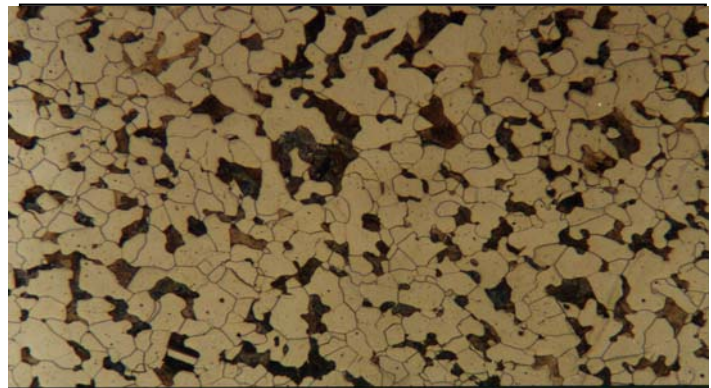


Material : AISI 1020 Carbon Steel

Method No. : Carbon Low

Results

The microstructure of AISI 1020 Steel (commonly used in metal constructions) consists of pearlite areas distributed in large ferrite areas. Grain boundaries can be seen. For such soft materials, it is recommended to apply low force on the samples to prevent ferrite deformation.



AISI 1020

Magnification: 80X

Etching: 2% Nital

Preparation Method:

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

Mounting: Mounting Press with Phenolic Powder

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	Dia-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