

HOT WORK TOOL STEEL

Wr.Nr.	PN	EN	GOST	AISI
1.2343	WCL	X37CrMoV5-1	4X5MΦC	H13

## CHEMICAL COMPOSITION

Chemical composition (in weight %)

Element	C	Si	Mn	P	S	Cr	Mo	V
min	0.33	0.80	0.25	max.	max.	4.80	1.10	0.30
max	0.41	1.20	0.50	0.03	0.02	5.50	1.50	0.50

## APPLICATION

Steel for the processing of light metal alloys, hot extrusion tools, tools for the manufacture of hollows, tools for the manufacture of screws, nuts, rivets and bolts.

Hot work tool steel with good ductility, good thermal conductivity, resistant to cracking at high temperatures, resistant to cooling and thermal shock, high hardenability and tempering resistance during work, good polishability.

## TREATMENT

Hardening	1020°C ± 10°C / Oil
Tempering	550°C ± 10°C (see tempering diagram)
Hardness [HRC]	min. 48

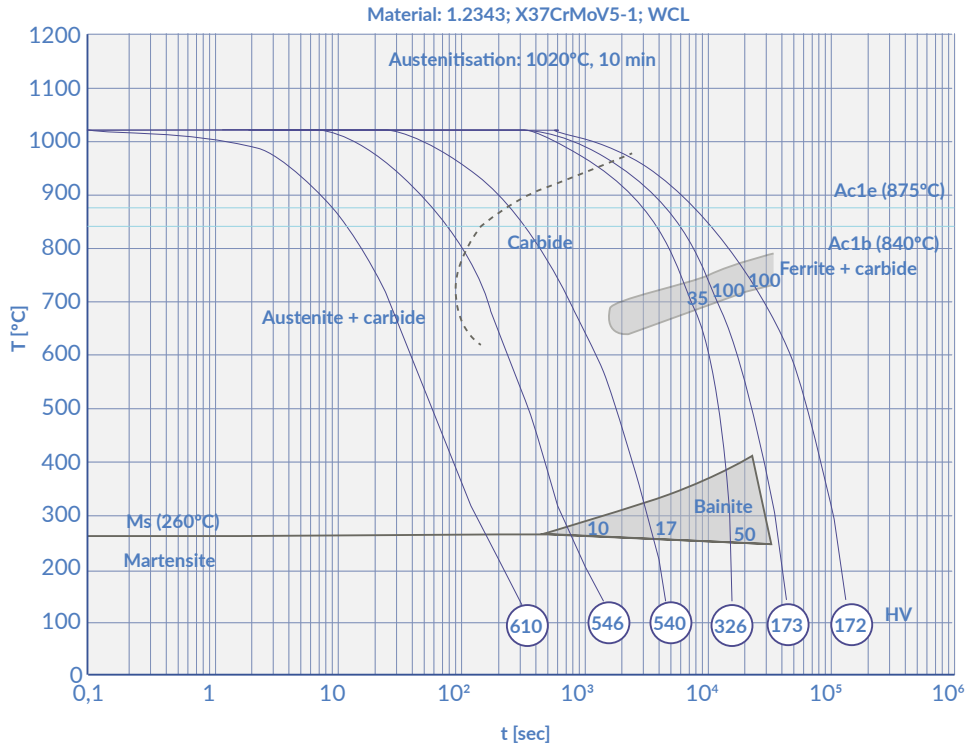
## ADDITIONAL HEAT TREATMENT

Soft annealing	750 - 780°C
Stress relieving	650 - 680°C (only for soft delivery conditions)
Additional quenching media	Air, hot bath 500°C, fluidised bed, gas overpressure

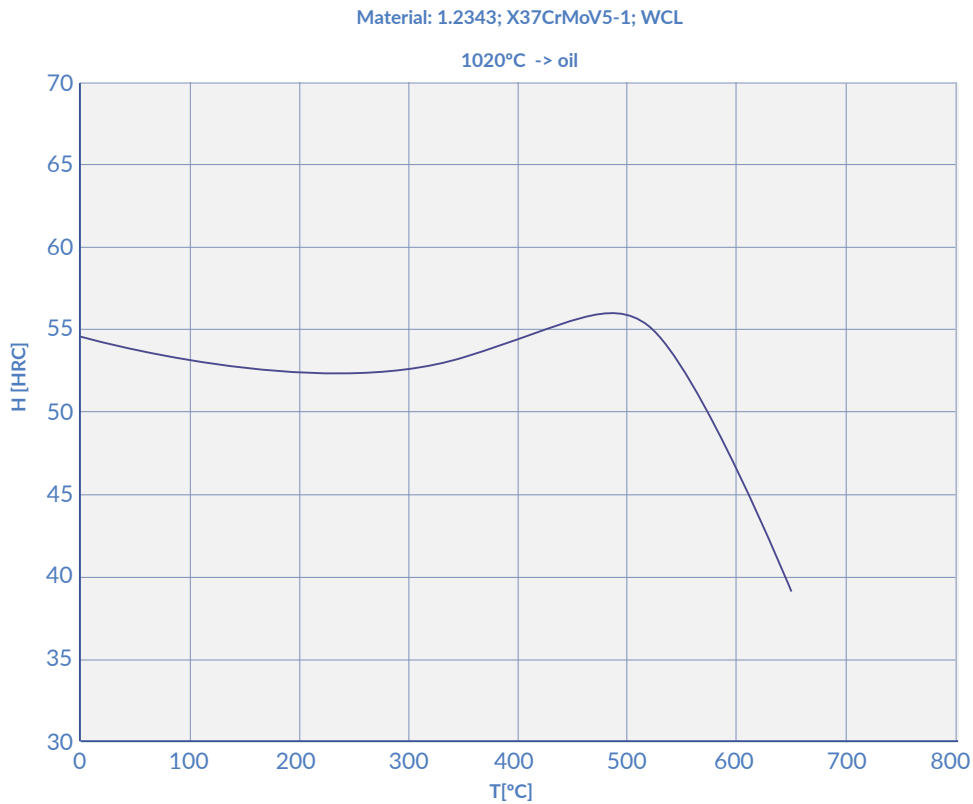
## MECHANICAL PROPERTIES

Condition	Soft annealed (+A)	Annealed and cold drawn (+A+C)
Hardness [HB]	max. 229	max. 249

## CONTINUOUS COOLING TRANSFORMATION (CCT) DIAGRAM



## TEMPERING DIAGRAM



**NOTE:** All technical information is for reference only.