

Quick guide

COMPONENTS FOR METALWORKING AND WOODWORKING MACHINES



Help choosing the right components for wood and metal processing machines.

If you're designing or installing a woodworking machine, such as a band saw, or a metal processing machine – a surface planer, for example – you'll need components that can dampen vibration and noise. Comfort and ease of use should also be a consideration, so think of factoring in ergonomics in your metal processing or wood production process. Your components will see constant use, in some cases, 24/7, so they'll need to be durable to ensure the machine's longevity, preventing failure and downtime. Safety for the operator is another concern, so quality should be a priority. Quality components will also ensure the protection of your machine and the product being manufactured.

The components we recommend in this guide are ideal for whatever you're designing, whether a lathe or a milling machine. That goes for drill press, dovetailer, boring machine, or an Ironworker machine design. Press brake machine components, for example, can also be used on mitring machines, and vice versa. If you're not sure if a component here is right for your application, we're happy to answer any questions.

You'll also need to think about masking solutions for painting the machine's external panels and walls. Consider our high-temperature **masking flangeless plugs** and **masking tapes**.

To make your job easier, we've made available **free samples** on most of our solutions, so you can try before you buy. You can also **download free CADs** of our solutions to help with designing your application.

METAL MANUFACTURING MACHINES

The CNC machine manufacturing process can involve many different materials, such as metal, wood, glass and plastic. In this section, we will only refer to metal. If you're considering components, you already have an idea of how to design a CNC milling machine. Choosing components will influence your design, so here's a look at the small parts you should consider.



STUD MOUNT LEVELLING FEET

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Industrial levelling feet with a swivel base adjust to uneven surfaces to level your machining centre. The articulated feet and large diameter pads provide solid levelling and support. Nylon base and steel thread.

Typically used: underneath machine



VIBRATION MOUNTS – HEAVY DUTY

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Similar to screw-on rubber feet, these vibration mounts absorb shock and reduce the noise common in industrial metalworking machinery. High adhesion to the floor and made of TPE. Also available: [vibration mount grommets](#), which act as a buffer and absorb vibrations.

Typically used: underneath machine



PLASTIC ONE-PIECE PULL HANDLE

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Nylon arched-shaped pull handles are lightweight and provide a more stylish ergonomic finish. Our range offers a choice of mounting type: front mounted or back mounted.

Typically used: machine doors



METAL ONE-PIECE PULL HANDLE

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Solid industrial design with an ergonomic grip and set at a male right angle. Threaded stud mounting. Made of stainless steel. Also available: screw-mount [recessed handles](#).

Typically used: machine doors



SEALING GASKETS

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Make sure that door gaskets and seals are one of your CNC machine components. The clip-on profiles offer edge protection and a snug seal. Used on metal sheet, they protect against vibrations and ingress of humidity and dirt. Available in EPDM and PVC. Also available: weather-stripping tape, which also works as gasket tape.

Typically used: inside machine doors and panels

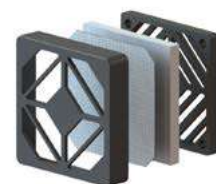


FAN FILTER SET

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Your CNC Machine design will need components for the control panel. The fan, which cools your PCB components, will need to be kept in good working order. Our fan filter set helps you ensure that, with a fan guard, fan filter cover, fan filter mesh sheet, and felt filter. Fan size: 120.0 mm.

Typically used: machine control panel





FAN GUARDS, METAL, SCREW MOUNT

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Fan guards help protect the computing application of your CNC machine design. They prevent debris from falling into the fan blades and causing an obstruction. Simple to install screw-mount application. Made of steel wire.

Typically used: machine control panel



PCB SUPPORT PILLARS

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Your PCB hardware components should include PCB spacers mounted on both sides with a low profile two-prong fastener. One side is locking and the other is a releasable snap-fit. Available in a variety of styles. Operating temperature range: -40°C to 85°C. Nylon 6/6.

Typically used: machine control panel



CIRCUIT BOARD INSTALLER AND EXTRACTOR

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Plastic card guides are strong and rigid with optimum leverage to assist in both inserting and extracting the PCB of your sheet-metal press-tool design. Operating temperature range: -40°C to 90°C. Nylon 6/6. UL94 V-2

Typically used: machine control panel



MALE-TO-FEMALE STANDOFF

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Self-tapping PCB standoffs are ideal for CNC machining and manufacturing. It simplifies installation by threading straight into panels without the need for nuts or washers. Zinc-plated hardened steel.

Typically used: machine control panel

ADJUSTABLE LATCHES

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Designed for flexibility and the security of metalworking machines. The additional locking button prevents accidental opening and the latch can be fitted using standard M4 fittings. The keeper is supplied with the latch. Made of 304 stainless steel.

Typically used: machine doors and panels



ADJUSTABLE TORQUE HINGES – WITH LEAF SCREW

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Basic components of Vertical Milling Machines, adjustable torque hinges hold doors or panels in position. They operate with a single torque adjustment using the stainless-steel screw. Available in different styles, in zinc alloy or nylon, and with maximum rotations of 150°, 180° or 270°.

Typically used: machine doors



GEAR LEVER

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Ergonomic in design with a plastic ball knob, this durable gear lever is perfect as one of your grinding machine parts. Stainless-steel shaft material.

Typically used: external fabrication; for changing gears at a pivot point



CAM LATCHES – LIFT AND TURN

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Ideal as one of your dovetailer machine parts. Low-profile swing handle stows away when not in use. Simple to install, using either a bracket or snap-in fastener. Consists of a slam-action spring-loaded handle. Available in keyed alike, key to differ, or a button to press. You might also consider a [flush compression lever latch](#), which helps seal against vibrations.

Typically used: machine cabinets or electrical boxes



HANDLE TURN CAM LATCHES – L-HANDLE

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L-handle cam latch comes with standard key-cylinder locking. Available in black or chrome finish and keyed alike, keyed different or keyless.

Typically used: machinery covers, doors, cabinets and panels



WOOD MANUFACTURING MACHINES

Wood engraving machines, laser wood-cutting machines, wood sanding machines, industrial wood saws – these and other different woodworking machines will need the same small components.



CABLE CLAMP

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Will space be limited in your table-saw design or sheet metal press machine design? This adhesive mount U-clip has a low profile, making it ideal for saving space. Good for mounting bundles in corners or along edges. Operating temperature range: 0°C to 50°C. Made of PVC. UL94 V-0.

Typically used: mounting bundles in corners or along internal edges



STANDARD CABLE TIES

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Tough, high-quality cable ties suitable for industrial woodworking machinery. The locking cable tie prevents accidental removal. Available in black and natural. Nylon 6/6. UL94 V-2. Also available: [releasable cable ties](#).

Typically used: inside machines



OPEN CABLE GROMMETS

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Standard grommets snap in place for quick and easy installation. They protect the wires and cables that pass through the panels of your milling machine. Flexible PVC.

Typically used: internal machine panels



HOSE CLAMPS

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Suitable for suction hoses that extract wood dust and chips from wood turning machines and grinding equipment. The house of this worm-drive hose clamp is spot-welded and the torque can be reached with a C7 hexagonal screw. Stainless steel.

Typically used: suction hoses

HOSE AND TUBING CINCH STRAPS

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Hook-and-loop design holds hoses securely. Hoses can be expanded or contracted during start up or shut down of your mitre machine. The heavy-duty version is reinforced with ballistic cordura nylon and is ultrasonically welded to the 1 1/2" hook-and-loop material. Woven nylon webbing with a nickel-plated delrin buckle.

Typically used: heavy hose assemblies



SPIRAL WRAP HOSE PROTECTOR

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Spiralguard® – spiral hose wrap – protects the hoses of your CNC milling machine design with anti-crush control. It also reduces abrasion tear and wear, increasing the life of your hose, minimising expensive downtime and increasing operator safety. Available in black or yellow. Made of HDPE.

Typically used: hoses



COMPRESSION CAM LATCHES

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Adjustable compression latches come with a T-handle knob. The added compression provides a more secure seal and improved insulation against noise and vibration conditions commonly generated by bevelling & scribing equipment and deburring machines. IP65 and NEMA 4 rated.

Typically used: machine covers



GRIP KNOBS

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Fluted knobs provide a firm, ergonomic grip. Stylish, yet functional, these durable knobs fit onto male applications and are resistant to oils, fuels, and greases. Ideal for the mechanical actions required in the woodworking industry. Available in PP.

Typically used: jigs, fixtures and adjustable machine parts



BLANKING PLUGS

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Used on sheet metal to protect against sharp edges. They are a quick solution for closing panel cavities in wood carving machines, providing a clean finish. Available in non-staining PVC with excellent aging properties and TPE, which is resistant to oils, acids and alkalises. Also available in nylon and ethylene-butylacrylate copolymer.

Typically used: machine panels



RECTANGULAR INSERTS AND GLIDES

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Inserts and glides protect users from snags while also providing an aesthetic appearance to wood chipping machine, wood lathe machine and CNC wood carving machine designs. Available in LDPE, HDPE, nylon and PE. Also use bolt nut protection caps, which finishes the appearance while protecting industrial wood-cutting machines from tampering.

Typically used: machine fabrication



VENT PLUGS

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The wood-production process and wood-bending process generate excessive heat, which makes vent plugs a necessity for cooling fans and moving parts. Available in nylon and stainless steel, in different styles. UL94 V-2.

Typically used: machine fabrication



CONTROL HAND WHEEL – STEEL

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Control the operation of wood milling machines with ease. Our spoked metal handwheels provide a leveraging hand hold for positioning and adjustment on machine and equipment. **The range** is fitted with different types of manoeuvring handles to increase safety.

Typically used: machine fabrication



HAND SWITCH

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IP50 turn-to-release emergency stop button is designed to be panel mounted in a 22mm cut out. For your on/off capabilities, use our [rocker switch](#), while our range of [push button switches](#) can help with your other needs.

Typically used: as a height adjustment mechanism



TUBE END GRIPS

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Round ribbed grips are ideal for applications requiring a strong finger grasp. The safety grip handles are flexible and durable material, fitting standard bar sizes and won't tear, split or shred. Made of PVC.

Typically used: machine handles and levers

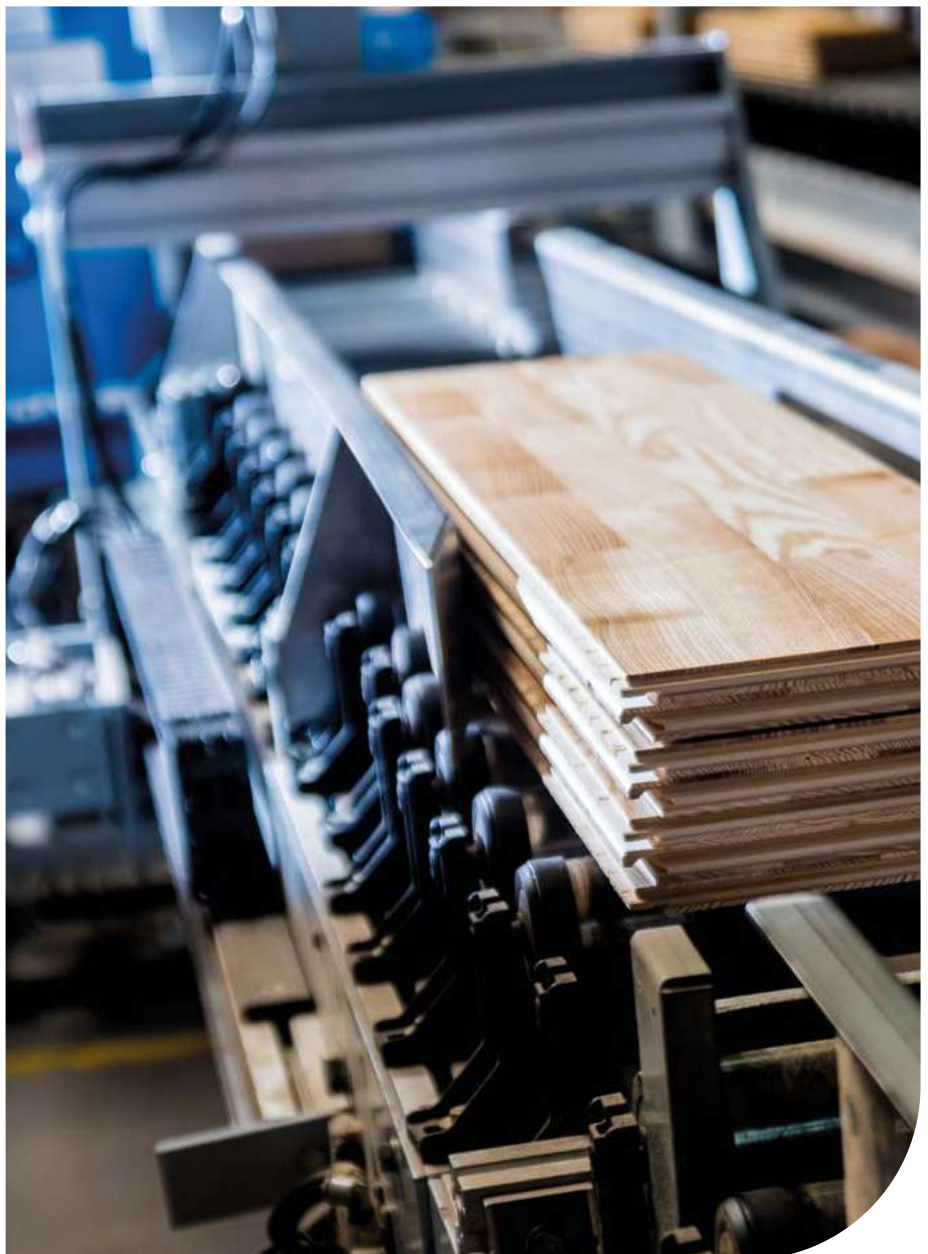


MANUAL HOLD-DOWN CLAMPS

[View online](#)

Horizontal manual hold-down clamps for wood processing methods have a low-height design to save space and cushioned, ergonomic handle grip. The handle and hold-down bar move in opposite directions to provide secure holding capacity. Corrosion-resistant zinc-plated steel and PVC.

Typically used: during production



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