

QUAKELOGIC

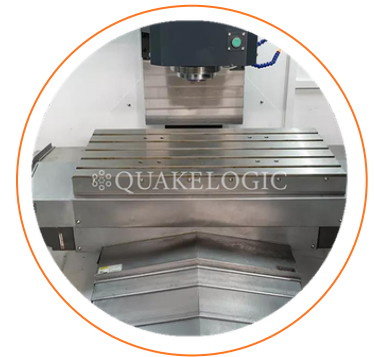
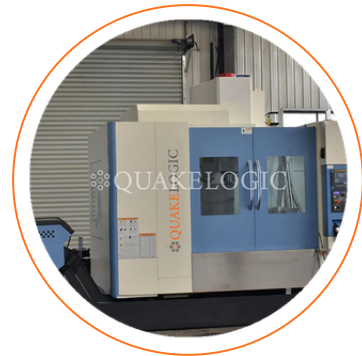
CNC VERTICAL MACHINING CENTRE

QL-MillMaster 1580



QL-MILLMASTER 1580

CNC VERTICAL MACHINING CENTRE



DISCOVER HIGH-PRECISION MACHINING PERFORMANCE

QuakeLogic's QL-MillMaster 1580 CNC Vertical Machining Centre is a high-performance vertical machining center engineered to deliver precise, efficient, and repeatable machining for production facilities, toolrooms, educational institutions, and precision manufacturing environments. Featuring a rigid machine structure, direct-drive spindle, Siemens 828D CNC control system, automatic disc tool changer, and precision linear guideways, the QL-MillMaster 1580 provides reliable performance, high machining accuracy, and long-term operational durability.

- Improves production efficiency by delivering fast, accurate, and repeatable machining with high-speed rapid traverse, precision CNC control, and automatic tool changing.
- Reduces operating costs through a rigid machine structure, precision drive components, automatic lubrication, and reliable cooling systems designed for long service life and minimal maintenance.
- Enhances operator productivity with an intuitive Siemens 828D CNC control system, servo-controlled machining functions, and efficient machining operations for consistent machining operations.
- Supports continuous industrial production through precision linear guideways, a direct-drive spindle, automatic chip removal, and reliable machining performance across a wide range of milling, drilling, boring, and tapping applications.

STANDARD FEATURES »

- Siemens 828D CNC Control
- CAT40 Direct-Drive Spindle
- 24-Tool Disc ATC
- Automatic Lubrication
- Automatic Coolant System
- Automatic Chip Conveyor
- Fully Enclosed Guard
- Workpiece Air Blowing
- Manual Pulse Generator
- Electrical Cabinet Heat Exchanger
- 3-Axis Linear Guideways
- C3 Ball Screws
- Z-Axis Nitrogen Balance
- Three-Color Indicator Light
- Factory Tested
- Standard Warranty

KEY FEATURES

- Delivers precise and repeatable machining through a rigid machine structure, precision linear guideways, and Siemens 828D CNC control.
- Provides X, Y, and Z travels of 47.2 in, 29.5 in, and 23.6 in for a wide range of machining applications.
- Direct-drive CAT40 spindle operates up to 12,000 RPM for high-speed milling, drilling, boring, and tapping operations.
- 24-tool automatic disc tool changer enables fast tool changes and improves machining efficiency during continuous production.
- Fully Enclosed Splash Guard minimizes coolant splash and enhances operator safety in demanding machining environments.
- Three-axis C3 precision ball screws and roller linear guideways provide high positioning accuracy and repeatable machining performance.
- Automatic lubrication, coolant, and chip conveyor systems support reliable operation while reducing routine maintenance requirements.
- Integrated workpiece air blowing, three-color status indicator, and Manual Pulse Generator improve operator convenience and machine usability.

PRODUCT FEATURES

Machine Type

CNC Vertical Machining Centre

Axis Configuration

3-Axis Machining

Working Capacity

47.2 in X Travel

29.5 in Y Travel

23.6 in Z Travel

Spindle Performance

CAT40 Direct-Drive Spindle

12,000 RPM Maximum Speed

Tool Management

24-Tool Automatic Disc ATC

Manual Pulse Generator

Construction

Fully Enclosed Machine Enclosure

3-Axis Roller Linear Guideways

C3 Precision Ball Screws

Machine Systems

Automatic Lubrication System

Automatic Coolant System

Automatic Chip Conveyor

Control System

Siemens 828D CNC Control

Electrical Requirements

Electrical configuration available to customer requirements (208–240V / 3-Phase / 60Hz standard; other configurations available upon request)

For more information about the features, specifications, and available configurations of the QL-MillMaster 1580 CNC Vertical Machining Centre, please contact QuakeLogic.

MACHINE CONFIGURATION

Component	Configuration
Machine Type	CNC Vertical Machining Centre
CNC Control	Siemens 828D CNC
Spindle	CAT40 Direct-Drive Spindle
Maximum Speed	12,000 RPM
Tool Changer	24-Tool Automatic Disc ATC
Guideways	3-Axis Roller Linear Guideways
Ball Screws	3-Axis C3 Precision Ball Screws
Lubrication	Automatic Lubrication System
Cooling	Automatic Coolant System
Chip Removal	Automatic Chip Conveyor
Electrical Requirement	208–240V / 3-Phase / 60Hz

MACHINING CAPACITY

Specification	Value
X-Axis Travel	47.2 in
Y-Axis Travel	29.5 in
Z-Axis Travel	23.6 in
Table Size	51.2 x 27.6 in
Maximum Table Load	3,000 lb (1,361 kg)
Spindle Speed	12,000 RPM
Tool Capacity	24-Tool ATC
Rapid Traverse	945 IPM

OPTIONAL FEATURES & ACCESSORIES

OPTIONAL 4TH AXIS

Expands machining capabilities by enabling multi-sided part processing and reducing setup time for complex machining applications.

THROUGH-SPINDLE COOLANT

Delivers coolant directly through the spindle to improve tool life, enhance cutting performance, and increase machining efficiency.

OPTIONAL 5TH AXIS

Provides simultaneous multi-axis machining for complex geometries, improved part accuracy, and increased manufacturing flexibility.

OPTIONAL WORKPIECE MEASURING SYSTEM

Supports automated workpiece measurement and inspection to improve machining accuracy and reduce setup time.

TECHNICAL SPECIFICATIONS

Specification	Description
Product	QL-MillMaster 1580 CNC Vertical Machining Centre
Machine Type	CNC Vertical Machining Centre
Axis Configuration	3-Axis
X-Axis Travel	47.2 in (1200 mm)
Y-Axis Travel	29.5 in (750 mm)
Z-Axis Travel	23.6 in (600 mm)
Table Size	51.2 x 27.6 in (1300 x 700 mm)
Maximum Table Load	3,000 lb (1,361 kg)
Spindle Taper	CAT40
Maximum Spindle Speed	12,000 RPM
Spindle Motor	30 HP (22.4 kW)
Rapid Traverse	945 IPM (24 m/min)
Cutting Feed	0.04–394 IPM
Tool Changer	24-Tool Automatic Disc ATC
Maximum Tool Weight	17.6 lb (8 kg)
Positioning Accuracy	±0.0002 in (±0.005 mm)
Repeatability	±0.00012 in (±0.003 mm)
Guideways	3-Axis Roller Linear Guideways
Ball Screws	3-Axis C3 Precision Ball Screws
Lubrication	Automatic Lubrication System
Cooling	Automatic Coolant System
Chip Removal	Automatic Chip Conveyor
Electrical Requirement	208–240V, 3-Phase, 60Hz
Machine Size (L x W x H)	120 x 89 x 95 in
Machine Weight	14,300 lb (6,500 kg)
Warranty	Standard Manufacturer Warranty

PRODUCT GALLERY



**Corporate
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- For product information, quotations, technical support, or partnership opportunities, our team is ready to assist you with professional and timely service.

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About QuakeLogic:

- QuakeLogic Inc. is a California-based engineering and technology company providing innovative, reliable, and high-quality solutions to customers worldwide.

Our Commitment

- At QuakeLogic, we are committed to quality, innovation, and customer satisfaction. We build lasting partnerships by delivering reliable solutions and dependable support.

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QL-MillMaster 1580

