



BUILT
FOR A SMART
TOMORROW

AUTOMATIC TOOL-CHANGING SIX-SIDED DRILLING MACHINE

VG-S6

ALL SIX SIDES. ONE SETUP.



6KW ATC
SPINDLE



5-TOOL
MAGAZINE



75 M/MIN



SMART
SCANNING



AUTO
ALIGNMENT

PRECISION FROM EVERY SIDE.
FULL TECHNICAL SPECIFICATION

Automatic Tool-Changing Six-Sided Drilling Machine | Model VG-S6

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ALL SIX SIDES. ONE SETUP.

Complete drilling in a single setup

The VORGEN VG-S6 processes all six faces of a panel without repeated manual repositioning. It combines horizontal and vertical drilling, upper and lower routing, barcode recognition and automatic alignment for efficient cabinet and panel-furniture production.

RUNNING SPEED

75 m/min

Maximum travel speed

UPPER SPINDLE

6 kW ATC

18,000 r/min

TOOL MAGAZINE

5 tools

Disc-type auto change

MATERIAL WIDTH

50-1220 mm

Supported panel range

MATERIAL LENGTH

250-2800 mm

Supported panel range

PANEL THICKNESS

15-40 mm

Supported panel range

Production workflow

01

SCAN

Read barcode and job data

02

ALIGN

Position the panel automatically

03

PROCESS

Drill and route all six faces

04

UNLOAD

Transfer completed workpiece

APPLICATIONS

Cabinet side panels • Top and bottom panels • Shelves • Door panels • Knock-down furniture components

CORE COMPONENTS

Taiwan SYNTEC control

Industrial CNC control platform with a clear, production-oriented interface.

Upper processing unit

12 vertical drills, 8 horizontal drills, 3 pressure wheels and 2 pressure plates.

6 kW ATC spindle

Automatic tool-changing spindle rated to 18,000 r/min.

Lower processing unit

Nine vertical drills plus a 3.5 kW lower spindle rated to 18,000 r/min.

Leadshine full servo

1.5 kW servo drive on X, Y and Z axes for responsive positioning.

Japanese SHIMPO reducer

Precision reducer supporting stable and accurate transmission.

Taiwan steel guide rail

25 mm guide system paired with 1.5-module helical rack transmission.

Industrial electrical system

Schneider components, Folinn inverter and shielded high-flex cables.

Double-hand gripper

Long-distance dual-gripper design for stable panel handling.

Central lubrication

Timed, metered lubrication supports transmission-component service life.

Air-floating work surface

Low-friction material handling assisted by one dedicated fan.

Quenched steel structure

Sandblasted machine bed and crossbeam designed for production rigidity.

TECHNICAL PARAMETERS

Model	VG-S6
Overall dimensions	4300 × 2800 × 2100 mm
Material width	50-1220 mm
Material length	250-2800 mm
Material thickness	15-40 mm
Work surface height	960 mm
Maximum running speed	75 m/min
Transmission	X/Y helical rack; Z ball screw
Upper spindle	1 × 6 kW automatic tool-changing spindle
Lower spindle	1 × 3.5 kW spindle
Spindle speed	18,000-24,000 r/min
Upper drilling unit	12 vertical + 8 horizontal drills
Lower drilling unit	9 vertical drills
Tool magazine	Disc type, 5 positions
Total installed power	24 kW
Working voltage	AC 380 V / 3 PH / 50 Hz
Total weight	Approx. 4000 kg

PRECISION FROM EVERY SIDE

Drilling, routing and tool changing

Upper and lower processing units work together to reduce panel turning and repeated setup. The VG-S6 is built for connector holes, hinge holes, dowel holes, grooves and routing operations used in modern panel furniture.

Six-sided processing

Complete drilling across the top, bottom and four edges in one production flow.

Simultaneous drilling

Horizontal and vertical drilling capability supports complex connector patterns.

Automatic tool change

Five-position magazine expands routing and grooving flexibility without manual changeover.

Automatic side alignment

Laser-assisted side alignment improves repeatability before machining begins.

Upper pressure system

Pressure wheels and plates help stabilize the workpiece during processing.

Rear unloading platform

Finished components transfer out of the processing zone for smoother material flow.

BUILT FOR PANEL FURNITURE

Fast changeovers. Fewer handling steps. Consistent output.

The machine recognizes production programs, supports intelligent job sorting and connects drilling instructions with scanned workpiece data—helping operators move from design information to finished panels with less manual intervention.

SOFTWARE & AUTOMATION

From file to finished panel

VORGEN VG-S6 is supplied with a production-ready computer platform and software workflow for processing common panel-furniture data formats.

Professional software

Imports XML, MPR, DXF and other supported production formats.

Barcode scanning

Connects each workpiece with the correct machining program.

Intelligent recognition

Identifies job information and supports automated processing sequence decisions.

Production sorting

Helps organize workpieces and reduce operator-dependent file handling.

Lenovo industrial computer

Windows platform with a 21-inch display for machine operation.

Remote assistance

Supports diagnosis, parameter guidance and software help through remote channels.

Compatible production data

XML

MPR

DXF

BARCODE
JOB DATA

Supported formats and software compatibility may depend on the selected production workflow and final machine configuration. Confirm integration requirements before order.

INSTALLATION & AFTER-SALES

Support beyond machine delivery

VORGEN coordinates installation, commissioning and operator training so the machine can be integrated into the customer's production environment.

Site preparation

Customer prepares machine space, access route, foundations where needed and safe working clearance.

Utilities

Provide AC 380 V / 3 PH / 50 Hz power, compressed air and required extraction connections.

Commissioning

Technicians verify installation, movement, machining functions and production settings.

Operator training

Covers routine operation, software workflow, maintenance and basic troubleshooting.

One-year warranty

Standard limited warranty applies to the supplied machine, subject to contractual terms.

Lifetime support

Technical assistance remains available beyond the initial warranty period.

SERVICE RESPONSE FRAMEWORK

URGENT

Immediate acknowledgement

GENERAL

Target response within 1 hour

COMPLEX

Action plan within 4 hours

Assistance may be provided through WhatsApp, WeChat, email, remote connection or on-site service when required. Final response times and coverage are governed by the sales agreement.

CONTACT VORGEN

Product consultation, demonstrations, training and technical support.

MANUFACTURER'S ADDRESS

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SEE THE MACHINE IN ACTION AT VORGEN

Book a consultation or product demonstration at the VORGEN Experience Centre.

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