

GS2

ECCENTRIC GEAR STRAIGHTSIDE SERVO PRESSES

3,150 - 8,000 kN

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 (NP&A) global technology resources, which represents nearly 400 years of combined metal forming experience.

With an aggressive stock program and global manufacturing synergies for competitive pricing and short term delivery anywhere in the world, the GS2 Press Series is offered with NP&A's full portfolio of automation and control solutions allowing for complete integrated pressroom systems from a single source.

In addition, all Minster and NP&A products are backed by the industry's most comprehensive Technical Customer Service network with fully-stocked service centers located on four 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.

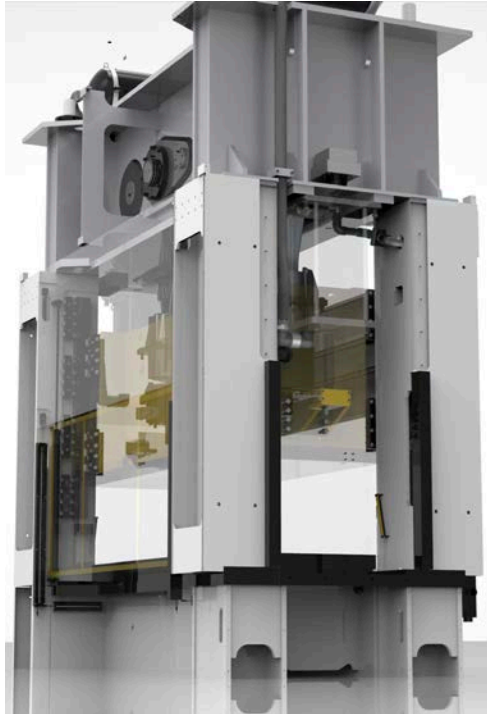
5 Siemens full energy management system provides maximum energy efficiency and lowest power cost per part.

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

STANDARD FEATURES

Minster Robust Design

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



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)

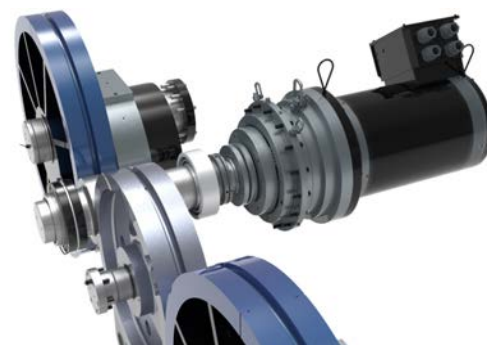
Double Helical Gear

- 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 use with high gear speed



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



Desch Reduction Planetary Gearbox

- Low inertia, high performance
- Maintenance free wet brake



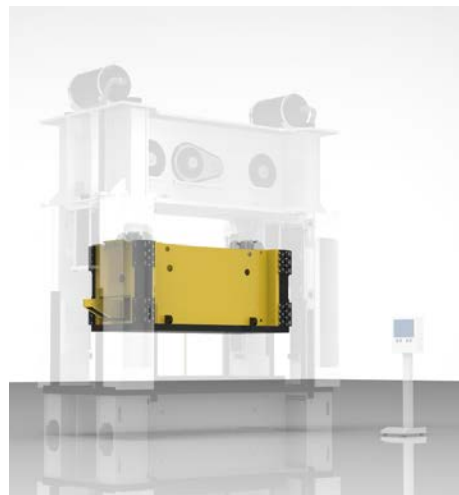
Siemens Servo Motor Technology

- State-of-the-art technology
- Flexible and programmable profiles
- Low inertia
- Full energy management
- Low demand on the electric power grid
- Water cooled motor for higher performance

STANDARD FEATURES

Slide Guiding System

- Zero clearance slide guiding system
- Linear roller guides provide full stroke slide guiding accuracy
- Precision eight-point slide guiding
- Easy maintenance



Global Production Control (GPC)

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.

FieldHawk - i4.0

FieldHawk is a cloud-based mobile application designed to communicate with your NP&A 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

- Recirculating oil lubrication
- Electronic tool storage
- Hydraulic overload
- Fixed bolster
- 16 pole programmable limit switch

- Automatic counterbalance control
- Electronic shutheight control
- Powered die doors (front & rear)
- Front light curtains
- Component Temperature Monitoring

- Feed and Transfer Mounting Pads – RH & LH end
- Maintenance platform in the crown

OPTIONAL FEATURES

Additional Available Options

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



TOTAL SYSTEM SOLUTION

A TOTAL SYSTEM SOLUTION: MINSTER GS2 PRESS + CHS & ARISA AUTOMATION

With capacity ranging from 355 to 900 tons, the Nidec Minster Global Servo Press (GS2) Series offers proven servo technology, performance, and flexibility.

Through the Nidec Press & Automation group of companies, the GS2 Press Series is offered with the innovative Global Production Control, featuring seamless integration with Nidec Arisa transfers, Nidec CHS feed lines, and much more.

REEL

STRAIGHTENER

LOOP CONTROL

SERVO ROLLS FEEDS

PRESS

SERVO TRANSFERS



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
- Industry 4.0 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

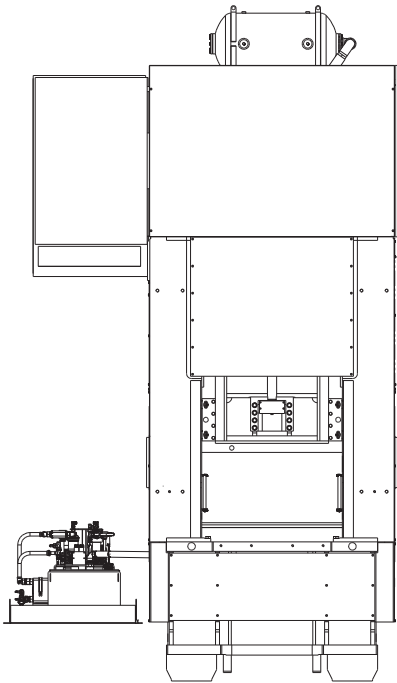
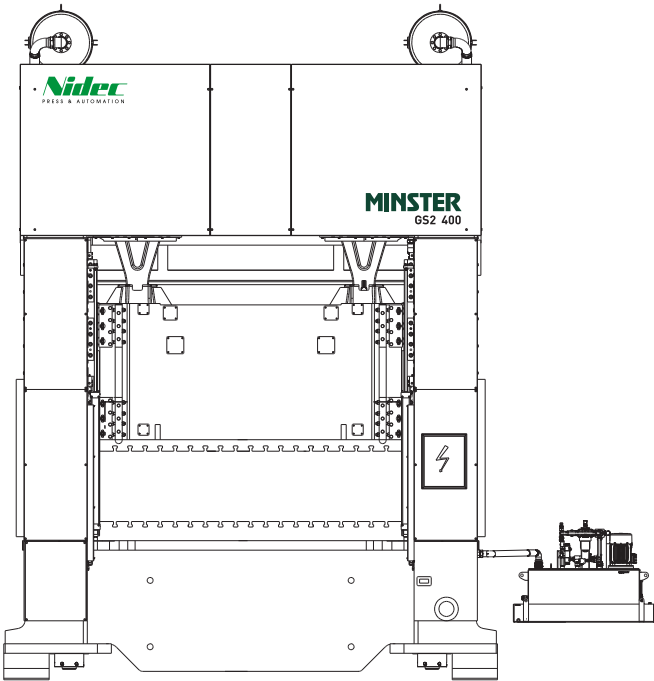
- Press Tending / Robotics
- Integrated Transfers
- High Speed Servo Feeds
- High Speed Gripper Feeds
- Heavy-Duty Coil Lines

GLOBAL SERVICE NETWORK

- Field Service
- Remanufacturing
- Spare Parts
- Technical Service
- Training
- Planned Maintenance
- Inspection & Audit
- Relocation
- Upgrade Services
- Engineering Services



SPECIFICATION & DIMENSIONS



	GS2-300		GS2-400		GS2-630			GS2-800		
SPECIFICATIONS										
Capacity	3,150 kN 355 US tons		4,000 kN 450 US tons		6,300 kN 710 US tons			8,000 kN 900 US tons		
FRAME SPECIFICATIONS										
Bed & Slide, R-L	2,550 mm 100 in	3,050 mm 120 in	3,050 mm 120 in	3,650 mm 143 in	3,050 mm 120 in	3,650 mm 143 in	4,250 mm 167 in	3,650 mm 143 in	4,250 mm 167 in	4,850 mm 191 in
Bed & Slide, F-B	1,200 mm 47 in		1,400 mm 55 in		1,500 mm 59 in			1,800 mm 71 in		
Shutheight on Bolster (SDAU)	700 mm 27.6 in		750 mm 29.5 in		850 mm 33.5 in			900 mm 35.4 in		
Bolster Thickness	190 mm 7.5 in		190 mm 7.5 in		190 mm 7.5 in			235 mm 9.3 in		
Side Window Opening, F-B	1,200 mm 47 in		1,400 mm 55 in		1,500 mm 59 in			1,800 or 2,200 mm 71 or 87 in		
Weight (kg / lbs)	53,000 kg 116,845 lbs	60,000 kg 132,280 lbs	82,000 kg 180,780 lbs	93,000 kg 204,600 lbs	106,000 kg 233,700 lbs	125,000 kg 275,578 lbs	145,000 kg 319,670 lbs	TBD	TBD	TBD
STROKE & SPEED SPECIFICATIONS										
Stroke	300 mm 11.8 in		350 mm 13.8 in		400 mm 15.7 in			450 mm 17.7 in		
Speed Continuous (Max.)	71 SPM		53 SPM		55 SPM			45 SPM		
Speed Pendulum 150 mm (5.9 in)*	90 SPM		90 SPM		85 SPM			75 SPM		
Speed Pendulum 125 mm (4.9in)*	100 SPM		95 SPM		90 SPM			80 SPM		
Speed Pendulum 100 mm (3.9 in)*	110 SPM		105 SPM		100 SPM			90 SPM		
Speed Pendulum 80 mm (3.1 in)*	115 SPM		110 SPM		105 SPM			95 SPM		
Slide Adjustment	300 mm 11.8 in		350 mm 13.8 in		400mm 15.8 in			400 mm 15.8 in		
Max Upper Die Weight	3,000 kg 6,615 lbs		6,000 kg 13,200 lbs		7,000 kg 15,430 lbs			10,000 kg 22,045 lbs		
CONTROL SPECIFICATIONS										
Servo Motor and Drive Platform	Siemens		Siemens		Siemens			Siemens		
Energy Management System	Full		Full		Full			Full		
Servo Power Infeed	80 kW 107 HP		120 kW 160 HP		160 kW 215 HP			235 kW 315 HP		
Energy (@40 SPM)	65 kJ 287 In-Tons		120 kJ 530 In-Tons		110 kJ 486 In-Tons			210 kJ 928 In-Tons		

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



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