

NOWARUN Machining Tolerance and Treatment Guide

A one page reference for writing a drawing NOWARUN can quote without a second round of questions.

Tolerances Published by Part Family

Shafts and knurled shafts	+/-0.005 mm to +/-0.01 mm, SWISS machining, CNC turning, grinding, knurling
Hydraulic valve blocks	+/-0.005 mm, 4 axis and 5 axis CNC machining and milling
Alloy CNC parts	+/-0.005 mm, 4 axis and 5 axis machining, milling, grinding
Aluminium CNC parts	+/-0.005 mm to +/-0.01 mm
5 axis machined parts	+/-0.01 mm, curve machining
Brass turned and machined parts	+/-0.01 mm, CNC turning, milling, grinding

Heat Treatment Options

Carburizing, carbonitriding, QT, quenching, tempering and induction hardening. Specify the case depth and hardness on the drawing; hardness is checked after heat treatment and dimensions before it, because dimensional drift during treatment is the most common reason a batch is rejected.

Surface Treatment Options

Anodizing, sandblasting, painting, powder coating, E-coating, plating, brushing, polishing, oiling, Geomet, Dacromet and Delta.

Lead Time and Quantity

Sample lead time	3 to 7 working days on stamped and simple machined parts
Volume lead time	10 to 15 working days on stamped parts
Minimum order quantity	From 1000 pieces on stamped parts, depending on the part and its dimensions
Machined and gear parts	Quoted per drawing
Quality systems	ISO 9001 and ISO/TS 16949
Origin	Hangzhou, Zhejiang, China

What to Put in the Enquiry Email

- The drawing as a PDF, or a dimensioned photograph of the worn part
- Annual quantity and the size of the first order
- Material grade, including the national standard it comes from
- Tolerance on the critical dimensions
- Heat treatment with case depth and hardness
- Surface treatment and the finish it has to reach
- Packing requirement and the destination port