

PRECISION MACHINING EQUIPMENT

Hydraulic Polygon Turning Machine

CF-50HPC / CF-60HPC



A dedicated machine platform for producing flats and polygonal profiles on cylindrical workpieces. The supplied specification lists two models with different workpiece diameter ranges, spindle bores, machining lengths and drive ratings.

MODEL	PROCESSING DIAMETER	MAX. LENGTH	SPINDLE SPEED
CF-50HPC	Ø5-Ø50 mm	80 mm	100-800 rpm
CF-60HPC	Ø5-Ø60 mm	100 mm	100-800 rpm

Hydraulic clamping • Stepless spindle-speed adjustment • Standard and optional tooling configurations

Machine Overview

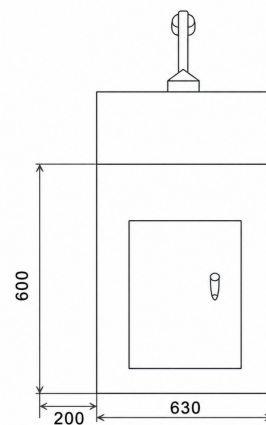
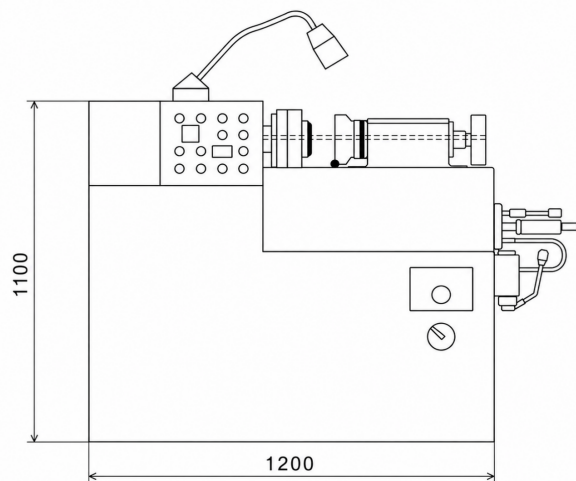
The CF-50HPC and CF-60HPC are hydraulic polygon turning machines intended for machining flats or polygonal forms on compatible cylindrical workpieces. The source document shows a dedicated cutter head, a hydraulic clamping arrangement and a workpiece locating element.

Working area and machine arrangement



Internal arrangement shown in the supplied machine photographs. Actual tooling and workholding should be confirmed against the target part drawing.

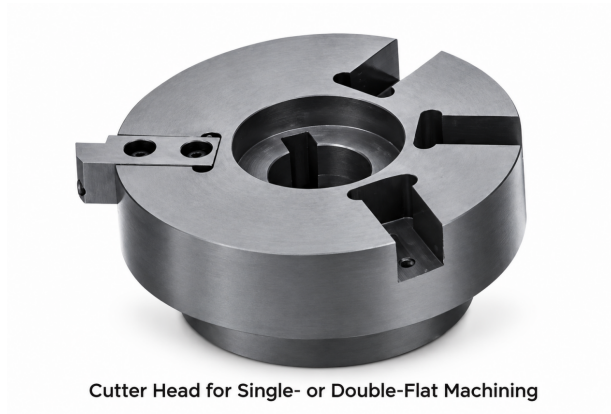
Outline drawings



Drawing callouts: side view 1200 mm overall length and 1100 mm height. End view includes 630 mm and 200 mm horizontal callouts and a 600 mm vertical callout. Confirm the complete installation envelope from an approved layout drawing before planning the foundation or guarding.

Cutter Head & Workholding

The supplied material identifies a cutter head for single- or double-flat machining and shows a split workholding assembly. The cutter-head configuration, clamping method and locating element should be selected for the workpiece geometry and angular orientation.



Cutter head for single- or double-flat machining



Split workholding components

Before ordering, verify the part material, blank diameter, required flat count, finished profile, tolerance, surface-finish requirement, clamping length and production volume. These inputs determine the suitable cutter head, locating method and workholding arrangement.

Technical Data

Published values transcribed from the supplied CF-50HPC / CF-60HPC specification table.

Parameter	Unit	CF-50HPC	CF-60HPC
Workpiece processing diameter	mm	Ø5-Ø50	Ø5-Ø60
Spindle through-bore diameter	mm	Ø46	Ø60
Maximum machining length	mm	80	100
Concentricity / eccentricity value*	mm	Ø0.05	Ø0.05
Workpiece accuracy (source wording)	mm	0.05	0.05
Surface-finish value*	µm*	1.6	1.6
Listed polygon / flat counts*	—	1, 2, 4, 6, 8...	1, 2, 4, 6, 8...
Feed-rate adjustment	m/min*	Stepless	Stepless
Main motor power	kW	2.2	4.0
Power supply	V	380 V, 3-phase, 4-wire	380 V, 3-phase, 4-wire
Hydraulic pump power	kW	0.75	1.2
Spindle speed range	rpm	100-800, stepless	100-800, stepless
Net weight (approx.)	kg	1,200	1,300

*Source-table terminology or units are not fully clear for the concentricity/eccentricity, feed-rate unit, surface-finish and polygon-count rows. Values and units are reproduced for reference and should be confirmed against the manufacturer-approved technical specification before quotation or acceptance.

STANDARD CONFIGURATION	OPTIONAL CONFIGURATION
- Hydraulic collet clamping device - Dedicated cutter head for listed 1-, 2-, 4- and 6-flat/polygon operations - Y6 hand-operated lubrication pump - Workpiece locating rod matched to spindle	- Workpiece-specific collet - Dedicated cutter head for listed 2-, 4-, 6- and 8-flat/polygon operations - Electric automatic lubrication pump - Dedicated locating rod for flat-machined workpieces; angular orientation required - Hydraulic oil cooling unit

Selection note: Confirm whether the required geometry is a single flat, opposed flats or a multi-sided profile. Provide a part drawing and blank dimensions for a machine, cutter-head and workholding review.