



Materials processed by BEUTTER

Beutter uses all machinable materials. These are procured exclusively from qualified manufacturers/dealers in Germany and abroad, and are accompanied by either a quality control report or an acceptance certificate. Stockkeeping is organised by batch, so that traceability is always ensured even for the finished components.

Below are some examples of materials with which we have worked in the past:

<u>Material group</u>	<u>Examples</u>
Structural steels, heat-treated steels case-hardening steels, nitriding steels	C45, S235, 15NiCr13, 20NiCrMo2-2, 16MnCrS5, 42CrMo4, 30CrNiMo8, 31CrMoV9, 34CrAlMo5-10
Free-cutting steels	11SMnPb30, 46SPb20, 11SMn30
Bearing steels, tool steels	100Cr6, 115CrV3, X210CrW12, HSS, HS6-5-2, HS18-1-2-10
Spring steels	56Si7, 51CrMnV4, 1.4310, Duratherm
Stainless valve steels	1.4034, 1.4112, 1.4125
Rust- and acid-resistant steels	1.4301, 1.4305, 1.4306, 1.4401, 1.4435, 1.4542, 1.4548, 1.4571, 1.4659, 15-5PH, 17-4PH; PH 13-8 Mo, AISI 304L, AISI 316L; Super-Duplex
Implant materials	1.4441, 1.4456 (nickel-free), AISI 316 LVM Elgiloy, Rex 734, Nitinol, Co-Cr28-Mo6, MP35N
Highly corrosion-resistant and heat-resistant materials	1.4828, 1.4878, 1.4923, 2.4856, Hastelloy, Haynes 25, Inconel, Nimonic, Monel
Magnetically soft materials, glazing alloys	Armco, Reineisen, Permenorm, Vacoflux, Vacon, Invar, Mu-Metal, NiFe46, NiCo29-18
Aluminum	Al99, AlCuMgPb, AlMgSi1, AlZnMgCu0,5, EN AW1-7xxxx, Aviation Alloys, Titanaluminid
Cu and Cu alloys	Electrolytic Copper, OF-Cu, Cu-Be, Brass, Bronze, New Silver, ARCAP
Titanium for use in medical technology	Pure Titanium ASTM-F 67, ASTM-F 136, Ti- 6Al-4V-ELI ASTM-F 136, Ti15-Mo ASTM-F 2066, Titan Grade 1-5, 23
Titanium for mechanical engineering and aviation	3.7035, 3.7165, ASTM-B 348, MIL-T 9047, Titan Grade 5, 7, 9
Sintered metals, matrix composite materials	Stellite, Ferrotitanit, Densimet, MMC
Pure metals, heavy metals	Nickel, Zirconium, Molybdenum, Tantalum, Tungsten
Noble metals	Platinum, Pt-Ir, Gold, Paladium
Ceramics	Macor, ZrO ₂ , Al ₂ O ₃
Filled and unfilled Plastics	PA, PVC, POM, PTFE, PE, PI, PEEK, PMMA, GFK, Torlon, Chirulen (PE-UHMW), antibacterial/ implantable plastics according to ISO 10993

