic Thick Gauge Fanner (TKF)
- D. *Permanent Magnetic Extra Heavy Duty (XHD)
- E. Sheet Seeker® Fanner
- F. PinFanner® (Set consists of 1 North & 1 South)
- G. *Electromagnetic Light Duty (ELD)
- H. *Electromagnetic Medium Duty (EMD)
- J. Electromagnetic Heavy Duty (EHD)
- K. Electromagnetic Extra Heavy Duty (EXHD)

Selection Guide Notes:

- *XHD, EMD and ELD: These sheet fanners are custom designed per application. The size and number of these fanners required to fan the specified sheet sizes is determined by the application requirements.
- (x2) A minimum of two fanners of the specified models are required for these applications. This table is only a guide to assist in selecting a fanner. Several other variables must also be considered:
 - 1. Stickiness or viscosity of the oil or draw compound between sheets, presence and condition of overlapping burrs on the metal edge due to a dull shear, alignment of the stack (each sheet should be relatively flush with the fanner face), shape and contact area of the sheet edge (i.e. is it square? is it scroll type edge? is it an unusual shape?)
 - 2. When selecting an electromagnetic fanner its height ("A") must be 5" higher than the height of the stack.

Sheet Fanner Selection Guide (By Sheet Size)

Sheet Stock	1/4" to 7 GA.	7 to 12 GA.	12 to 18 GA.	18 to 24 GA.	24 to 30 GA.
Size By	0.250 to 0.179 TH	0.179 to 0.105 TH	0.105 to 0.048 TH	0.048 to 0.024 TH	0.024 to 0.012 TH
Square Inches	10.2 to 7.5 lbs/sq.ft.	7.5 to 4.5 lbs/sq.ft.	4.5 to 2.0 lbs/sq.ft.	2.0 to 1.0 lbs/sq.ft.	1.0 to 0.5 lbs/sq.ft.
144 ln2	С, Ј	C, J	B, E, F, *H	B, E, F, *H	A, E, F, *G
288 ln2	*D, K	С, Ј	B, E, F, *H	B, E, F, *H	A, E, F, *G
432 ln2	*D, K	*D, K	B, E, F, *H	B, E, F, *H	A, E, F, *G
576 ln2	*D, K	*D, K	C, E, J	B, E, F, *H	A, E, F, *G
864 ln2	*D, K	*D, K	C, E, J	B, E, F, *H	A, E, F, *G (x2)
1,152 ln2	*D, K	*D, K	*D, K	B, E, F, *H	A, E, F, *G (x2)
1,292 ln2	*D, K	*D, K	*D, K	C, E, J	A, E, F, *G (x2)
1,728 ln2	*D, K	*D, K	*D, K	C, E, J	A, E, F, *G (x2)
2,304 ln2	*D, K	*D, K	*D, K	C, E or J (x2)	A, E, F, *G (x2)