

CNC Fasteners Specification Sheet

Bolts nuts and screws machined when no catalogue part fits the joint.

Four fastener capabilities for joints no standard part covers: custom bolts with the steel alloy selected against the application, custom nuts in aluminium, brass or stainless steel, machined screws across materials, sizes and finishes, and a general bespoke fastener service where thread, head and shank all follow the joint.

4 products in this category. Every figure below is published on the product pages at trueglowimaging.com/categories/fasteners-cnc.html

Custom CNC Fasteners · Bespoke to application

CNC machined fasteners made to the application rather than to a standard part number. Where a catalogue fastener does not exist for the thread, head form or material required, the fastener is engineered and machined to fit. Design flexibility is the point of the service: the geometry follows the joint it has to make, and the material follows the environment it has to survive.

Specification

Process	CNC machining
Build Type	Bespoke design to the intended application
Design Input	Client drawing, sample, or joint requirement
Geometry	Thread pattern, length and head design to specification
Quantities	Prototype through to production batches

Key benefits

Fasteners That Do Not Exist in a Catalogue. Every assembly eventually needs a fastener no standard covers. Machining it removes the redesign of the surrounding part that would otherwise be forced.

Engineered Rather Than Selected. The fastener is designed to fit its intended application, which means thread, head and shank are decided by the joint instead of by what is available.

Collaboration on Difficult Joints. Complex requirements are worked through with the engineering team rather than answered with a nearest-equivalent part number.

Consistency Across a Production Run. CNC machining produces the same part repeatedly, which matters in a fastener because torque and preload depend on dimensional consistency.

Where it is used

Assemblies where no standard fastener fits the available space • Machines needing a non-standard thread pitch or head form • Replacement of obsolete fasteners on older equipment • Fasteners in materials a standard range does not cover • Low-volume production requiring bespoke hardware • Prototype builds ahead of a tooled fastener order

Custom Cnc Nuts from China Reliable Factory

Custom CNC Nuts · Aluminium, brass, stainless steel

Custom CNC machined nuts in aluminium, brass and stainless steel, produced to international safety and quality standards and suitable for global markets. Machining rather than cold forming makes sense where the thread, the flange geometry or the material falls outside standard ranges, or where quantities are too small to justify forming tooling. Compliance is verified by regular audits.

Specification

Process	CNC machining
Materials	Aluminium, brass, stainless steel
Standards	International safety and quality standards
Compliance	Verified by regular audits
Build Type	Custom to drawing or sample

Key benefits

No Forming Tooling to Pay For. Cold formed nuts need dies. Machining a nut avoids that cost entirely, which is what makes small and medium quantities viable.

Three Materials as Standard. Aluminium for weight, brass for corrosion and machinability, stainless steel for strength in wet or chemical environments. The material follows the joint's environment.

Audited Compliance. Regular audits confirm the parts meet international safety and quality standards rather than relying on a single certificate at first order.

Geometry the Standard Range Does Not Cover. Special thread pitches, non-standard across-flats and custom flanges are machined to the drawing rather than substituted.

Where it is used

Assemblies requiring a non-standard thread or across-flats dimension • Machines where a standard nut does not fit the available space • Corrosion-sensitive joints requiring stainless or brass • Weight-critical assemblies using aluminium fasteners • Replacement of obsolete nuts on older equipment • Small production batches where forming tooling is uneconomic

Custom Cnc Bolts from China Reliable Supplier

Custom CNC Bolts • Stainless and carbon steel

CNC machined bolts made to drawing, with the steel alloy chosen against the application. Stainless bolts suit valves, pump shafts and gears; medium carbon steel bolts suit axles, light gears and forged connecting rods; mild carbon steel bolts are used for tie rods, anchor pins and machinery parts. The route runs from a CAD blueprint through material selection and machining to inspection, packaging and dispatch, with tailored thread patterns, lengths and head designs and surface treatments from polishing to anti-corrosion coatings.

Specification

Process	CNC machining from CAD blueprint
Stainless Bolts	Valves, pump shafts and gears
Medium Carbon Steel Bolts	Axles, light gears and forged connecting rods
Mild Carbon Steel Bolts	Tie rods, anchor pins and machinery parts
Customisation	Thread pattern, length, head design
Surface Treatments	Polishing, anti-corrosion coatings
Process Steps	Design, material selection, machining, quality inspection, packaging, dispatch

Key benefits

Alloy Selected by Application. Stainless for valves and pump shafts, medium carbon for axles and connecting rods, mild carbon for tie rods and anchor pins. Choosing the alloy against the duty is what stops a bolt failing in service.

Thread Head and Length All Configurable. A specific thread pattern, length or head design can be machined, so the bolt fits the joint rather than the joint being altered to suit the bolt.

Surface Treatment Included in Scope. Polishing through to anti-corrosion coatings are available, which is what determines the bolt's life in an outdoor or wet installation.

Bulk Orders Without Losing Consistency. Large orders are handled on the available infrastructure, and every bolt is inspected rather than sampled.

Where it is used

Valves, pump shafts and gears using stainless bolts • Axles, light gears and forged connecting rods using medium carbon steel bolts • Tie rods, anchor pins and machinery parts using mild carbon steel bolts • Outdoor installations requiring anti-corrosion coating • Non-standard threads or head designs on special assemblies • Bulk supply of a proven custom bolt for production

CNC Screws

Custom CNC Screws

CNC machined screws across a range of materials, sizes and finishes, including machine screws and other varieties for applications where precision matters, such as aerospace. Quality checking is a fixed part of the process rather than an option, and price depends on material, geometry and quantity, with volume breaks available on larger orders.

Specification

Process	CNC machining
Materials	Aluminium, brass, stainless steel and others

Varieties	Machine screws and other types
Sizes and Finishes	Range available to specification
Aerospace Use	Precision applications supported
Pricing Factors	Material, geometry, volume with bulk discounts

Key benefits

Material Size and Finish All Variable. The catalogue covers screws in different materials, sizes and finishes, so the fastener follows the joint instead of the joint being redesigned to a standard head.

Volume Discounts on Bulk Orders. Price breaks exist for larger quantities. Declaring your annual usage at enquiry usually changes the quoted piece price more than any negotiation afterwards.

Aerospace-Level Precision Available. Precision is paramount in aerospace applications, and screws are machined to that standard when the drawing calls for it.

Quality Checking Not Negotiable. Quality is treated as a non-negotiable step in the process, which is what makes a machined screw a defensible substitute for a certified standard one.

Where it is used

Aerospace assemblies requiring precision fasteners • Machines needing a non-standard head or thread form • Corrosion-sensitive assemblies requiring stainless steel • Electronics and instrument assemblies using brass screws • Weight-critical assemblies using aluminium screws • Replacement of discontinued screws on older equipment

How To Enquire

Send the process rather than a model number: capacity or flow rate, the product being handled, the container format where relevant, and the utilities already on site. WhatsApp +86 150 5517 9418 or email sales@trueglowimaging.com.

Minimum order is one unit on the process, packaging, utility and crane ranges. Machined, fabricated and moulded parts are quoted from single pieces upward.