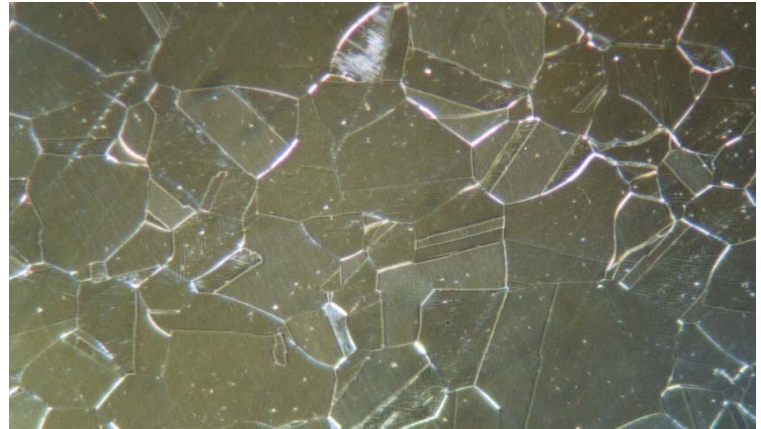


Material : AISI 316L Austenitic Stainless Steel

Method No. : A12

Results

Since the material is highly sensitive against surface deformations, low sample force during mechanical preparation is recommended. Annealed twins can be seen in the microstructure.



AISI 316L Austenitic Stainless Steel
Magnification: 400X Etching: 10% Oxalic Acid

Preparation Method:

Cutting: Abrasive Cut-off machine with Metlab RC-35-50 Abrasive wheel

Mounting: Mounting Press with Black Epoxy

Mechanical Preparation: FORCIPOL Grinding / Polishing Machine + FORCIMAT Automatic Specimen Mover.

Steps	Surface	Abrasive	Lubricant	Force per Sample, (N)/(PSI)	Time min.	Disc Speed, rpm	Relative Rotation
1	S/C Paper Disc	180 Grit	Water	25/5	2 min. or until plane	300	Contra
2	S/C Paper Disc	400 Grit	Water	25/5	2	300	Contra
3	S/C Paper Disc	800 Grit	Water	25/5	2	300	Contra
4	Plus Cloth	6 μ Diamond Suspension	Blue Lube	20/4	3	150	Contra
5	Metlab Cloth	1 μ Diamond Suspension	Blue Lube	20/4	3	150	Contra

FOR MORE DETAILED INFORMATION PLEASE REFER TO METLAB PRICE LIST