

# GS2

Eccentric Gear Straightside  
Servo Presses

3150 - 8000 kN Capacity

355 - 900 US Tons Capacity



## Product Overview

With capacity ranging from 3150-8000 kN (355-900 US tons), the Minster Global Servo Press (GS2) Series offers proven servo technology, performance, and flexibility.

The GS2 was designed in collaboration with Nidec Press & Automation's global technology resources, which represents nearly 400 years of combined metal forming experience.

Assembled at Nidec Minster's world headquarters in Minster, Ohio, the GS2 is built with the same rugged characteristics, combined with the performance and technology that Minster customers have come to know.

With an aggressive stock program and global manufacturing synergies within Nidec Press & Automation, Nidec Minster is able to offer GS2 presses with competitive pricing and short term delivery anywhere in the world.

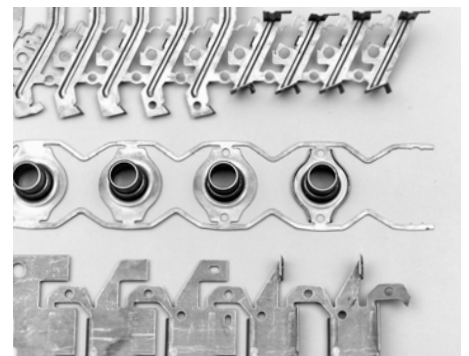
The GS2 Press Series is offered with NPA's full portfolio of automation and control solutions allowing for complete integrated pressroom systems from a single source.

In addition, all Minster and NPA products are backed up with the industry's most comprehensive Customer Service network with fully-stocked Service Centers located on three continents, and service personnel dispatched from more than 90 global locations.



- 1** Precision kinematics enables quicker system response and higher production rates.
- 2** Eccentric wheels with double helical gearing for smooth operation, increased power transmission and higher durability.





**3** Desch Planetary Gearbox reduces the drive train inertia for quicker acceleration and faster stopping times.

**4** Minster proven Robust Design insures years of trouble free operation and lowest overall cost of ownership.

**5** Siemens full energy management system provides maximum energy efficiency and lowest power cost per part.

**6** Zero clearance slide guiding improves die set up and operation.

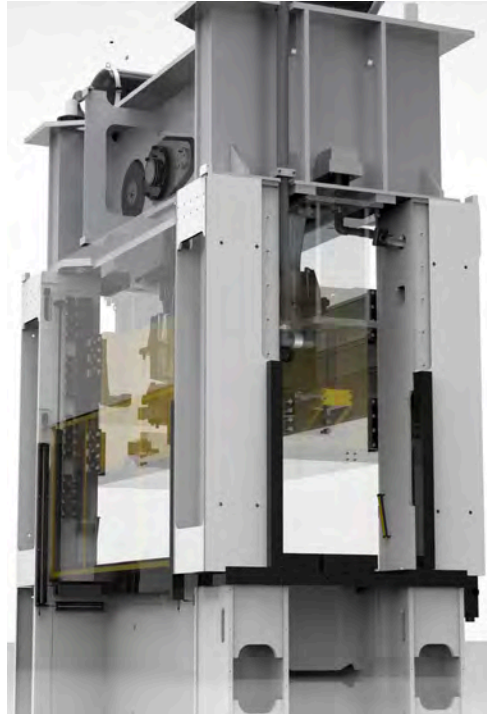
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## Standard Features

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### Minster Robust Design

- Heavy duty steel frame
- Maximum rigidity insuring consistent bottom-dead-center (BDC) repeatability
- All components are thoroughly analyzed




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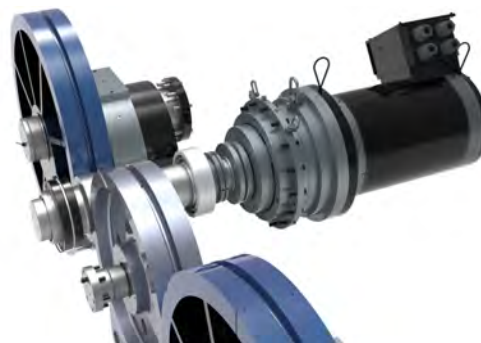
### Low Inertia Drive Train

- Integrated assembly to obtain maximum performance
- Low friction bearings
- Double reduction planetary and pinion gearing
- Space saving, low inertia design (for minimum space)

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### Eccentric Gear Transmission

- Precision kinematic drive train
- Superior response results in higher performance
- Load is centralized directly through the most rigid part of the drive train
- Compact design insures minimal deflection and superior response




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### Desch Reduction Planetary Gearbox

- Low inertia, high performance
- Maintenance free wet brake

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## Double Helical Gear

- No axial force
- Smoother running, more power transmission with less noise
- Increased durability due to lower losses and friction wear
- Tighter tolerance resulting in precise kinematic drive train
- Recommended for high transmission speeds



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## Siemens Servo Motor Technology

- State-of-the-art technology
- Flexible programmable profiles
- Low inertia
- Full energy management
- Minimum connection to the electric power grid
- Water cooled design

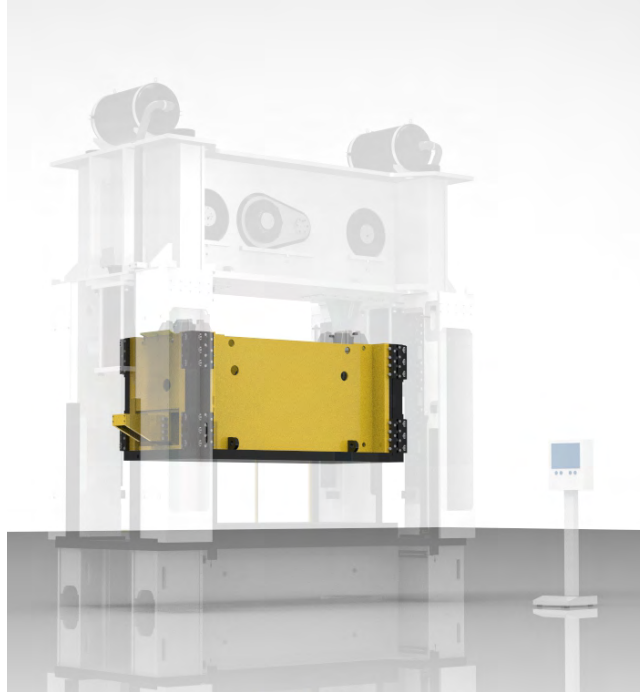
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## Standard Features

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### Slide Guiding System

- Zero clearance slide guiding system
- Linear roller guides for maximum sliding guiding accuracy
- Precision eight-point slide guiding
- Easy maintenance




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### Additional Standard Features

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| <ul style="list-style-type: none"> <li>• Recirculating oil lubrication</li> <li>• Electronic tool storage</li> <li>• Hydraulic overload</li> <li>• Fixed bolster</li> <li>• 16 pole programmable limit switch</li> </ul> | <ul style="list-style-type: none"> <li>• Automatic counterbalance control</li> <li>• Electronic shutheight control</li> <li>• Powered die doors (front &amp; rear)</li> <li>• Front light curtains</li> <li>• Liquid cooled motor</li> </ul> | <ul style="list-style-type: none"> <li>• Temperature monitoring</li> <li>• Mounting pads - RH and LH end</li> <li>• Maintenance platform in the crown</li> </ul> |
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## Optional Features

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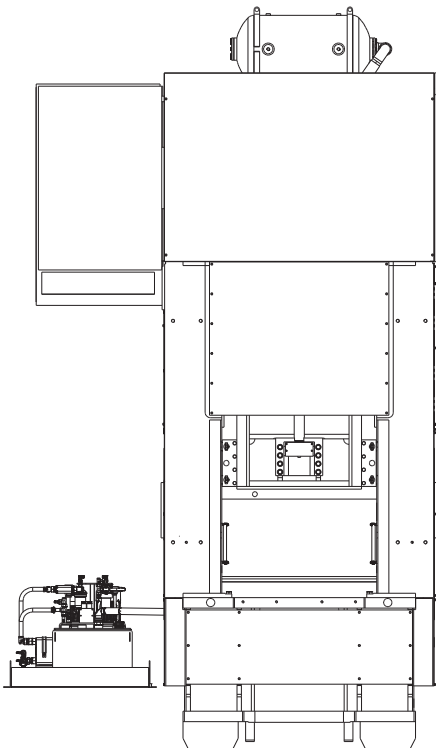
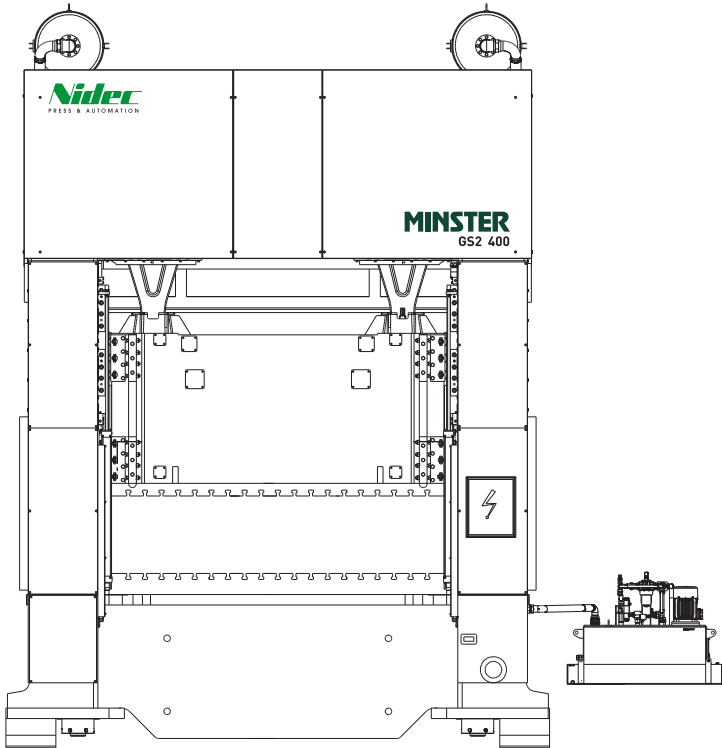
### Features

- Press isolation mounts
- 4 channel tonnage monitor + HOL Adj Valve
- 16 point die protection
- Automatic shutheight adjustment
- Die area lights
- Integration with industry partners



## GS2-315 SERIES

### Specifications & Dimensions



#### SPECIFICATIONS

Capacity

3150 kN  
355 US tons

#### FRAME SPECIFICATIONS

Bed &amp; Slide, R-L

2550 mm  
100 in

3050 mm  
120 in

Bed &amp; Slide, F-B

1200 mm  
47 in

Shutheight on Bolster (SDAU)

600 - 650 - 700 mm  
23.6 - 25.6 - 27.6 in

Bolster Thickness

190 mm  
7.5 in

Side Window Opening

1200 mm  
47 in

Weight (kg / lbs)

53,000 kg  
116,845 lbs

60,000 kg  
132,280 lbs

#### STROKE & SPEED SPECIFICATIONS

Stroke

250 - 300 mm  
9.8 - 11.8 in

Speed Continuous (Reduced Rating)

71 SPM

Speed Pendulum 150 mm (5.9 in)\*

80 SPM

Speed Pendulum 125 mm (4.9 in)\*

90 SPM

Speed Pendulum 100 mm (3.9 in)\*

95 SPM

Speed Pendulum 80 mm (3.1 in)\*

105 SPM

Slide Adjustment

200 mm  
7.8 in

Max Upper Die Weight

3,000 kg  
6,615 lbs

#### CONTROL SPECIFICATIONS

Servo Motor and Drive Platform

Siemens

Energy Management System

Full

Servo Power Infeed

80 kW  
107 HP

Energy (@40 SPM)

50 kJ  
221 In-Tons

\* Stroke rate depends on profile of stroke and press mechanical properties.



## GS2-400 SERIES

## GS2-630 SERIES

## GS2-800 SERIES

|           | 4000 kN<br>450 US tons                      |                          | 6300 kN<br>710 US tons                      |                           |                           | 8000 kN<br>900 US tons                      |                   |                   |
|-----------|---|--------------------------|---|---------------------------|---------------------------|---|-------------------|-------------------|
| m         | 3050 mm<br>120 in                           | 3650 mm<br>143 in        | 3050 mm<br>120 in                           | 3650 mm<br>143 in         | 4250 mm<br>167 in         | 3650 mm<br>143 in                           | 4250 mm<br>167 in | 4850 mm<br>191 in |
|           | 1400 mm<br>55 in                            |                          | 1500 mm<br>59 in                            |                           |                           | 1800 mm<br>71 in                            |                   |                   |
|           | 650 - 700 - 750 mm<br>25.6 - 27.6 - 29.5 in |                          | 750 - 800 - 850 mm<br>29.5 - 31.5 - 33.5 in |                           |                           | 800 - 850 - 900 mm<br>31.5 - 33.5 - 35.4 in |                   |                   |
|           | 190 mm<br>7.5 in                            |                          | 190 mm<br>7.5 in                            |                           |                           | 235 mm<br>9.3 in                            |                   |                   |
|           | 1400 mm<br>55 in                            |                          | 1500 mm<br>59 in                            |                           |                           | 1800 mm<br>71 in                            |                   |                   |
| kg<br>lbs | 82,000 kg<br>180,780 lbs                    | 93,000 kg<br>204,600 lbs | 149,000 kg<br>327,800 lbs                   | 168,000 kg<br>370,375 lbs | 188,000 kg<br>413,600 lbs | TBD   | TBD               | TBD               |
|           | 250 - 300 - 350 mm<br>9.8 - 11.8 - 13.8 in  |                          | 350 - 400 - 450 mm<br>13.8 - 15.7 - 17.7 in |                           |                           | 400 - 450 mm<br>15.7 - 17.7 in              |                   |                   |
|           | 53 SPM                                      |                          | 55 SPM                                      |                           |                           | 45 SPM                                      |                   |                   |
|           | 70 SPM                                      |                          | 75 SPM                                      |                           |                           | 65 SPM                                      |                   |                   |
|           | 80 SPM                                      |                          | 80 SPM                                      |                           |                           | 70 SPM                                      |                   |                   |
|           | 85 SPM                                      |                          | 90 SPM                                      |                           |                           | 80 SPM                                      |                   |                   |
|           | 90 SPM                                      |                          | 95 SPM                                      |                           |                           | 85 SPM                                      |                   |                   |
|           | 250 mm<br>9.8 in                            |                          | 300 mm<br>11.8 in                           |                           |                           | 300 mm<br>11.8 in                           |                   |                   |
|           | 6,000 kg<br>13,200 lbs                      |                          | 7,000 kg<br>15,430 lbs                      |                           |                           | 10,000 kg<br>22,045 lbs                     |                   |                   |
|           | Siemens                                     |                          | Siemens                                     |                           |                           | Siemens                                     |                   |                   |
|           | Full  |                          | Full  |                           |                           | Full  |                   |                   |
|           | 120 kW<br>160 HP                            |                          | 160 kW<br>215 HP                            |                           |                           | 235 kW<br>315 HP                            |                   |                   |
|           | 75 kJ<br>331 In-Tons                        |                          | 100 kJ<br>441 In-Tons                       |                           |                           | 200 kJ<br>883 In-Tons                       |                   |                   |



**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.**



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- System/Tech Upgrades
- i4.0 Software Upgrades
- Integrated Controls

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- 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



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

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