

BELINO SP-R1300M6

Wide Profile Sanding Machine

Machine: 4,330 × 2,200 × 2,100 mm | Weight: 3,800 kg | Load: 13.5 kW | Supply: 415 V, 50 Hz, 3 Phase

Electrical design basis: 13.5 kW machine load + 5 kW surplus margin = 18.5 kW. Final switchgear, cable and stabilizer settings must be verified against the machine nameplate, measured fault level, cable route, ambient temperature and local electrical authority requirements by a licensed electrical contractor.

1. Site & Foundation

☐	Confirm the final machine position and maintain clear space for feeding, operation, servicing and abrasive replacement.
☐	Provide a flat, level industrial floor structurally suitable for the approximately 3,800 kg machine; complete anchors only as directed by Caple.
☐	Ensure the access route, doorway and turning space can accommodate the machine and handling equipment.
☐	Keep the area dry, clean, well illuminated and free from civil work or production obstruction.

2. Unloading & Positioning

☐	Arrange a certified crane or forklift of adequate capacity, with trained riggers, slings, shackles, rollers and toe jacks.
☐	Unload only from the marked lifting points and place the machine near its approved final position.
☐	Inspect packages for visible damage or shortages; photograph and report any issue before unpacking.
☐	Barricade the handling area and keep unauthorised personnel away during unloading and shifting.

3. Electrical Supply, Protection & Cable

☐	Provide a dedicated 415 V, 50 Hz, three-phase feeder through a 40 A, 4-pole industrial MCCB/MCB; use C/D curve or adjustable motor-duty protection, minimum 10 kA breaking capacity or higher as required by the measured fault level.
☐	Provide 4-core × 6 mm ² copper flexible power cable (three phases plus neutral where required) and a separate 6 mm ² green/yellow copper protective-earth conductor. Do not use 2.5 mm ² cable for this load.
☐	Install a lockable 40–63 A, 4-pole local isolator near the machine, plus phase-failure/phase-sequence, under/over-voltage and short-circuit protection.
☐	Test phase-to-phase voltage, phase sequence, insulation and earth continuity before energising; connect only under Caple engineer supervision.

4. Voltage Stabilizer

☐	Provide a three-phase servo voltage stabilizer: 25 kVA minimum for the 18.5 kW design load; select 30 kVA where incoming voltage is highly unstable or motors can start simultaneously.
☐	Specify 415 V three-phase output with ±1% regulation, suitably selected input range after recording the site voltage, and independent phase correction where appropriate.
☐	Include manual bypass, input/output MCCB protection, overload, short-circuit, phase-failure, under/over-voltage, high-temperature protection and digital metering.
☐	Use copper-wound industrial equipment with OEM routine-test certificate and conformity to applicable BIS/IEC safety requirements; confirm neutral arrangement with the machine circuit diagram.

INSTALLATION READINESS

5. Dust Extraction & Utilities

☐	Provide an operating dust-extraction system with five Ø200 mm connection points, correctly sized ducts and minimal restrictive bends.
☐	Keep flexible hoses, clamps, blast gates and proper support for the final machine connections ready.
☐	Confirm compressed-air pressure and consumption with Caple; if required, provide clean, dry air with FRL, hose and matching fittings.
☐	Keep suitable wood-dust fire protection, waste collection and housekeeping arrangements available.

6. Raw Materials & Trial Production

☐	Keep all required raw materials ready on the day of installation.
☐	Provide sufficient solid wood, MDF, veneer and representative profile samples covering the normal production range.
☐	Keep raw-material and primer-sanded samples ready, together with an approved finish sample for quality comparison.
☐	Ensure trial pieces are dry, clean and free from nails, screws, stones or other metal contamination.

7. Operators & Training

☐	Make sure two designated operators are available throughout commissioning and hands-on training.
☐	Ensure both operators understand the usual products, profiles and expected sanding quality.
☐	Provide PPE for both operators: safety shoes, eye and hearing protection, and suitable dust masks.
☐	Nominate one production or maintenance supervisor to approve trials, record settings and sign the handover.

8. Documents, Safety & Final Readiness

☐	Keep the approved layout, packing list, machine manual, electrical drawing, purchase order and serial-number details at site.
☐	Arrange a qualified electrician, maintenance technician and responsible site coordinator during installation.
☐	Provide emergency access, fire extinguishers, barricading and a clean, adequately illuminated working area.
☐	Do not energise or operate the machine until Caple completes inspection, safety checks, trial run and commissioning approval.

Important: The 40 A protection, 6 mm² copper cable and 25/30 kVA stabilizer are engineering recommendations based on the supplied 13.5 kW rating and requested 5 kW margin. Final selection must be coordinated with the actual nameplate current, OEM wiring diagram, installation method, cable length, permissible voltage drop and site prospective short-circuit current.

Customer / Site: _____ Date: _____ Ready for installation: Yes / No

Checked by: _____ Signature: _____