



## SUPERIOR POLISHING EFFICIENCY

Individual or Central Force | Variable Speed Head | Easy To Use

SPECIFICATION	FEMTO-1100S	FEMTO-1500S
Application of Force	Individual Pistons (1-6 samples)	Individual Pistons (1-6 samples)  Central Force (3-6 samples)
Specimen Holder	Fixed Individual Holder	Quick Releas Chuck or Interchangeable Holders
Head Speed	0 - 300 rpm	0 - 300 rpm
Force	1.1 - 13.5 lbs (5 - 60N)	1.1 - 13.5 lbs (5 - 60N)
Power Supply	110 / 220V	110 / 220V
Motor	0.54 hp (400 W) dynamic torque servo motor	0.54 hp (400 W) dynamic torque servo motor
Dimensions (W x D x H)	10 x 18 x 22-inch (254 x 457 x 560 mm)	10 x 18 x 22-inch (254 x 457 x 560 mm)
Weight	60 lbs (28 kg)	60 lbs (28 kg)



NANO-1000S shown with FEMTO-1500S attachment

The **FEMTO-S Metallographic Automated Polishing System** is designed to optimize the process of metallographic sample preparation. With its advanced features and user-friendly design, the FEMTO-S will significantly boost your lab's productivity and efficiency.

The FEMTO-S can be installed at the factory or as a future upgrade for any of our NANO-S grinder polishers. The FEMTO-S is offered in two polishing modes: Individual Force and Central Force, providing versatility to meet a wide range of polishing requirements. The Individual Force mode allows for independent control of the applied force on each specimen, ensuring uniform and consistent results. In the Central Force mode, the polishing head applies force evenly to all specimens, streamlining the process for batch polishing.

With its variable speed head, the FEMTO-S enables precise control of the polishing speed. This feature allows users to tailor the polishing parameters to match the specific material properties and achieve the desired surface finish. The intuitive user-friendly interface makes it easy to operate even for users with minimal experience.

Experience enhanced productivity and efficiency with the FEMTO-S Metallographic Automated Polishing System.



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**2** year warranty

Limited warranty

## APPLICATIONS

- Metals
- Ceramics
- Polymers
- Composites
- Aerospace
- Electronics
- Biomaterials



INDIVIDUAL FORCE



CENTRAL FIXED FORCE

## Individual vs. Central Force Automated Polishing

**Individual Force:** The force is applied to each sample individually. The main advantage for single or individual sample preparation is the elimination of the planar grinding steps. The primary disadvantage is that the specimen plane is not fixed in a rigid position during grinding and can result in loss of flatness across the specimen.

**Central Force:** For central force holders the specimens are locked into a rigid position or fixed plane so that the specimens cannot rock during sample preparation, especially the planar grinding or coarser grinding steps. The advantage is that the flatness across all the specimen mounts is better than individual force sample preparation. The main disadvantage is that 1-2 more planar grinding steps are required using coarser more damaging abrasives.

INDIVIDUAL SPECIMEN HOLDERS (1100S and 1500S)	PART #	CENTRAL SPECIMEN HOLDERS (1500S)	PART #
Individual Specimen Holder for FEMTO-1100S (6 slots for 1-1.5-inch diameter rings)	SH-1100	1-inch or 25 mm Central Specimen Holder (3-6 sampels)	QRC-SH100A-1500
Individual Specimen Holder for FEMTO 1500S with Quick Release Chuck (6 slots for 1-1.5-inch diameter rings)	SH-1150	1.25-inch or 30 mm Central Specimen Holder (3-6 sampels)	QRC-SH125A-1500
1-inch Diameter Rings (6/set) 25 mm Diameter Rings (6/set)	SR-0100 SR-25mm	1.5-inch or 40 mm Central Specimen Holder (3-6 sampels)	QRC-SH150A-1500
1.25-inch Diameter Rings (6/set) 30 mm Diameter Rings (6/set)	SR-0125 SR-30mm	2-inch or 50 mm Central Specimen Holder (3-6 sampels)	QRC-SH200A-1500
1.5-inch Diameter Rings (6/set) 40 mm Diameter Rings (6/set)	SR-0150 SR-40mm	Central Force Loading Plate	CF-LP-1500
Individual Specimen Holder for FEMTO-1100S (3 slots for 2-inch diameter rings)	SH-1200	<b>FEMTO ACCESSORIES</b>	
Individual Specimen Holder for FEMTO-1500S with Quick Release Chuck (3 slots for 2-inch diameter rings)	SH-1250	Quick Release Chuck for dual central / individual specimens	QRC
2-inch Diameter Rings (3/set) 50 mm Diameter Rings (3/set)	SR-0200 SR-50mm	Central Holder Male Coupler for use with QRC	QRC-CFC-V2
		Individual Holder Male Coupler for use with QRC	QRC-IFC-V2



QRC-SH125A-1500



SH-1150 Specimen Holder  
with SR-0125 Rings



Quick Release Chuck



Central Force Holder  
Loading Plate

