

Okuma 2SP-V920EX — Equipment Specification Sheet

Quantity Required: 2

Machine type: Twin-spindle, four-axis CNC vertical turning center

Manufacturer: Okuma

Model: 2SP-V920EX

Primary applications: High-volume turning of large-diameter, heavy, thin-walled or irregularly shaped components, including brake drums, brake rotors, wheel hubs, gears and motor housings. The two spindle-and-turret stations can machine separate operations simultaneously under one CNC.

Machine capacity

Specification	Nominal value
Number of main spindles	2
Primary controlled axes	4 — X1, Z1, X2, Z2
Optional controlled axes	C1 and/or C2 with milling specification
Maximum turning diameter	920 mm / 36.22 in
Maximum turning height/length	860 mm / 33.86 in
Maximum swing	1,000 mm / 39.37 in
Swing over carriage	710 mm / 27.95 in
X-axis travel, each side	485 mm / 19.09 in
Z-axis travel, each side	860 mm / 33.86 in
Rapid traverse, X and Z	24 m/min / 78.74 ft/min
Standard maximum workpiece mass	1,200 kg / 2,640 lb per spindle
Floor-to-spindle-nose height	1,150 mm / 45.28 in

The working-envelope and travel values above are taken from Okuma's published 2SP-V920EX specifications. Higher workpiece capacities may be available under restricted-speed conditions, but the installed option package should be verified before using a value above 1,200 kg.

Spindles and workholding

Specification	Nominal value
Spindle speed	20–1,250 rpm
Speed ranges	2 automatic ranges
Spindle motor	30/22 kW × 2, 30-minute/continuous rating
Approximate motor rating	40/30 hp per spindle
Spindle nose	JIS A2-11
Spindle bore	110 mm / 4.33 in
Front spindle-bearing diameter	200 mm / 7.87 in
Available chuck sizes	24, 28, 32 or 36 in

Typical workholding	Two independently controlled hydraulic power chucks
Optional high-torque spindle	Configuration-dependent, with reduced maximum speed

Okuma lists 24-, 28-, 32- and 36-inch chuck configurations for the V920EX platform. Chuck diameter, jaw package, hydraulic pressure and safe operating speed must be confirmed from the installed chuck nameplate and workholding documentation.

Turrets and tooling

Specification	Nominal value
Turret arrangement	V12 + V12
Tool stations	12 per turret / 24 total
Standard configuration	Fixed turning tools
Optional configuration	M-V12 live-tool turret on one or both sides
OD tool-shank sizes	25 or 32 mm
ID boring-bar shank sizes	40, 50 or 63 mm
Optional milling-spindle speed	Up to 4,000 rpm intermittent / 3,000 rpm continuous
Optional C-axis range	360°
Minimum C-axis command	0.001°

With the milling specification, all 12 stations on the applicable turret can accept driven tools. Published milling-motor ratings differ between OSP- and FANUC-equipped builds. The automatic tool changer shown in some V920EX literature applies to the **single-spindle V920EX** and should not be assumed to be available on the 2SP-V920EX.

CNC and plant configuration

Item	Installed/reference configuration
Manufacturer-published CNC options	Okuma OSP or FANUC
Brochure reference controls	OSP-P300LA or FANUC 0i-TF
Plant equipment status	In service
ML10 records	MC10-10000A, right-side lathe, serial 211969; MC10-10000B, left-side lathe, serial 242309
ML12 records	MC12-10000, Op. 10 vertical lathe; MC12-20000, Op. 20 vertical lathe
Installed CNC control	Not identified in the available equipment-register entries
Associated plant systems	Separate hydraulic power units, mist collectors and robotic turning-cell equipment, depending on line

The June 17, 2026 equipment register identifies in-service 2SP-V920EX entries in Machine Lines 10 and 12. The ML10 records distinguish right- and left-side machines, while the ML12 records identify Op. 10 and Op. 20 vertical lathes.

The register does not identify the installed CNC model for these machines. The control should therefore be confirmed directly from the operator panel, CNC cabinet or machine electrical documentation rather than inferred from the manufacturer's available OSP and FANUC configurations.

Utilities and installation

Specification	Reference value
Overall floor dimensions	4,500 × 2,845 mm / 177.17 × 112.01 in
Machine height	3,693 mm / 145.39 in
Approximate machine mass — turning specification	22,800 kg / 50,160 lb
Approximate machine mass — milling specification	23,400 kg / 51,480 lb
Coolant capacity	420 L per side / approximately 840 L total
Coolant capacity, US measure	111 gal per side / approximately 222 gal total
Coolant-pump motor	0.28/0.46 kW per side, 50/60 Hz
Shower/chip-flusher pump	0.39/0.62 kW per side, 50/60 Hz
Chip handling	Rear-discharge conveyor and filtration options available
Electrical supply	Build- and site-specific; verify nameplate and electrical drawings
Pneumatic and hydraulic requirements	Verify installed machine and chuck package

The published dimensions represent the basic two-spindle machine. Chip conveyors, coolant filtration equipment, mist collectors, operator access, fencing and robotic loading equipment increase the required installation envelope.

Standard machine characteristics

- Two independently functioning spindle-and-turret stations operated by one CNC.
- Separate right- and left-side machine structures designed to reduce vibration transfer between simultaneous operations.
- Rigid vertical columns and wide square guideways intended for heavy and stable cutting.
- Vertical spindle orientation that simplifies loading and helps reduce workpiece distortion caused by gravity.
- Optional live tooling and C-axis capability for turning, drilling, tapping and milling in one setup.
- Thermo-Friendly Concept compensation on applicable OSP-controlled machines.
- Suitable for robotic loading, automated production cells and two-operation process consolidation.

Verification note: Okuma's manufacturer designation is **2SP-V920EX**. Published specifications vary with CNC control, standard-turning versus M live-tool configuration, spindle option, chuck size and regional build. The plant equipment register also repeats serial number **211969** across

more than one ML10/ML12 equipment entry, so it should not be used by itself to determine the number or identity of unique physical machines. The machine nameplate, CNC panel, chuck nameplate, electrical drawings, installation drawing and original option sheet should be treated as the final authority for each installed unit.