

HB

High Speed Presses

60 & 80 Tons Capacity



Standard Features

One-Piece Cast Frame

The Hummingbird frame is of class 40 grade cast iron. Minster's construction provides the compressive strength and vibration dampening that provides greater die life and part accuracy.



Heavy Drive Connection and Rigid Slide

The Hummingbird slide is designed to minimize deflection under full loading. The high strength 1045 steel connections and pistons are made specifically for high speed blanking. This feature, designed to handle snap-through forces equal to 50% tonnage rating of the press, reduces punch penetration and promotes die life.

Speed & Precision

Minster Hummingbird presses provide consistently accurate, automated high speed blanking. The 80 metric ton machine is capable of 1,000 SPM with a stroke length of 25 mm making the Hummingbird the fastest machine of its type in this tonnage range.

Flywheel Drive Arrangement for Maximum Press Efficiency

The Hummingbird series are flywheel type presses to provide higher speeds for punching, notching and blanking operations. Minster's patented combination hydraulic clutch and brake produces the maximum torque possible providing for faster starting and stopping, resulting in increased production. A segmented drive disc design provides easy maintenance. In addition, Minster's clutch and brake unit requires no adjustment and years of maintenance-free operation, resulting in less downtime and higher production rates.

Dynamic Balancer System

The dynamic balancing system on the Hummingbird greatly reduces the effect of the slide and tooling inertia forces caused by running at high speeds. This reciprocating balancer helps maintain precise slide bottom-dead-center repeatability resulting in less die wear and greater part accuracy.

Sealed Crown

The design of the Hummingbird series features a total sealed crown and hydrostatic piston drives system. This helps keep contaminants out of the lube system, prevents oil loss and provides a cleaner work environment.

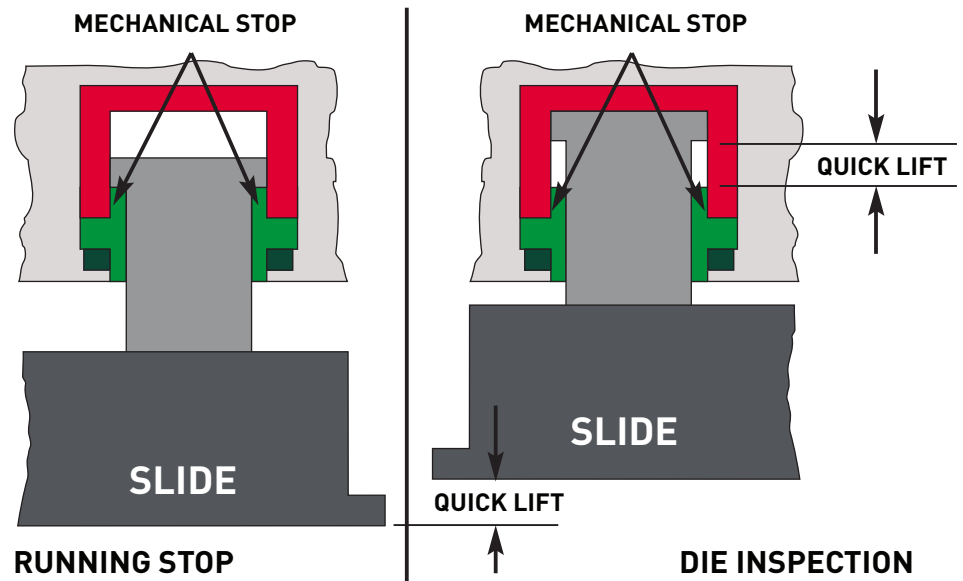
Heavy Duty Bed

The massive bed of the Hummingbird press has a maximum deflection of 0.001" per foot increasing die life and improving part quality.

Standard Features

Hydraulic Quick Lift

Quick access to dies is provided by a hydraulic system which lifts the slide as much as 50mm. The hydraulic system returns the slide to the original shutheight position against a mechanical stop, maintaining tool settings. This feature enhances die accessibility and allows fast and easy unsticking from the bottom even with shorter strokes and higher speeds, thus contributing to greater production efficiency.



Production Management Control (PMC)

Incorporates all press functions including:

- Full machine diagnostics detailing all press and feed line faults.
- Multiple selectable languages.
- Open architecture which allows for greater convenience in planning and maintenance.
- PLC and color touch screen technology; all press and feed line functions can be monitored for efficient diagnosis of production line faults.

Available popular options include: die protection, load monitoring as well as automatic shutheight and counterbalance controls.

Thermal Control Package

Minster's Hummingbird presses provide a Thermal Control Package consisting of an air/oil heat exchanger and preheating system. A thermostatically controlled heating system helps maintain the oil at a constant temperature, thereby reducing shutheight fluctuations.

Fully Hydrostatic Slide Guiding

The Hummingbird is guided by four hydrostatic passline guide posts for accuracy and repeatability.

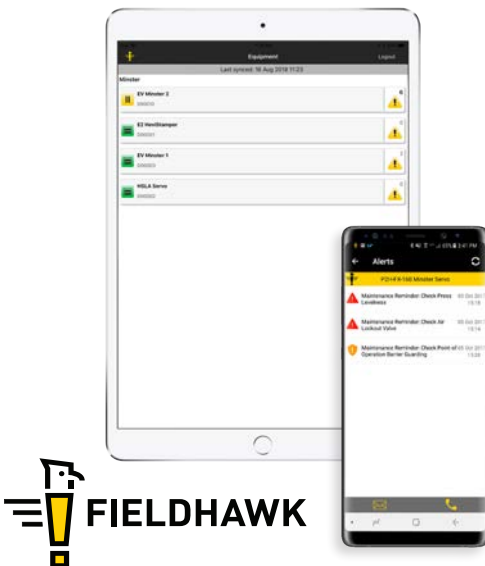
Standard Features

FieldHawk - i4.0

FieldHawk is a cloud-based mobile application designed to communicate with your Nidec stamping press lines from your iOS or Android mobile devices. Cloud-based, secured communications allows all authorized users to check machinery status from anywhere you can get phone service and/or an internet connection, thus reducing downtime.

Additional Standard Features

- Powered shutheight adjustment with electronic readout
- Cast iron bolster plate with general purpose t-slots
- Flywheel brake
- Four vibration mounts
- Minster full function pedestal control



Optional Features

Infinitely Adjustable Stroke

Provides more flexibility and higher production due to the ability to produce either blanked/shallow formed parts or drawn/higher formed parts on the same press.

- No limit on stroke length
- Quick and simple pushbutton adjustment
- Dial-in, or pushbutton stroke length via die number automatically sets stroke & shutheight for easy changeover
- Provides power microinch mechanism for easier die set-up
- Extremely accurate bottom-dead-center repeatability & parallelism

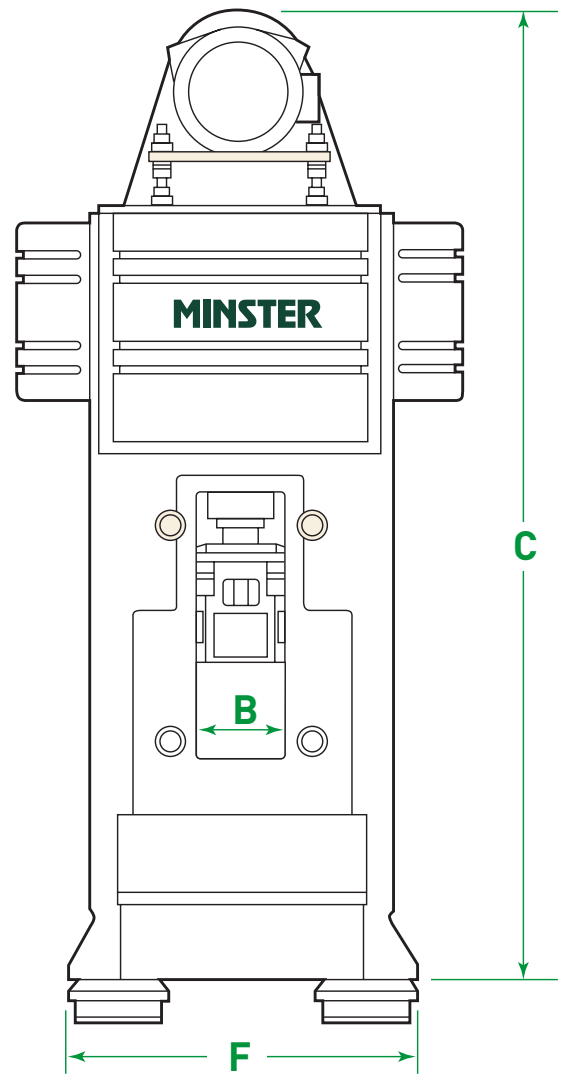
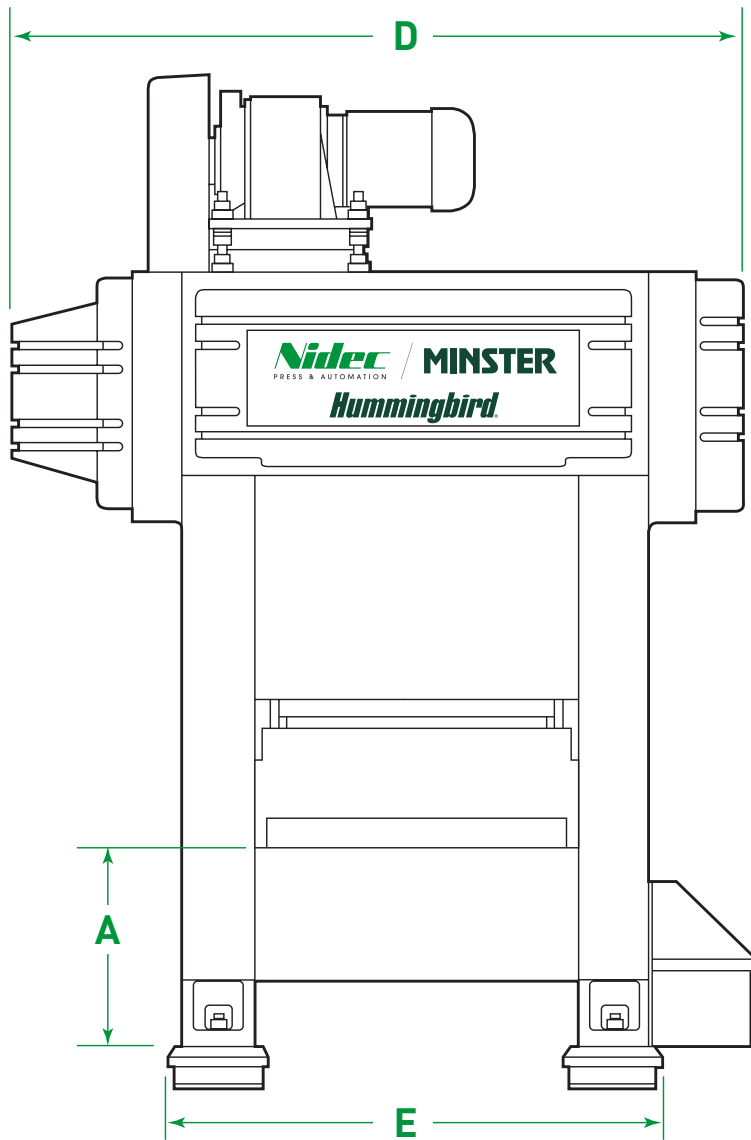
Adjustment-In-Motion

Minster offers an Adjustment-In-Motion feature on Hummingbird presses. The A.I.M. allows the operator to make precise shutheight adjustments with just the touch of a button, while the press is running. The operator can adjust the press for close tolerance parts without sacrificing production time.

Additional Options

- Load production
- Remote stroke position indicator
- Quick-Die-Change Systems
- Stock Lubrication
- Material Handling Systems
- Feeds
- Conveyors
- Die Doors

Specifications & Dimensions



	HB-60	HB-80	HB-60 SPM	HB-80 SPM
			Max.	Max.
Tons Capacity	600 kN / 66 Tons	800 / 90		
Stroke of Slide (Standards)	0.98" ~ 25 mm	0.98" ~ 25 mm	1000	1000
	1.18" ~ 30 mm	1.18" ~ 30 mm	900	900
	1.57" ~ 40 mm	1.57" ~ 40 mm	750	750
	1.97" ~ 50 mm	1.97" ~ 50 mm	650	650
Stroke of Slide (Adjustable)	0.59" ~ 15 mm	.59" ~ 15 mm	1000	1000
	0.79" ~ 20 mm	0.79" ~ 20 mm	900	900
	0.98" ~ 25 mm	0.98" ~ 25 mm	800	800
	1.18" ~ 30 mm	1.18" ~ 30 mm	750	750
	1.38" ~ 35 mm	1.38" ~ 35 mm	700	700
	1.57" ~ 40 mm	1.57" ~ 40 mm	650	650
	1.77" ~ 45 mm	1.77" ~ 45 mm	600	600
	1.97" ~ 50 mm		550	
Slide Adjustment	1.97" ~ 50 mm	1.97" ~ 50 mm		
Shutheight on Bolster (S.D.A.U.)	13.98" ~ 355 mm	13.0" ~ 330 mm		
Shutheight on Bed (S.D.A.U.)	19.0" ~ 483 mm	18.29" ~ 464,60 mm	Varies According to Stroke Length	
Bolster Thickness	5.0" ~ 127 mm	5.30" ~ 134,60 mm		
Area of Slide, R-L x F-B	43.30 x 18.90" 1100 x 480 mm	48.03 x 20.08" 1220 x 510 mm		
Area of Bed, R-L x F-B	43.50 x 28.60" 1105 x 724 mm	48.50 x 28.0" 1232 x 711 mm		
Area of Bolster, R-L x F-B	43.30 x 27.60" 1100 x 700 mm	48.03 x 27.56" 1220 x 700 mm		
Bed Opening, R-L x F-B	37.0 x 10.0" 940 x 254 mm	44.0 x 11.0" 1117 x 280 mm		
A Bottom of Feet to Top of Bed	33.0" ~ 838 mm	33.0" ~ 838 mm		
B Upright Opening, F-B	15.0" ~ 381 mm	15.0" ~ 381 mm		
C Approximate Overall Height	157" ~ 3988 mm	160" ~ 4070 mm		
D Overall Width	116" ~ 2946 mm	120" ~ 3048 mm		
E x F Area of Footprint, R-L x F-B	74.0 x 54.0" 1880 x 1371 mm	81.0 x 57.25" 2057 x 1454 mm		
Strokes per Minute @ 25 mm	125-1000	125-100		
Motor HP and Speed	40-1800 hp 30-1800 kw	50-1800 37.5-1800		
Approximate Weight	38,000 lbs 17.263 kg	45000 20.410		



One Brand: A World of Resources

Nidec Press & Automation is the full service pressroom provider of choice for businesses in more than 90 countries and on six continents. Comprised of leading press room product brands, we ensure a complete offering of machinery, services and technology to meet your exact needs, enabling you to rely on one source.

Discover the freedom to achieve, to maximize and to drive your operation to exceed your goals. At Nidec Press & Automation, your success is the core of our focus and how we design our solutions to meet the rigid needs of the metal forming industry.

Choosing to work with us means you gain a constant resource with a global footprint, the brightest minds behind our solutions, and backed by regionally based OEM support ready to work as a natural extension of your team.

**Our promise to you is simple:
We're with you whenever and wherever
business takes you.**



MACHINERY

- Turn Key Systems
- Individual Components
- System/Tech Upgrades
- i4.0 Software Upgrades
- Integrated Controls

METAL FORMING PRESS APPLICATIONS

- Mechanical
- Servo
- Transfer
- High-Speed & Electrical
- Electrical Vehicle (EV)
- Lamination
- Container Cupping
- Container End-Conversion
- Container Shell
- Gap/D-Frame

AUTOMATION

- Press Tending / Robotics
- Integrated Transfers
- High Speed Servo Feeds
- High Speed Gripper Feeds
- Heavy-Duty Coil Lines

GLOBAL SERVICE NETWORK

- Field Service
- Emergency Response
- Technical Service & Support
- OEM Replacement Parts
- Machine & Component Remanufacturing
- Technical Training



One Brand: A World of Resources

A single source solution that will help you find the efficiencies you want — all from the products, services and technology of Nidec Press & Automation.

nidecpa.com