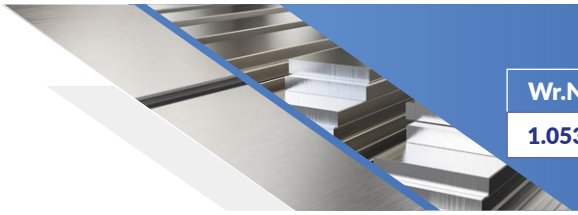


STRUCTURAL STEEL

Wr.Nr.	PN	EN	GOST	AISI
1.0535	55	C55	55	1055

CHEMICAL COMPOSITION

Chemical composition (in weight %)

Element	C	Si	Mn	P	S	Cr	Mo	Ni	Cu
min	0.52	0.60	0.60	max.	max.	max.	max.	max.	max.
max	0.60	0.40	0.90	0.045	0.045	0.40	0.10	0.40	0.30

APPLICATION

Unalloyed structural steel for components in general machine building and vehicle contruction.
Medium loaded elements of machines and devices with increased resistance to abrasion in the engineering and automotive industries, such as spindles, axes, shafts, connectors, tool gripping jaws.

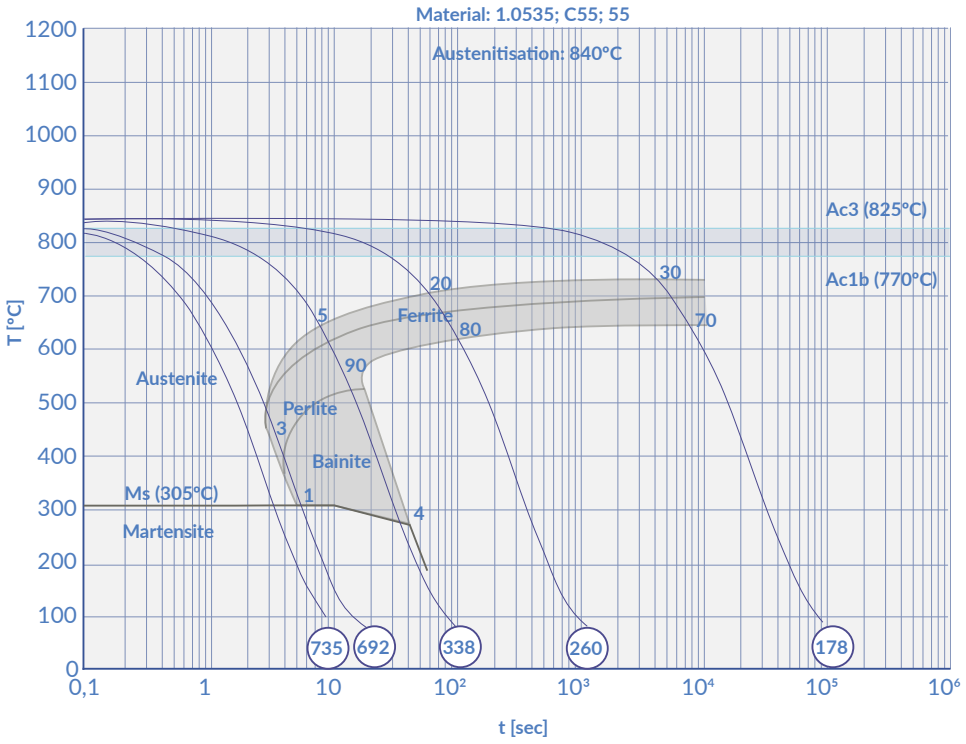
TREATMENT

Normalising	825 - 865 °C at least 30 min. austenitizing time (approx.)
Hardening	805 - 845 °C / oil or water, at least 30 min. austenitizing time (approx.)
Tempering	550 - 660 °C min. 60 min. (approx.)
Soft annealing	680 - 710 °C

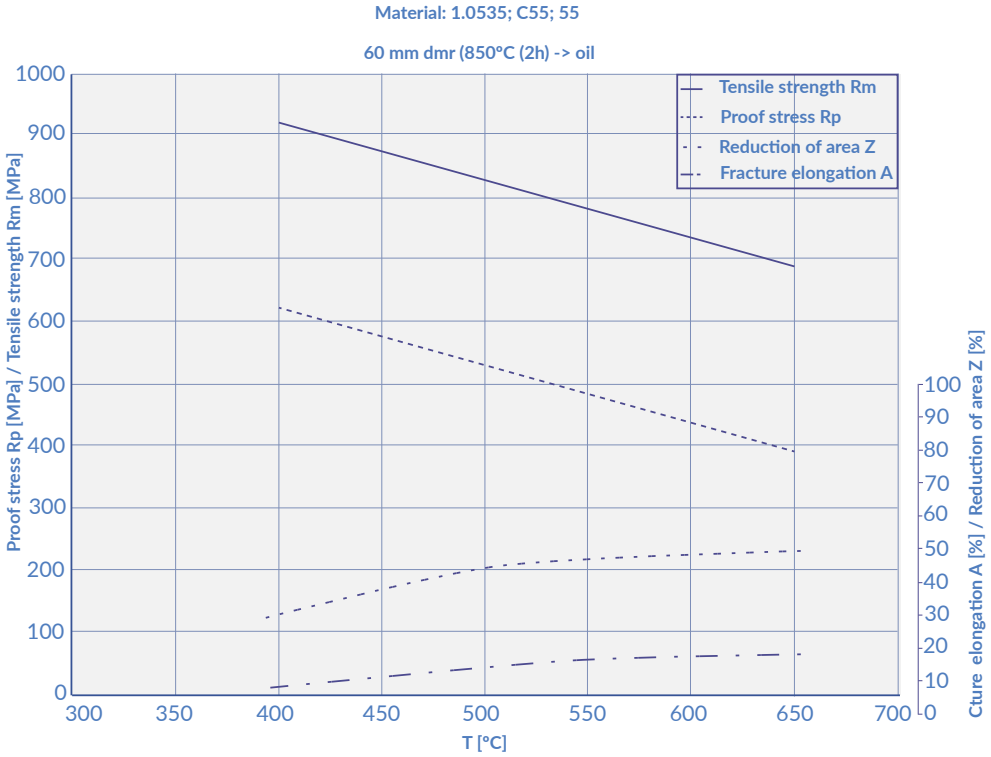
MECHANICAL PROPERTIES

Condition	Quenched and tempered (+QT)	Normalised (+N)	Treated to improve shearbility (+S)	Soft annealed (+A)
Hardness [HB]	Depend on diameter and thickness		max. 255	-

CONTINUOUS COOLING TRANSFORMATION (CCT) DIAGRAM



TEMPERING DIAGRAM



NOTE: All technical information is for reference only.