

FX-12S High Precision Centerless Grinding Machine

Model FX-12S | Centerless Grinder | WUK Machinery, Shenzhen China



Overview

The FX-12S grinds from 0.5 mm to 40 mm diameter on a 305 x 150 x 120 mm wheel turning at 1950 rpm. The regulating wheel is variable from 0 to 320 rpm, which is a wider speed range than the larger FX-18S and suits the faster through feed small parts allow. At 1800 x 1400 x 1450 mm and 1700 kg net it installs in a far smaller footprint.

Who It Is For

Small part producers in fastener, bearing, instrument and medical component manufacturing, and shops adding centerless capacity to an existing turning line without a major installation.

Key Benefits

- **Wheel Speed 1950 rpm** – A higher wheel speed on a smaller diameter keeps surface speed where fine finishes need it on small parts.
- **Regulating Wheel to 320 rpm** – The wider regulating range lets small diameter parts be fed through quickly without changing gears.
- **0.001 mm Micro Feed on Both Slides** – Upper and lower slide micro feed are both graduated at 0.001 mm per division, so size can be trimmed from either.
- **Compact 1800 x 1400 mm Footprint** – At 1700 kg net this machine goes into a production cell rather than needing a dedicated foundation.

Technical Features

- 305 x 150 x 120 mm grinding wheel at 1950 rpm
- 205 x 150 x 90 mm regulating wheel, variable 0 to 320 rpm
- 7.5 HP grinding wheel motor with 2.0 kW regulating wheel motor
- 1.0 HP hydraulic pump and 1/8 HP coolant pump
- Regulating wheel tilt +5 to -3 degrees, swivel +5 to -1 degrees
- Dressing device graduated at 0.01 mm per scale division

FX-12S Specifications

Figures are taken from the machine data sheet. Items not documented are marked TBC rather than estimated.

Grinding range (diameter)	0.5 to 40 mm
Grinding wheel size (dia x width x hole)	305 x 150 x 120 mm
Regulating wheel size (dia x width x hole)	205 x 150 x 90 mm
Grinding wheel speed	1950 rpm
Regulating wheel speed	0 to 320 rpm
Grinding wheel motor	7.5 HP
Regulating wheel motor	2.0 kW
Hydraulic pump motor	1.0 HP
Coolant pump motor	1/8 HP
Upper slide feed graduation	3.5 mm per turn, 0.02 mm per division
Upper slide micro feed graduation	0.1 mm per turn, 0.001 mm per division
Lower slide feed graduation	7.0 mm per turn, 0.1 mm per division
Lower slide micro feed graduation	0.2 mm per turn, 0.001 mm per division
Dressing device graduation	1.5 mm per turn, 0.01 mm per division
Regulating wheel tilt angle	+5 to -3 degrees
Regulating wheel swivel angle	+5 to -1 degrees
Machine dimensions (L x W x H)	1800 x 1400 x 1450 mm
Packing dimensions (L x W x H)	2350 x 1650 x 1770 mm
Net / gross weight	1700 / 1850 kg

Applications

- Through feed grinding of small dowel pins and rivets
- Grinding shafts for small motors and pumps
- Finishing needle rollers and small bearing components
- Medical and instrument component grinding in volume
- Sizing drawn bar stock before secondary machining

Materials and Construction

Cast iron base with hardened ground slides, hydraulic infeed, independently driven grinding and regulating spindles. Blade and wheel specification matched to the part.

Quality Control Before Shipping

- Spindle run out measured on both wheel heads
- Micro feed graduation verified against measured movement
- Regulating wheel angles calibrated
- Sample parts ground and measured for diameter and roundness
- Electrical and safety inspection before crating

Customisation Options

- Work blade angle and material for your part diameter
- Through feed guides and simple part handling
- Wheel and regulating wheel specification for your material
- Coolant filtration options
- Voltage and frequency configured for your supply

Certification

Certification is quoted and confirmed in writing on request. Documented certification status for this model is TBC.

Commercial Terms

- Minimum order: 1 set
- Delivery: 15 to 45 working days after deposit
- Trade terms: EXW, FOB, CFR and CIF
- Packing: plywood cases lined with plastic film
- Warranty: 12 months on the machine
- CNC control options where applicable: FANUC, SIEMENS, SYNTEC and GSK

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