



**MINSTER**

# LAMINATION & ELECTRICAL

---

PRESS UPGRADES & AFTERMARKET OFFERINGS

---

## Table of Contents

TR2 Variable Displacement Lube Pump Package.....	3
TR2 Heat Exchanger .....	4
TR2 Hydraulic Bolster Adjustment Package .....	5
TR2 Piston Seal Upgrade Package.....	5
TR2 Guide Post Seal Kits .....	6
TR2 Bolster Shutheight Encoder.....	6
Adjustment In Motion (AIM) Upgrade.....	7
Clutch Sleeve Anti-Fretting Mounting Package .....	8
Flywheel Bearing Re-Grease Package.....	9
Conversion to Flywheel Spherical Bearings .....	10
Piston Accumulator Package .....	11
Dynamic Balancer MonitorFlow® Package.....	12
Hydura Pump Replacement Package .....	12
Conversion to Variable Frequency Drive (VFD) .....	13
Minster Rotary Union for Hydraulic Clutches.....	14
Replaceable Brake Key Linings.....	15
Air Rotary Union Package.....	15
Air Clutch Brake Facing Upgrade.....	16
MC Clutch Brake Spring Package .....	16
Tandem Air Valve Clutch Package.....	17
Detachable Slide Adjust Motor Package.....	18
SA Brake Lock-Up.....	19
Automatic Shutheight Adjustment for Slide or Bolster .....	20
Oil Sump Heaters .....	21
Heat Exchanger Package.....	22
Connection Pin Upgrade Package.....	23
Connection Oil Deflectors.....	23
Piston and Connection Heaters.....	24
Die Door Assembly.....	25
Vibration Isolators.....	26
Safety Railing .....	27
Aluminum Die Safety Blocks .....	28
Adjustable Die Safety Blocks.....	28
Preventative Maintenance Programs .....	29
Press Remanufacturing and Component Rebuild.....	30
Nidec Press & Automation - One Brand: A World of Resources .....	31

---

## Lamination & Electrical Press Upgrades

---

### TR2 Variable Displacement Hydraulic Pump Package

**Description:** Part No. 810-1038 and 6047 for 60Hz  
or 3500-181 for 50Hz

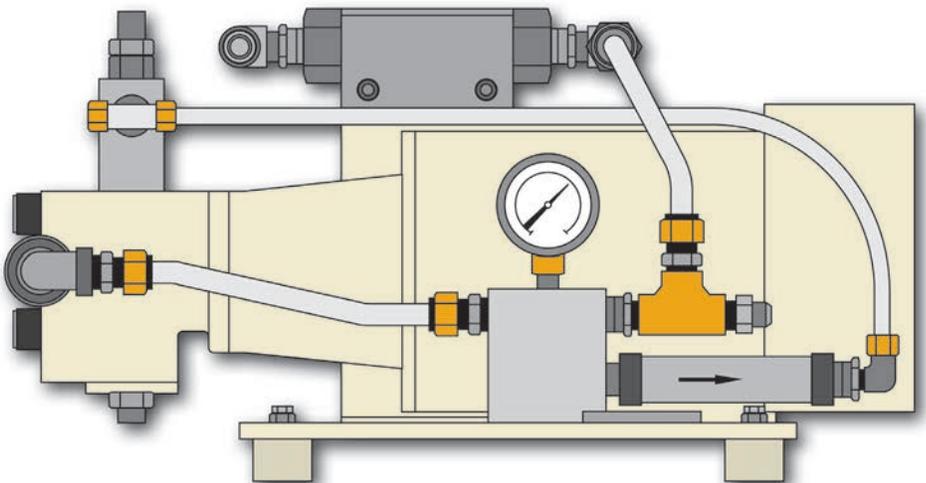
This package replaces press hydraulic packages that utilize air over oil pumps. Enhancements included with this replacement package include; a spin-on type filtering system, blocked line detection, and larger lube motor.

#### Benefits:

- Improved reliability & serviceability of your press hydraulic system
- Reduced downtime
- Reduced system maintenance
- Readily available spares

#### Package Includes:

- New pump, motor and coupling
- All necessary plumbing, brackets, and mounting hardware to add the unit to the press
- Spin-on type oil filter
- Installation information



---

## Lamination & Electrical Press Upgrades

---

### TR2 Heat Exchanger

**Description:** Part No. 810-0251

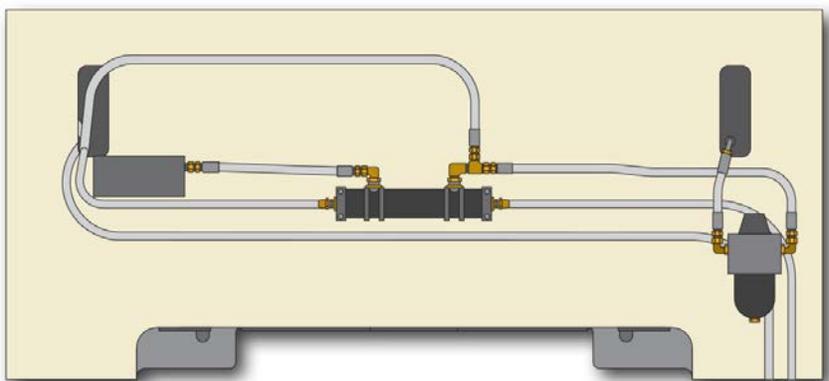
This package provides a closed lube heat exchanger system with (2) crown mounted water over oil heat exchangers connected to an air over water chiller.

**Benefits:**

- Increased efficiency of press lubrication system and reduced lubrication faults
- Consistent operating temperature results in consistent oil viscosity which improves oil flow and pressure consistency
- Improved part quality
- Increased slide guiding system effectiveness due to the desired oil pressure being maintained in the hydrostatic slide guides

**Package Includes:**

- Manifolds and valves
- Hydraulic motor
- Tubing, fittings, and hardware



---

## TR2 Hydraulic Bolster Adjustment Package

**Description:** Part No. 810-1079

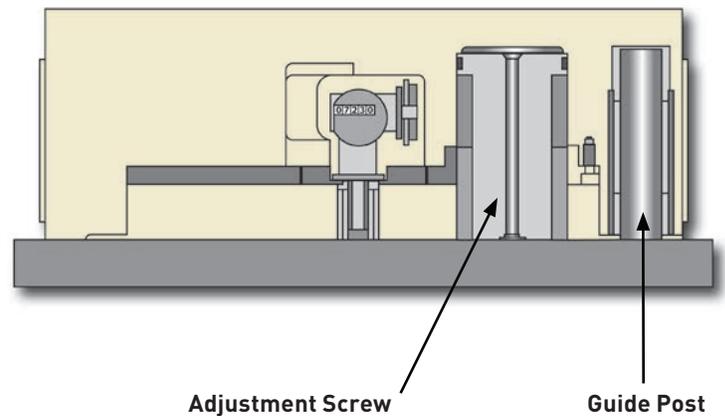
This package adds a solenoid controlled hydraulic motor to replace the manual adjustment on a TR2 adjustable bolster.

**Benefits:**

- Allows for easier shutheight adjustment during die setting. Hydraulic pressure on the threads acts as a lock when the bolster is not being adjusted.

**Package Includes:**

- Manifolds and valves
- Hydraulic motor
- Tubing, fittings, and hardware




---

## TR2 Piston Seal Upgrade Package

**Description:** Part No. 810-2284 or 810-2208

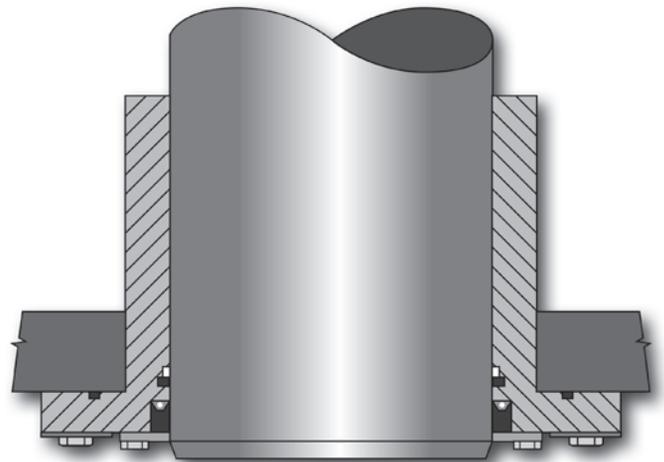
This package provides better drive piston seals to replace the original seals. The new seals require new drive piston housings and retainers.

**Benefits:**

- Improved seal life
- Longer seal life
- Reduced downtime

**Package Includes:**

- Oil seals
- Slide piston housing and orifices
- Piston seal retainer



## Lamination & Electrical Press Upgrades

### TR2 Guide Post Seal Kits

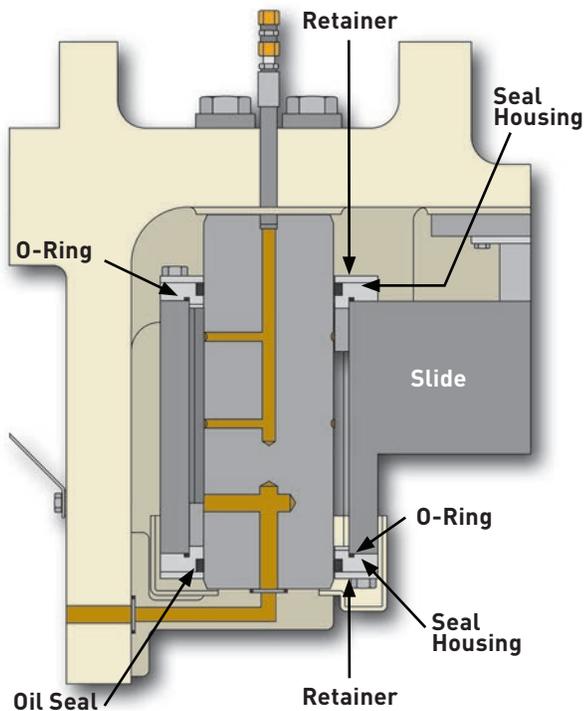
This package provides all necessary components to replace the housings and seals on the hydrostatic bearings that guide and locate the press slide.

#### Benefits:

- The new seal housings position the new style seals against the guide post to prevent leaks and reduce wear

#### Package Includes:

- Seal housings
- Oil seals
- O-rings
- Retainers



### TR2 Bolster Shutheight Encoder

**Description:** Part No. 810-2260

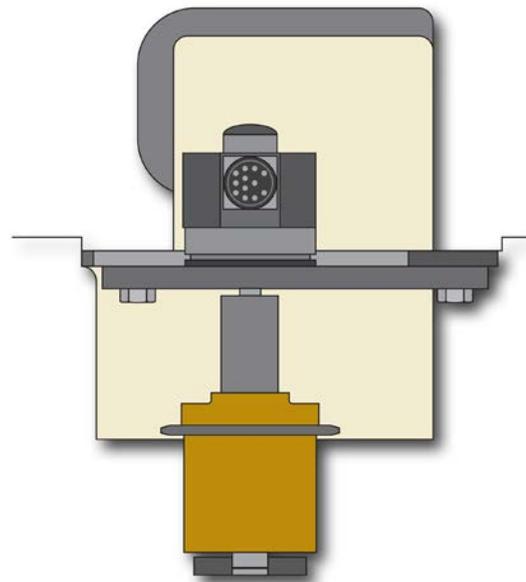
This package replaces the obsolete mechanical counter with an encoder and digital display.

#### Benefits:

- Improved reliability
- Integrated shutheight control

#### Package Includes:

- Encoder
- Cables
- Digital display
- All necessary mounting hardware



---

## Adjustment in Motion (AIM) Upgrade

### Description:

This package adds either an in die sensor or a sensor between the slide and upright to feedback shutheight information to the press control during operation.

### Benefits:

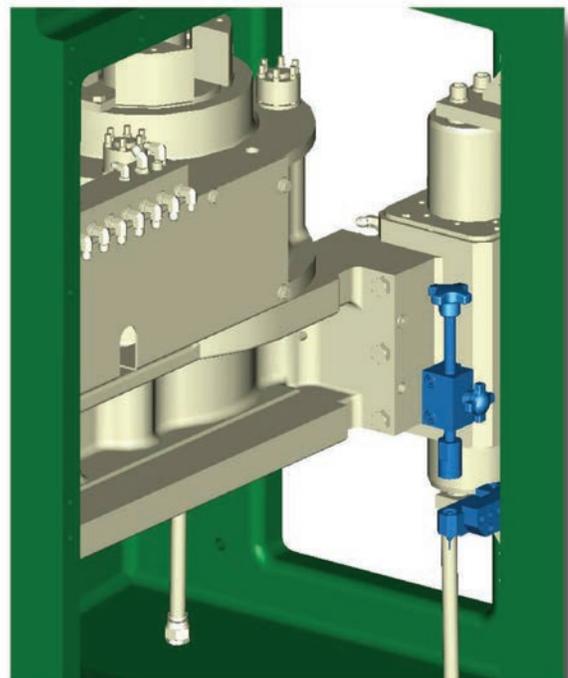
- The press automatically adjusts the shutheight during operation to compensate for internal thermal expansion and connection stretch at high speeds to keep a consistent shutheight during critical stamping operations.

### Package Includes:

- Electronic sensor and target
- Slide adjust resolver
- Mounting brackets
- All necessary hardware

### Press Lines:

- HB and PM3 with PMC version 6 or later



---

## Lamination & Electrical Press Upgrades

---

### Clutch Sleeve Anti-Fretting Mounting Package

**Description:** Part No. 810-1015

This package replaces the existing clutch sleeve with a new clutch sleeve that is designed to incorporate an internal shaft locking device. This device virtually eliminates any fretting that may occur between the clutch sleeve and the crankshaft.

**Benefits:**

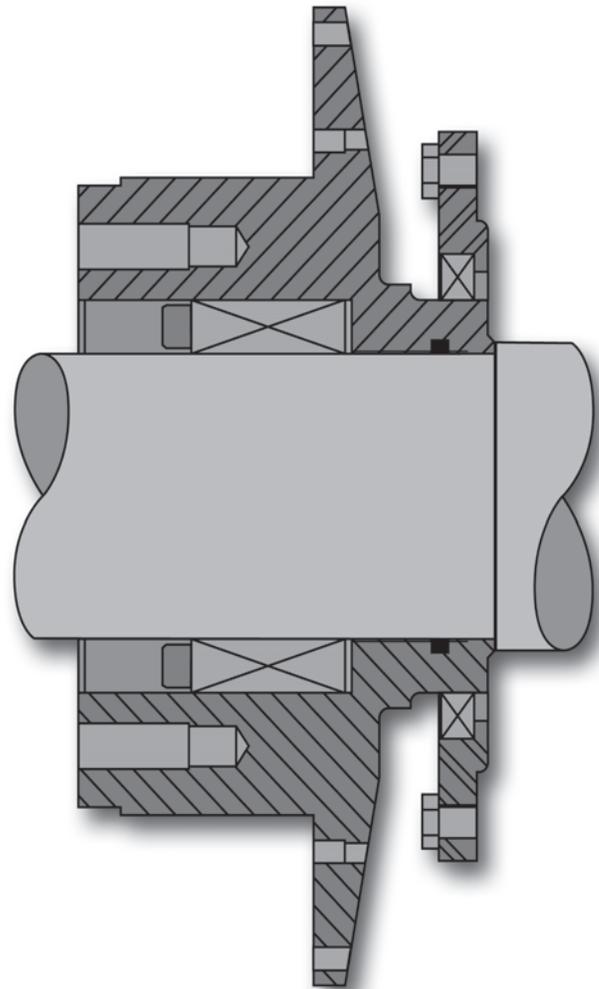
- Reduces risk of extended and unplanned downtime due to crankshaft failure
  - By reducing crankshaft fretting, the crankshaft life is significantly increased
- Reduces potential maintenance costs

**Package Includes:**

- New clutch sleeve
- Shaft locking assembly
- Oil seal and O-ring
- Installation information

**Press Lines:**

- ECH, EC, PM3, PM2, P2H, DASH, DACH, OPTH, and SASH



---

## Flywheel Bearing Re-Grease Package

**Description:** Part No. 810-0104

This package provides an easily accessible method of replenishing the grease for the flywheel bearings. It also includes new flywheel bearings and bearing spacers that are assembled to tight tolerances. Note, the flywheel typically requires rework to incorporate this new package. This package is standard with all spherical bearing upgrades.

### Benefits:

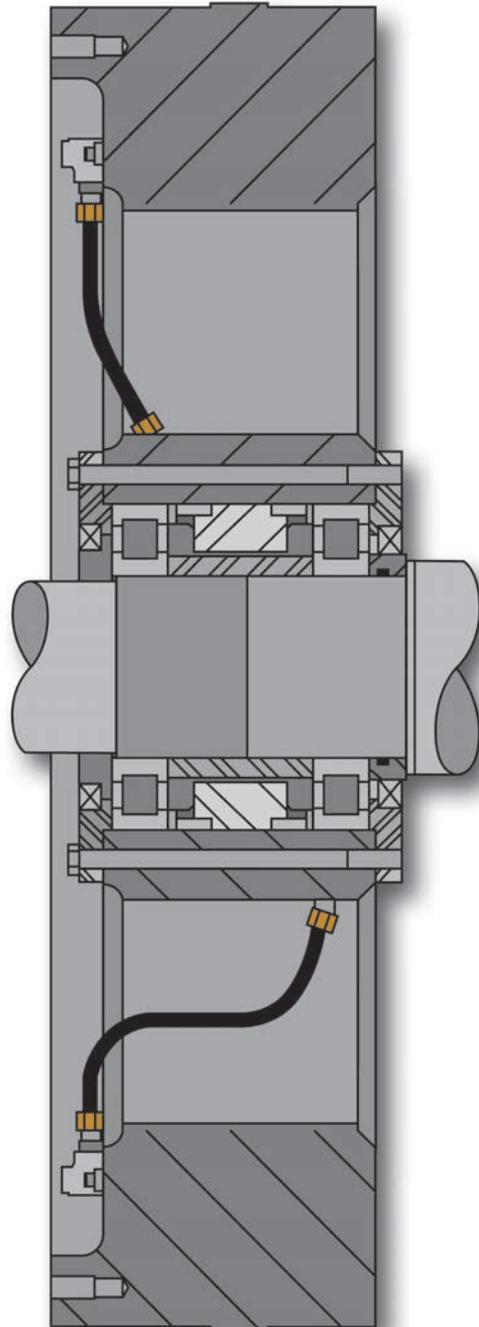
- Increases flywheel bearing life by an average of 250% over non re-grease installations
  - Re-greasing the bearings allows them to run cooler and more efficient, resulting in prolonged life
- Reduced maintenance costs
- Reduced unplanned downtime

### Package Includes:

- Flywheel bearings
- Bearing spacers and retainers
- Bearing oil seals
- O-Rings
- Fittings and hoses required for installation
- Drawings and instructions for required flywheel modifications

### Press Lines:

- ECH, EC, PM3, PM2, P2H, DASH, DAC, DAS, OPTH, SASH and TR2



---

## Lamination & Electrical Press Upgrades

---

### Conversion to Flywheel Spherical Bearings

**Description:** Part No. 810-2247

This package replaces crankshaft flywheel cylindrical bearings with spherical roller bearings. Flywheel re-work may be required for proper lubrication. This package incorporates the flywheel re-grease package.

**Benefits:**

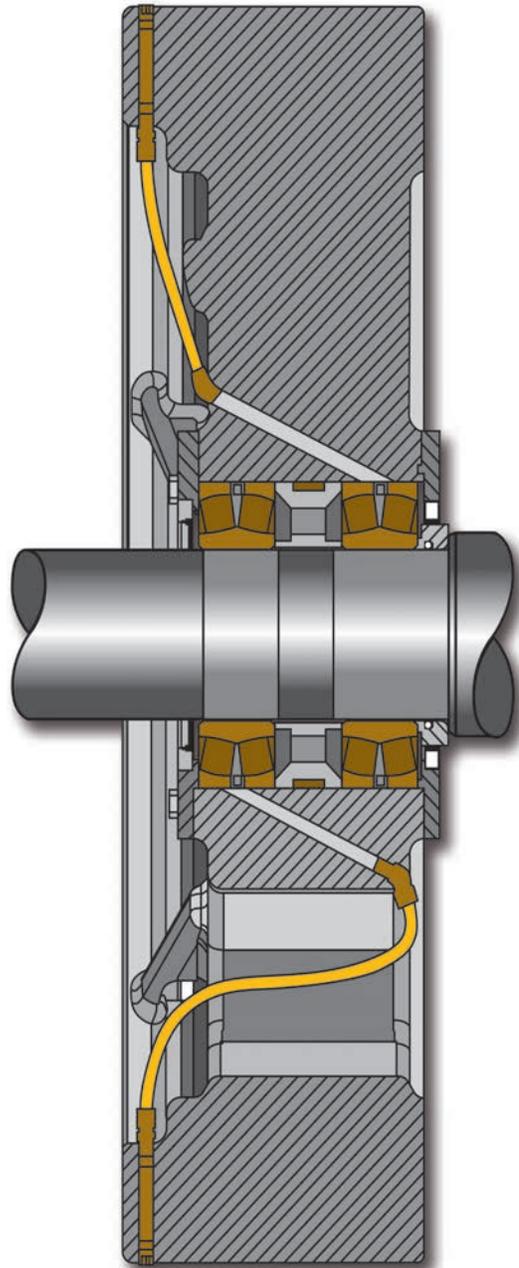
- Prevents false brinelling
- Improves bearing life
- Simplifies installation

**Package Includes:**

- Flywheel bearings
- Bearing and cone spacers
- Retainers and seals
- Misc. mounting and lubrication hardware

**Press Lines:**

- ECH, P2H, EC, PM3, and SASH



---

## Piston Accumulator Package

**Description:** Part No. 1262-1259

This package replaces the bladder type hydraulic accumulator with a modern nitrogen charged piston accumulator.

**Benefits:**

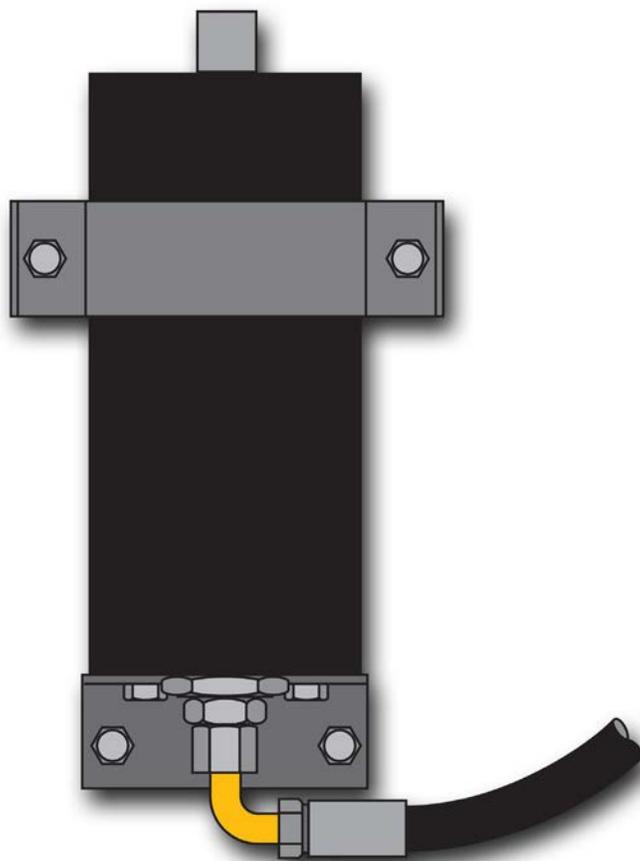
- Improved availability of parts
- Easier maintenance
- Constant system pressure during inch and single stroking operations

**Package Includes:**

- Piston type accumulator
- Mounting bracket and hardware
- All necessary hoses and fittings

**Press Lines:**

- EC, ECH, OPTH, DASH, SASH, P2H and TR2



## Lamination & Electrical Press Upgrades

### Dynamic Balancer MonitorFlow® Package

**Description:** Part No. 810-1079

This package adds a MonitorFlow system to ensure that the lubrication to the balancer guides is not interrupted due to blockage.

**Benefits:**

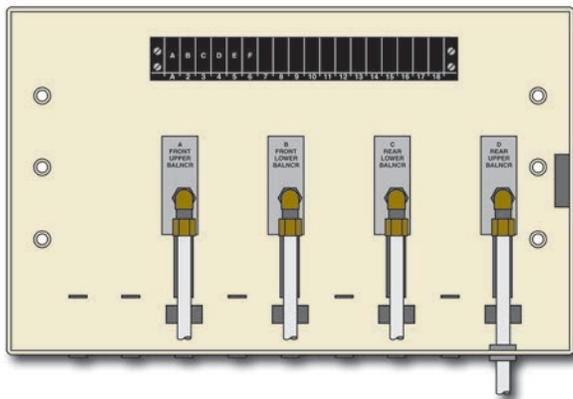
- Prevents catastrophic downtime that could result if the oil supply to the dynamic balancer is interrupted

**Package Includes:**

- MonitorFlow control panel
- All the necessary plumbing to install the MonitorFlow kit
- Updated hydraulic diagram
- New plumbing layout

**Press Lines:**

- DASH, EC, PM2 and PM3



### Hydura Pump Replacement Package

**Description:** Part No. 1222-293

This package is necessary to replace the obsolete Hydura Pumps used for the hydraulics and lubrication on Minster press styles EC, PM3, & PM2.

**Benefits:**

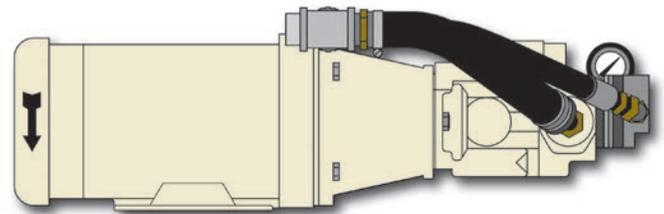
- Direct replacement for obsolete Hydura design
- Current design allows for improved part availability

**Package Includes:**

- New motor w/ pump mounting flange and coupling
- (1) hydraulic and (1) lube pump

**Press Lines:**

- EC, PM3 and PM2



## Conversion to Variable Frequency Drive

Conversion of press main drive motor to a press rated, inverter-duty motor with a VFD control.

### Benefits:

#### *VFD Controller*

- Provides higher performance throughout the full speed range
- Reduces operating costs by maintaining an electrical power factor of up to 18% higher than Eddy Current Motors
- Provides tighter speed/torque control
- Includes an EMI (electromagnetic interference) filter to prevent disturbances of other electronic equipment within your plant
- VFD control replacement parts and support is readily available 24/7/365
- 12-month warranty as standard on the VFD control
- 24-month extended warranty if the control is installed by a certified Nidec Press & Automation technician

#### *Press Rated, Inverter Duty Drive Motor*

- 10:1 torque speed ratio. Motor supplies constant torque from 10% to 100% of full speed
- Provides longer tool life than a standard AC motor in VFD applications
- 1shielded motor cable included, increases motor bearing life by reducing electrical noise emissions and their negative effects
- 36-month warranty that is backed by Nidec Press & Automation and more than 1000 world wide service outlets
- Significantly quieter than an Eddy Current Motor

### Package Includes:

- Press rated inverter duty motor equipped with an EMI filter
- Variable frequency control in wall mountable, NEMA 12 enclosure
- Motor mounting parts and layout drawing for mounting modifications
- 50 feet of shielded motor cable
- Installation and VFD setup information
- Options which can be includes:
  - Installation and VFD commissioning by certified Nidec Press & Automation technicians
  - New main contactor
  - Remote forward/reverse selector switch
  - Remote speed control
  - Remote speed and load meters



## Lamination & Electrical Press Upgrades

### Minster Rotary Union for Hydraulic Clutches

**Description:** Part No. 810-1155 for E2's and DAC's

This Minster Rotary Union (MRU) is designed to transfer fluid up to 10,000 psi into rotating machinery at speeds of up to 1500 rpm. The MRU was designed with hydrodynamic oil film type bearing and high pressure seal arrangement in place of the failure prone face seals and roller bearings utilized in typical rotary unions. The MRU has been the standard for all Minster hydraulic clutches since 1998.

**Benefits:**

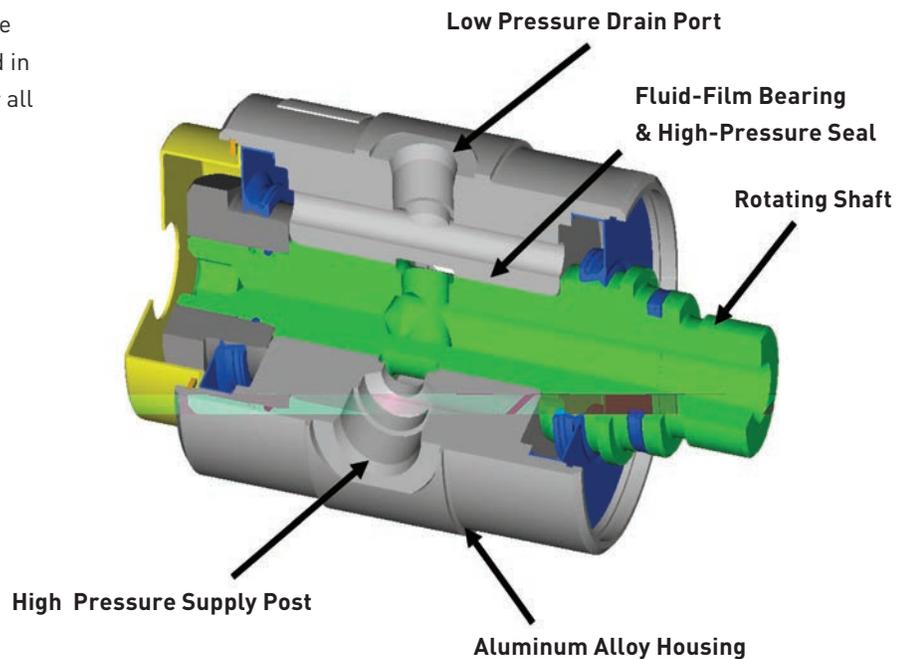
- 3 to 5 times the life of typical rotary unions to due:
  - Elimination of high pressure face seals
  - Elimination of rolling element bearings
- Ability to withstand high vibration environments
- Units can be rebuilt
- Alternative and custom designs are available

**Package Includes:**

- Rotary union
- High pressure hose
- Drain hose
- All necessary plumbing and mounting hardware

**Press Lines:**

- Any Minster press with hydraulic clutch



## Replaceable Brake Key Linings

### Description:

This package adds new, more durable brake keys with replaceable linings to existing Minster Clutch/Brake Units

### Benefits:

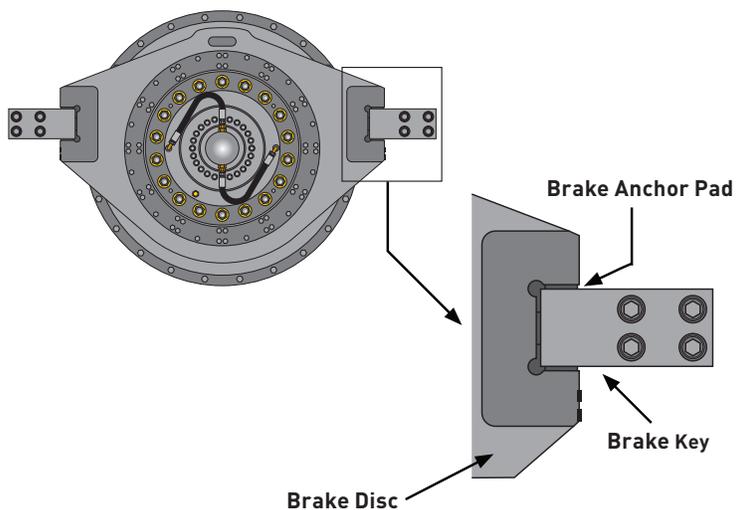
- Reduces damage to the brake disc anchor slot and the brake key incurred during normal operation and single stroke applications.

### Package Includes:

- New brake keys
- Brake anchor key pads
- All necessary mounting hardware

### Press Lines:

- All presses utilizing the Minster MC, EFHC and MHC clutch/brake units



## Air Rotary Union Package

### Description: Part No. 810-0343

The new air rotary union package replaces the old slower speed leather seal style rotary union.

### Benefits:

- Applicable to higher press speeds
- Better part availability
- Ease of maintenance

### Package Includes:

- Rotary union
- Distributor spindle, seal and adapter
- All necessary plumbing and mounting hardware
- Installation instructions



## Lamination & Electrical Press Upgrades

### Air Clutch/Brake Unit Facing Upgrade

**Description:**

This kit updates your existing clutch/brake with new, more aggressive facings.

**Benefits:**

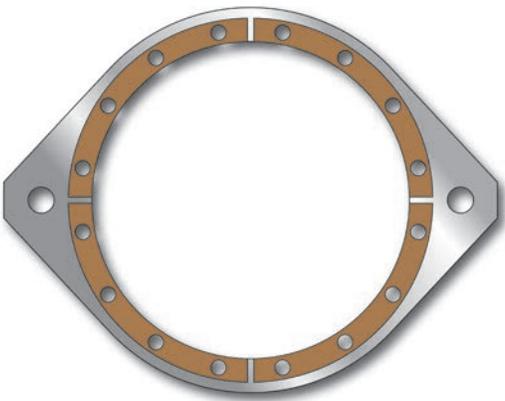
- Increased brake friction for better reaction time
- Provides increased protection of press and dies

**Package Includes:**

- New brake facings
- Mounting hardware
- Steel brake disk

**Press Lines:**

- All presses utilizing Minster air clutch/brake units



### MC Clutch/Brake Unit Spring Package

**Description:**

This package adds four brake springs to your existing 12-spring MC clutch/brake unit

**Benefits:**

- Increased brake torque for reduced brake activation time (Increased brake torque reduces clutch torque)

**Package Includes:**

- Pressure plate\*
- Cylinder plate\*
- New brake studs
- New brake springs
- Steel brake disk

*\*Original parts can be reworked to accept four more springs*

**Press Lines:**

- All presses utilizing Minster air clutch/brake units



---

## Tandem Air Valve Clutch Package

### Description:

This upgrade replaces the current clutch valve with a tandem air clutch valve.

### Benefits:

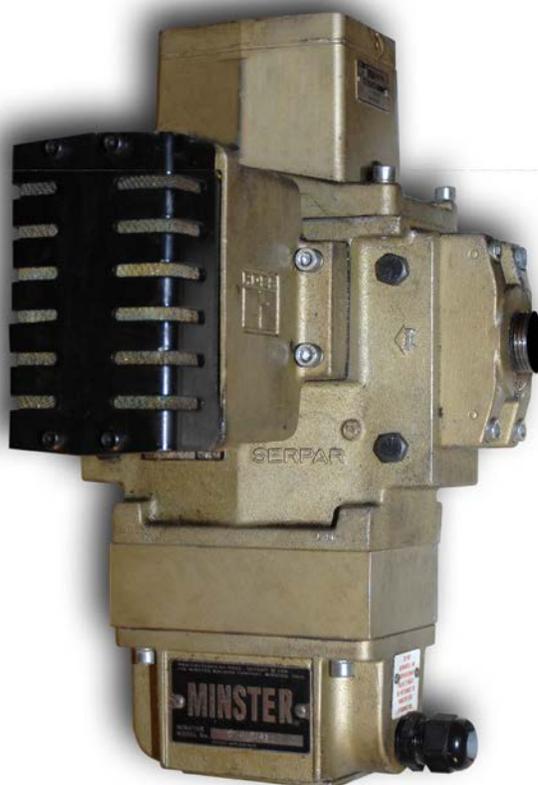
- Minster tandem air clutch valves are connected in a parallel circuit to allow quick deactivation of the clutch in the event that one of the valves should fail mechanically. Available with either mechanical or electrical valve monitoring

### Package Includes:

- New dual air clutch valve
- Connector cables
- Mechanical reset (if applicable)
- All necessary hoses, fittings and tubings

### Press Lines:

- All air clutch and brakes utilizing  $\frac{3}{4}$  &  $1\frac{1}{4}$  clutch valves



---

## Lamination & Electrical Press Upgrades

---

### Detachable Slide Adjust Motor Package

**Description:** Part No. 810-1856 or 810-1866

Detachable motorized adjustment motor to be used to adjust the press shutheight for die setting. Fastens into a bracket mounted on the press slide yet can be removed for use on other presses after set up is complete

**Benefits:**

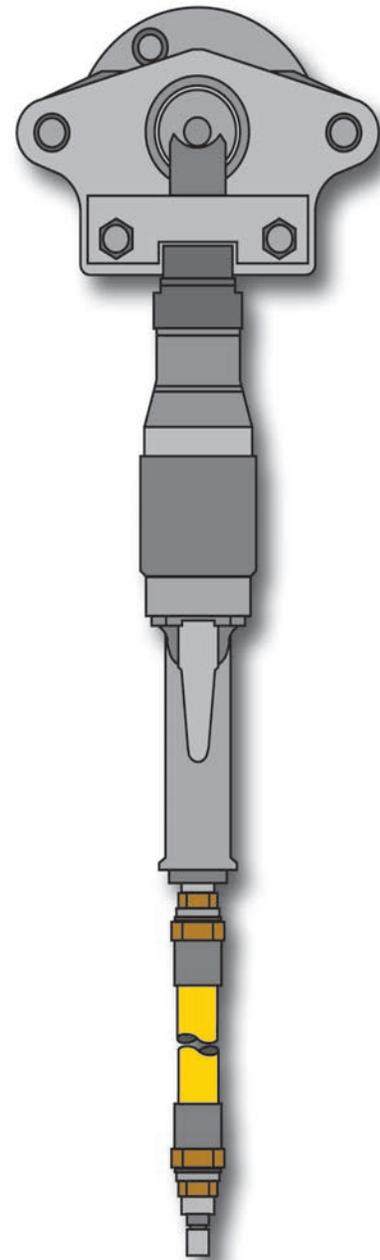
- Reduced die set-up time by using this detachable air powered shutheight adjustment motor to adjust press shutheight
- Easier to use than manual slide adjustment wrenches

**Package Includes:**

- Air motor
- Air motor anti-rotation bracket
- Adjust socket
- Air hose
- Quick disconnect coupling
- Installation information

**Press Lines:**

- P2, DAC, DAS, PM2 and PM3



## SA Brake Lock-Up

**Description:** Part No. 810-1260

This package adds a hydraulic lock-up brake to the worm shaft to prevent slide drift.

### Benefits:

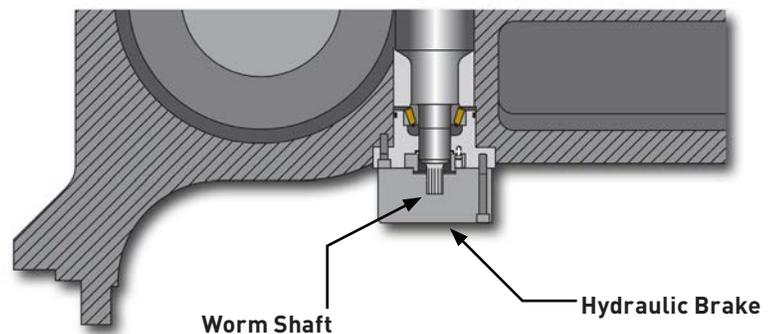
- Increased lift of slide shutheight adjustment parts
- Improved reliability of slide adjustment
- Reduced maintenance and downtime

### Package Includes:

- Hydraulic brake
- New worm shaft
- All necessary manifold and housing assemblies
- All necessary mounting hardware

### Press Lines:

- PM2, PM3 and PM4



## Automatic Shutheight Adjustment for Slide or Bolster

### Description:

This package allows for automatic shutheight adjustment using the slide or bolster, from your control pedestal and/or touch screen.

### Benefits:

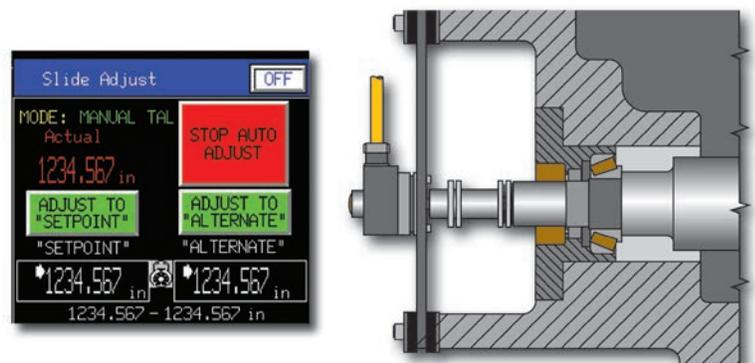
- Allows for accurate adjustment and gauging of shutheight using the slide or bolster
- Can be set to automatically adjust to a per-determined set point

### Package Includes:

- Encoder with mounting bracket
- Drive coupling or pulleys
- All necessary mounting hardware
- Control programming for readout

### Press Lines:

- Most Minster presses with slide or bolster height adjustment and Production Management Control (PMC)



---

## Lamination & Electrical Press Upgrades

---

### Automatic Shutheight Adjustment for Slide or Bolster

#### Description:

This package allows for automatic shutheight adjustment using the slide or bolster, from your control pedestal and/or touch screen.

#### Benefits:

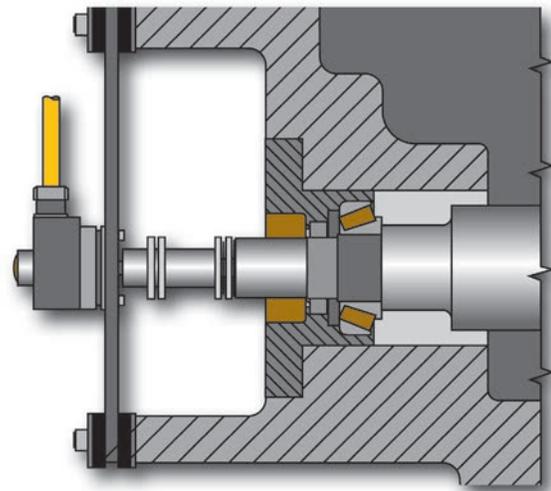
- Allows for accurate adjustment and gauging of shutheight using the slide or bolster
- Can be set to automatically adjust to a per-determined set point

#### Package Includes:

- Encoder with mounting bracket
- Drive coupling or pulleys
- All necessary mounting hardware
- Control programming for readout

#### Press Lines:

- Most Minster presses with slide or bolster height adjustment and Production Management Control (PMC)



## Oil Sump Heaters

**Description:** Part No. 810-0562

Heaters are provided to put in the reservoir to heat the oil before it is distributed throughout the press. The heaters are regulated to maintain the proper oil temperature and are activated when the press is **NOT** cycling.

### Benefits:

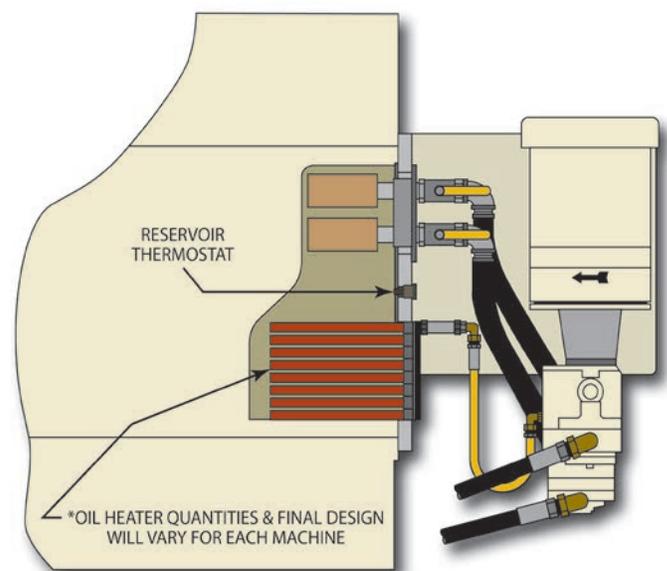
- Will maintain proper oil operating temperature while the press is not cycling, which is especially critical in cooler climates
- Allows for faster press start-up

### Package Includes:

- Immersion heaters
- Preset thermometer
- Oil reservoir cover(s)
- Installation hardware
- Installation instructions

### Press Lines:

- All Minster press lines with proper sump capacity



---

## Lamination & Electrical Press Upgrades

---

### Heat Exchanger Package

**Description:** Part No. 810-0251

This package incorporates a heat exchanger into the press sump in order to maintain a consistent press oil temperature. This results in a consistent oil viscosity and increased thermal stability.

**Benefits:**

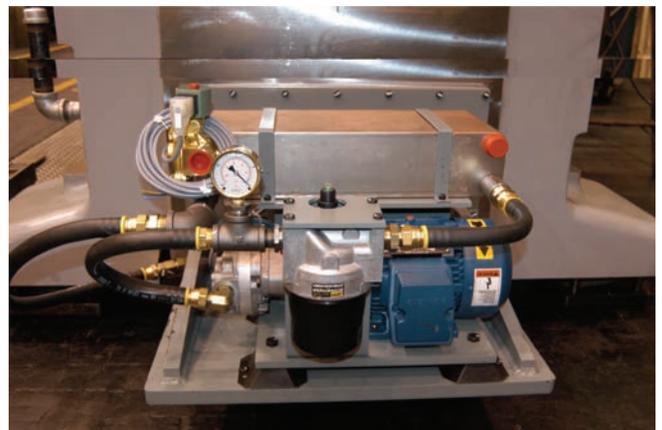
- Improves part quality:
  - The slide guiding system effectiveness is increased due to the desired oil pressure being maintained in the slide guide housings as a result of consistent oil
- Improves part consistency by better maintaining bottom-dead-center repeatability:
  - Shutheight stability is increased as a result of reduced thermal growth
- Increases efficiency of press lubrication system and reduces lubrication faults:
  - Consistent operating temperature results in consistent oil viscosity, which improves oil flow and pressure consistency

**Package Includes:**

- Heat exchanger
- Thermalprobe and thermometer
- Level switch
- Installation information
- All necessary plumbing, brackets and mounting hardware to add this unit to the press

**Press Lines:**

- PM3 and PM4



---

## Connection Pin Upgrade Package

**Description:** Part No. 810-2127

This package adds retainers to the ends of the connection pins to eliminate connection pin movement.

**Benefits:**

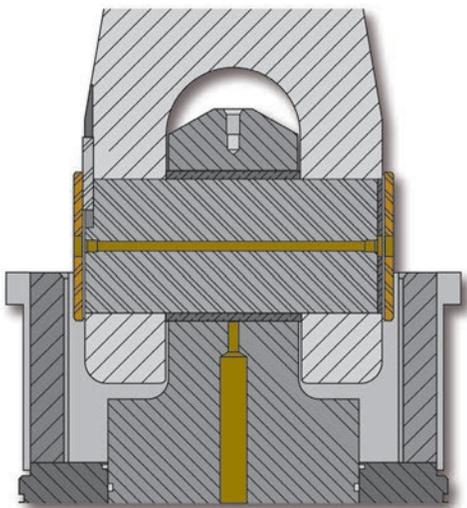
- Prevents pin from working loose in high snap-thru or high vibration applications
- Reduces excessive wear
- Increased bushing and pin life

**Package Includes:**

- Connection pins, retainers, keys and mounting hardware

**Press Lines:**

- E2H and PM4



---

## Connection Oil Deflectors

**Description:** Part No. 810-2162, 810-2163, 810-2164

Adds flexible oil deflectors on connection near connection pin.

**Benefits:**

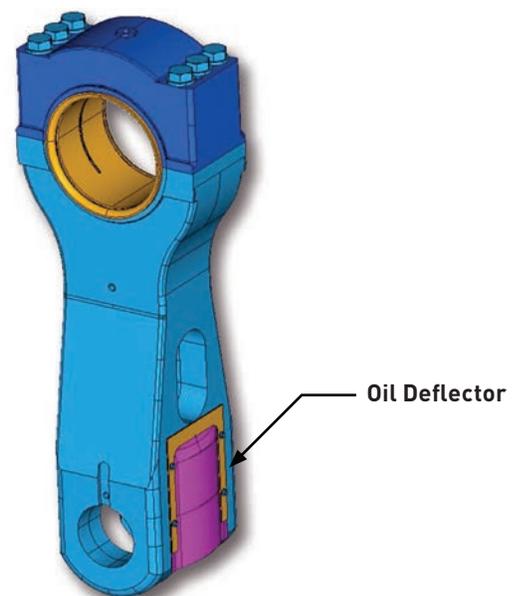
- Decreases oil splash around wrist pins

**Package Includes:**

- Oil deflectors for both side of both wrist pins
- Mounting hardware

**Press Lines:**

- E2h and PM4



---

## Lamination & Electrical Press Upgrades

---

### Piston and Connection Heaters

**Description:** Part No. 1218-193

When a press is initially started, heat, generated by friction, will begin to warm the structure. Until the connections and/or pistons reach a stable operating temperature, the shutheight may vary. By preheating the connections and/or pistons to operating temperature, any changes in shutheight can be minimized.

**Benefits:**

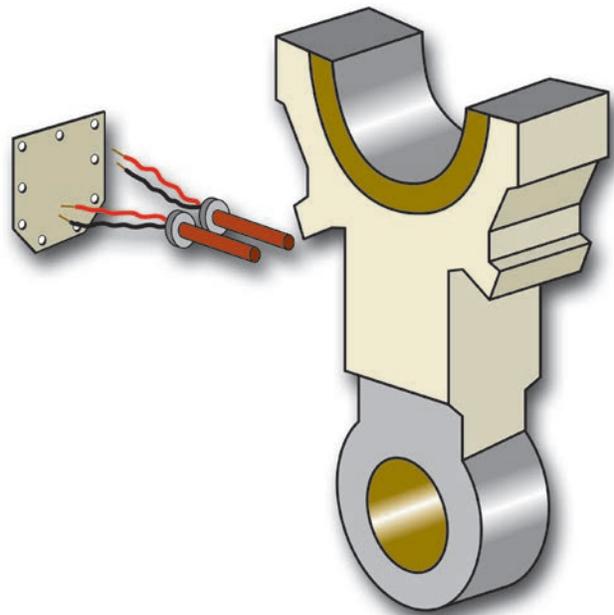
- Helps to limit loss of shutheight due to thermal elongation of the connections and pistons after the press has been running
- Can be used to maintain the connection temperature whenever the press has been shut down for short periods of time

**Package Includes:**

- [2] cartridge-type heaters per connection of piston
- Electrical control box
- Connection remachine print
- Wiring diagram

**Press Lines:**

- Most Minster press lines



---

## Die Door Assembly

### Description:

This package adds front or/and rear die doors on an existing press.

### Benefits:

- Die doors provide a no-bypass safety barrier and assist in containment of die lubricant
- Die doors meet OSHA requirements

### Package Includes:

- Doors and track
- Counter weight
- Safety switches and hardware

### Press Lines:

- P2, E2, PM2 and PM3



**NOT INTENDED AS A PROJECTILE BARRIER**

---

## Lamination & Electrical Press Upgrades

---

### Vibration Isolators

**Description:**

This package will provide vibration isolators for each corner of the press.

**Benefits:**

- Reduces transmitted shock and vibration
- Provides an adjustment means to precisely level, align and properly support your press
- Can provide the same level of isolation as air mounts but without the same risk of damage or leakage

**Package Includes:**

- Isolator Assemblies
- Leveling screws

**Press Lines:**

- All presses



---

## Safety Railing

**Description:** Part No. 810-2145

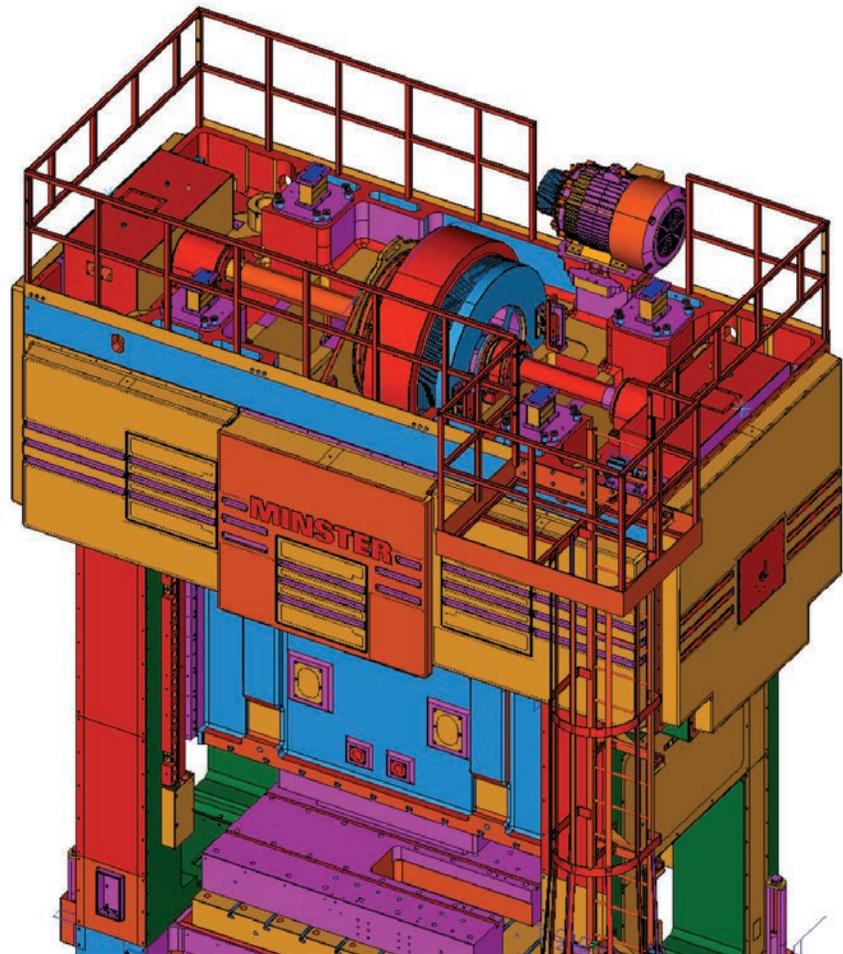
Add crown safety railing with caged ladder access. Lockout devices can be added to ensure press cannot run while personnel are working on the crown.

### Benefits:

- Can be customized to fit customer's needs
- Lockout devices can tie into current press control

### Package Includes:

- Safety railing
- Caged ladder
- Safety lockout devices
- Mounting equipment
- Installation instructions



## Lamination & Electrical Press Upgrades

### Aluminum Die Safety Blocks

#### Description:

This package is for adding die safety blocks with repetitive shutheights. Each block has a predetermined static load rating and is made to a specific length.

#### Benefits:

- Strong for static loads and lightweight for handling
- Can be supplied for a large range of shutheights
- Meets OSHA regulations

#### Package Includes:

- Safety blocks
- Interlocking plug and receptacle
- Optional safety block holder available

#### Press Lines:

- All Minster presses



### Adjustable Die Safety Block Package

#### Description:

This package simplifies using die safety blocks with frequent shutheight variations. Each block has a predetermined adjustable range and specific load rating.

#### Benefits:

- Reduces die set up time
- Versatile for a variety of shutheights
- Adjustable height feature to eliminate the need for wedges
- Meets OSHA regulations

#### Package Includes:

- Height adjustable safety block
- Interlocking plug and receptacle
- Optional safety block holder available

#### Press Lines:

- All presses



## Preventive Maintenance Programs

Custom Care PM is a preventive maintenance program. The Program begins with a press line audit to determine your equipment's current condition which is required for predictive analysis. This program also includes semi-annual 100-point preventative maintenance checks. Minor maintenance is performed which may include changing the machine's oil filters and oil if available, replacing lube lines and making adjustments as necessary.

### Benefits:

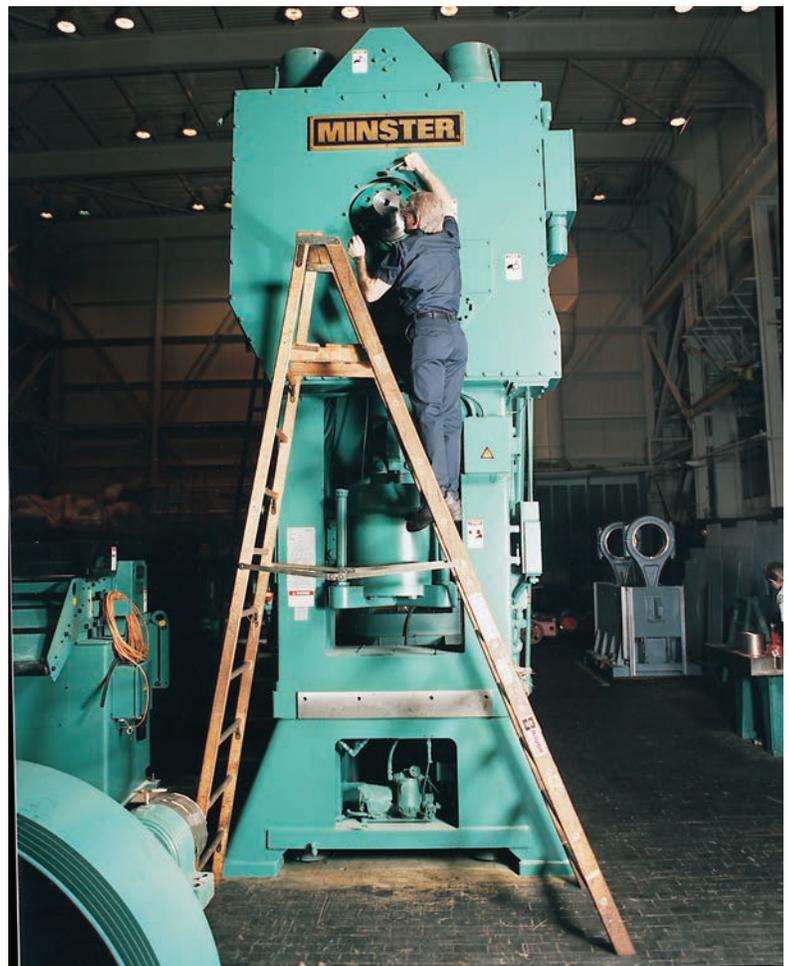
- Service rate discounts of 5% to 10%.
- Repair parts discounts of 5% to 10%.
- One day of operator training for up to three people per year in Nidec Press & Automation's Customer Education Center at no charge.
- Increased productivity and equipment reliability.
- Reduced unplanned down time as most repairs can be planned and scheduled in advance.
- OEM Certified Inspection reports & Maintenance records.
- One-year warranty on Service work performed & Parts replaced.
- Availability of original equipment prints in DXF file format.
- Increased die life as a result of more closely maintained equipment tolerances.
- Extended equipment life as a result of making necessary adjustments before more extensive wear occurs.

### Package Includes:

- Customized package to suit every customer's needs

### Press Lines:

- Minster press line equipment and most of the other brands' equipment



---

## Lamination & Electrical Press Upgrades

---

### Press Remanufacturing & Component Rebuild

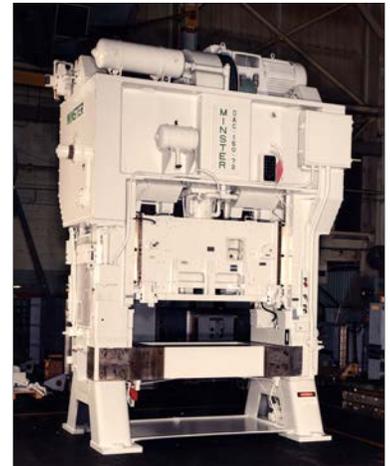
Nidec Press & Automation's Services Division can modify and enhance your equipment to better meet your current requirements. You make the choice whether to refurbish, rebuild or remanufacture your equipment. Nidec Press & Automation can handle your project from start to finish including: tear down, transport, upgrade, modify and install. Nidec Press & Automation's years of experience and skill have been applied to non-Minster equipment for years. Think Nidec Press & Automation for all your press room equipment needs.

#### Benefits:

- Minimizes damage by having Nidec Press & Automation do the tear down, removal and installation.
- Rebuild to suit your unique requirements. Whether you're faced with budget or time constraints, or for any other reason, we will quote the scope of work that makes sense for you.
- Incorporates newer technology and upgrades.

#### Press Lines:

- Minster press line equipment and most of the other brands' equipment.





## One Brand: A World of Resources

Nidec Press & Automation is the full service press room 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 for your press room.

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 who not only has the brightest minds behind our solutions for you, but also has 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  
Notching  
High-Speed & Electrical  
Electrical Vehicle (EV)  
Lamination  
Container Cupping  
Container End-Conversion  
Container Shell  
Gap/D-Frame

### AUTOMATION

Press Tending / Robotics  
Integrated Transfer  
Systems  
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](http://nidecpa.com)