

RDC 2 (Multibloc HQ)

Short name	X37CrMoV5-1
No.	1.2343 (ESR + Micro 900 / BG)
AISI	H11

Typical chemical composition. %	C	0.38
	Si	1.00
	Mn	0.35
	Cr	5.00
	Mo	1.25
	V	0.45

PROPERTIES AND USES

CrMo-alloyed hot-work steel with good high-temperature strength properties and high toughness at elevated temperatures. Being resistant to temperature shocks and easy to harden throughout, RDC 2 is particularly useful in extrusion tools for processing light alloys, such as liners, dies, mandrels, pressure discs, stems, headers, centering and shearing mandrels; also for the casting dies, cores and ejectors, slides, plungers, counter-plungers, nozzles, die inserts, sprues, spreaders for processing light alloys as well as for die forging dies, die inserts, punches and mandrels in forging machines,

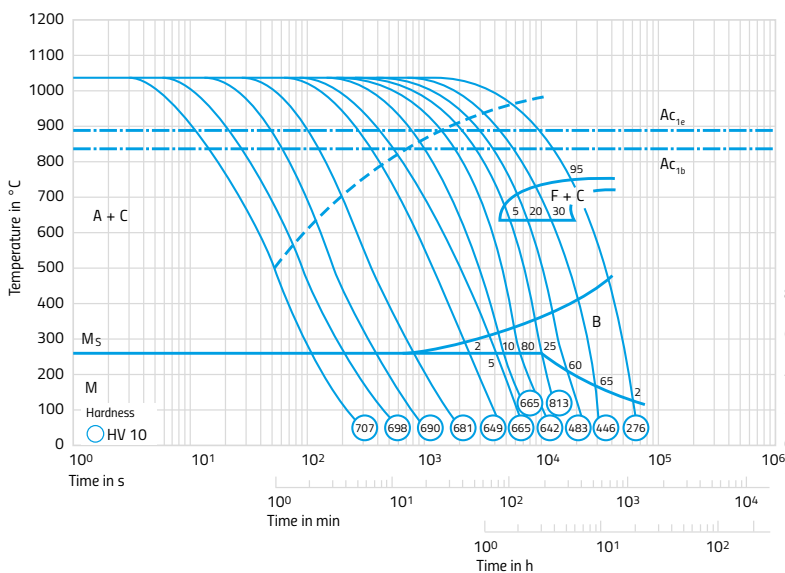
dies and punches for making bolts, nuts and rivets. RDC 2 is water-coolable. The steel could also be used for the construction of plastic molds.

RDC 2 (Multibloc HQ) produced by ESR (Electro-Slag Remelting) and our specialized forging and heat-treatment technology Micro 900 / BG shows a supreme toughness and extremely homogeneous mechanical and physical properties. Furthermore, a particularly high cleanliness ensures an excellent polishability.

HOT WORKING AND HEAT TREATMENT

Forging	1150–850 °C (2100–1560 °F)
Soft annealing	800–820 °C (1470–1510 °F) 4 hrs/furnace cooling
Brinell Hardness in the annealed condition	Max. 225 HB
Stress relieving	650 °C (1200 °F)
Preheating for hardening	850 °C (1560 °F)
Hardening temperature	980–1020 °C (1800–1870 °F)
Quenching	Oil, air or salt bath of 450–500 °C (840–930 °F)
Tempering	According to tempering curve
Time	1 hr/25 mm (1 hr/in.)

CONTINUOUS TTT CURVE



TEMPERING CURVE (APPROX. VALUES)

