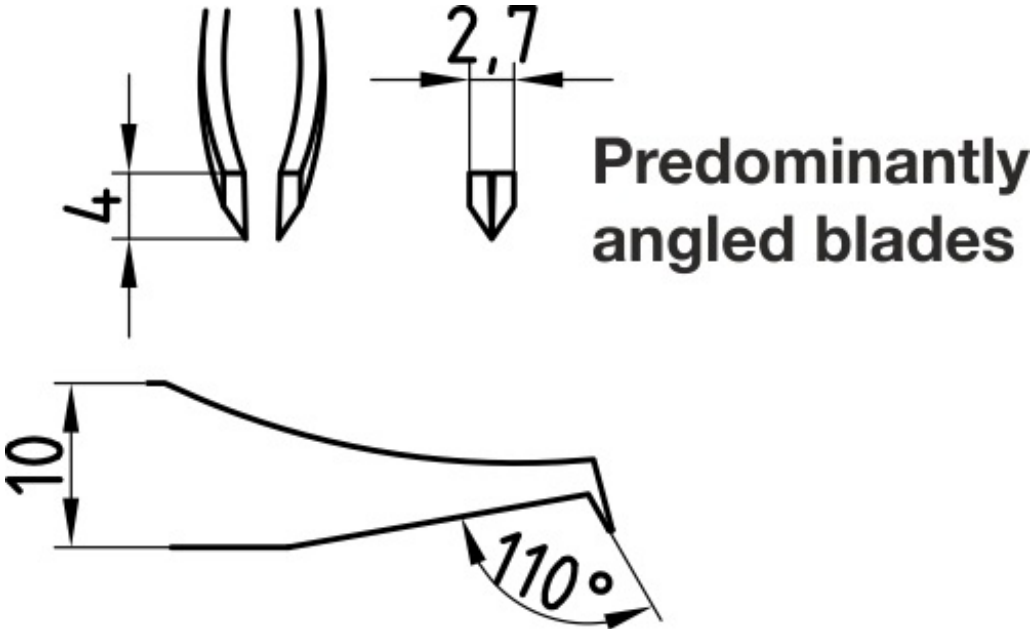
Electronics

Tweezers
152 High Precision Cutting Tweezers

3 3/4" 100 mm

Miniature cutting tweezers



152.S **Inox Steel**

General Notes

- Martensitic higher carbon steel (Material number 1.4034, DIN X46Cr13, AISI number 420)
- contains from 12.5 to 14.5 wt% chromium
- magnetizable
- can be hardened by heat treatment, forming should be done in the annealed condition
- less resistant to corrosion than the austenitic or ferritic grades
- used where strength and/or hardness are of primary concern and where the environment is relatively mild from a corrosive standpoint.
- typical applications include tweezers and cutting tools for the electronic industry, watch-makers, jewelers and laboratory and medical applications in mild aggressive chemical environments

Composition

Component	Wt.%	Component	Wt.%	Component	Wt.%
C	0.43-0.50	Si	≤1.0	Mn	≤1.0
P	≤0.04	S	≤0.03	Cr	12.5-14.5

Mechanical properties:

State	annealed
Density	7.7 g/cm³
Hardness	53-54 HRC
Tensile Strength ,ultimate	615-625 Mpa
1.2% Yield stress	≤300 MPa
Modulus of elasticity	215 GPa

Thermal properties

Coef. of lin. therm expansion:	10.5 E-6/°C	20°C-100°C
Coef. of lin. therm expansion:	11.5 E-6/°C	20°C-300°C
Specific heat capacity:	0.46 J/(g·K)	
Thermal conductivity	30 W/(m·K)	

Electrical properties

Resistivity	0.55 E-4 Ohm.cm

Credits