

Gateway R65 (1.2316)

Prehardened Stainless Steel

Gateway R65 is a Stainless Martensitic Steel with improved corrosion resistance due to high amounts of Chromium and Molybdenum. Material is supplied in the prehardened condition.

Tap Chemistry

	Min	Max		Min	Max
Carbon	0.33	0.45	Sulfur		0.03
Silicone		1.00	Chromium	15.50	17.50
Manganese		1.50	Molybdenum	0.80	1.30
Phosphorus		0.03	Nickle		1.00

Applications

Suitable for plastic injection dies / cavities as well as plastic extrusion dies for higher corrosion resistance.

Heat Treatment: Soft annealing

Temperature	Cooling	Hardness
1400 - 1470 F	furnace	max. 230 HB

Stress relief annealing

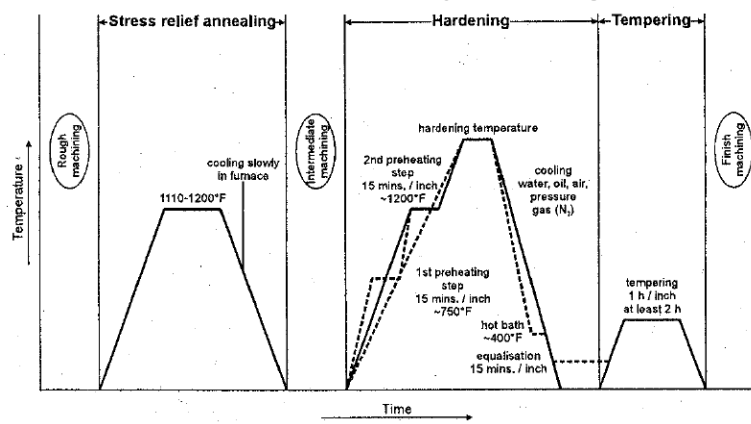
The recommendation 930-1020F is valid for quenched and tempered condition. In the soft annealed condition stress relieving between 1110 - 1200F is possible

Temperature	Cooling	
930 - 1020 F	furnace	

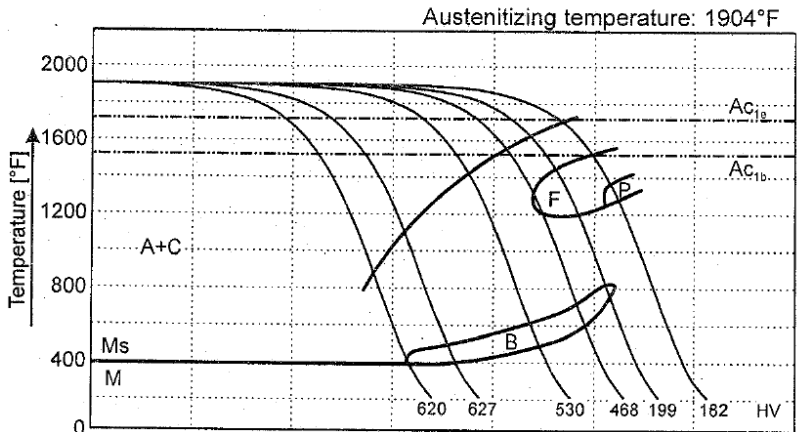
Hardening

Temperature	Cooling	Hardness
1870-1920 F	oil, pressure gas (N ₂) air or hot bath 930 -1020F	see tempering diagram

(1.2316) Thermal Cycle Diagram



Continuous Cooling Transformation Diagram (CCT)



Tempering Diagram

