

CNC Polygon Turning Machine for Multi-Sided Components

This CNC polygon turning machine is designed for machining polygonal components in mass production. It achieves productivity 3 to 4 times higher than conventional machines while ensuring high component quality.



Overview

High-Efficiency Polygon Machining

The CXF-W40X is a specialized CNC polygon turning machine engineered for the mass production of multi-sided components such as hex, square, and flat surfaces. It delivers 3 to 4 times the productivity of conventional machines while maintaining exceptional component quality and concentricity. This versatile tool integrates turning and polygon cutting in a single setup, making it an ideal solution for high-volume manufacturing of valve stems, shafts, and sockets.

Key Performance Metrics

Efficiency Rating

4 x

Productivity vs. Conventional

Technical Capabilities

Milling Range	2 flats to 12 flats
Clamping and Feed	Hydraulic power clamping and feed
Secondary Operations	Chamfering, Deburring, Boring, Spot facing, Contouring

Applications

Typical Workpieces

- Valve stems
- Brake cams
- Shifter shafts
- Collared nuts
- Drill and socket drive tangs
- Duplex and super duplex steel hex/squares

Features & Advantages

Machine Features

- Integrated CNC turning lathe with NC polygon cutter
- Imported high-quality flexible coupling
- Synchronous main spindle and tool spindle rotation
- Optional power milling turret for boring
- User-friendly operation interface

Production Type

Mass Production • Batch Production

Economic Benefit

Cost-effective in terms of material and tooling