42CrMo4

Normativa di riferimento UNI EN 10083-1
Reference Standard UNI EN 10083-1

Corrispondenze *Comparable standards*

Sostituisce / *Replace* 42CrMo4 UNI 7845

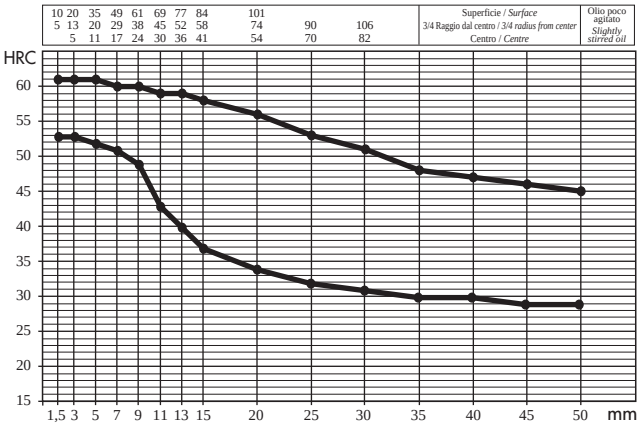
Composizione *Chemical analysis*

C	Mn	Si	Cr	Ni	Mo
.38÷.45	.60÷.90	≤ .40	.90÷1.20	-	.15 ÷ .30

Caratteristiche meccaniche / *Mechanical analysis*

Stato *Condition*	Saggio Ø mm. *Specimen Ø mm.*	Re min. N/mm2	Rm N/mm2	A min. %	KV min. J
Bonificato *Hardened and tempered*	≤ 16	900	1100÷1300	10	30
	16÷40	750	1000÷1200	11	35
	40÷100	650	900÷1100	12	35
	100÷160	550	800÷950	13	35
	160÷250	500	750÷900	14	35

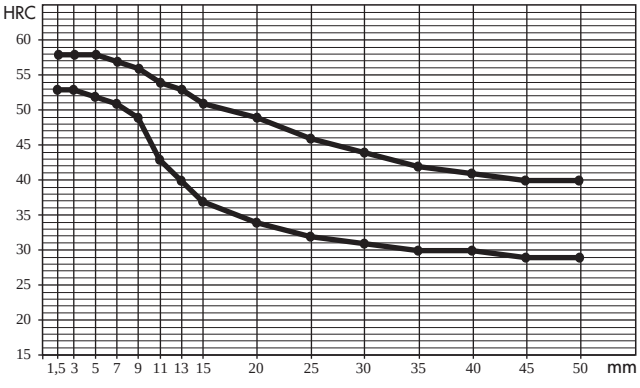
42CrMo4 H



Temprabilità Jominy *Jominy hardenability*

Distanza dall'estremità temprata *Distance from quenched end*	Durezza Rockwell *Rockwell hardness*	
mm.	HRc min	HRc max
1,5	53	61
3	53	61
5	52	61
7	51	60
9	49	60
11	43	59
13	40	59
15	37	58
20	34	56
25	32	53
30	31	51
35	30	48
40	30	47
45	29	46
50	29	45

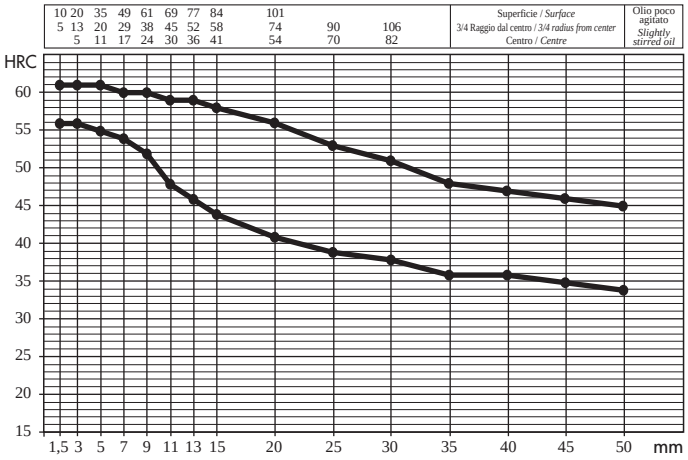
42CrMo4 HL



Temprabilità Jominy *Jominy hardenability*

Distanza dall'estremità temprata *Distance from quenched end*	Durezza Rockwell *Rockwell hardness*	
mm.	HRc min	HRc max
1,5	53	58
3	53	58
5	52	58
7	51	57
9	49	56
11	43	54
13	40	53
15	37	51
20	34	49
25	32	46
30	31	44
35	30	42
40	30	41
45	29	40
50	29	40

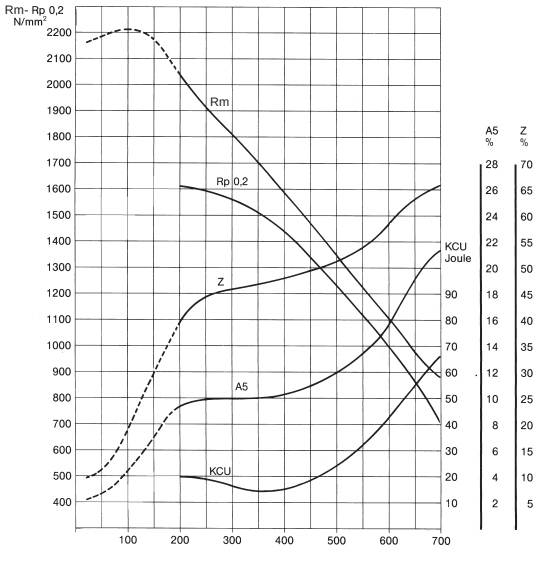
42CrMo4 HH



Temprabilità Jominy
Jominy hardenability

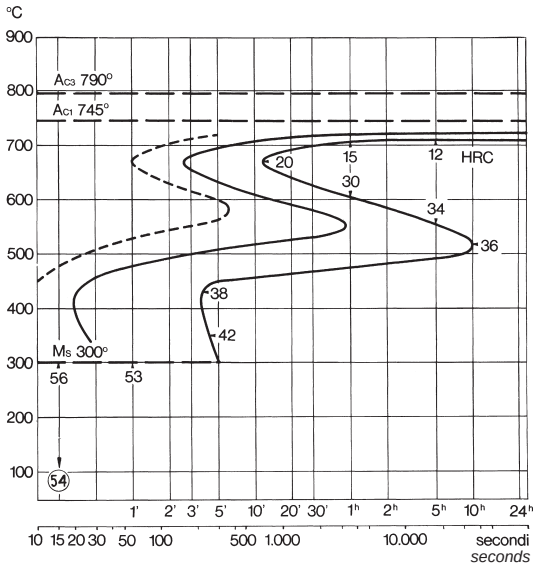
Distanza dall'estremità temprata *Distance from quenched end*	Durezza Rockwell *Rockwell hardness*	
mm.	HRc min	HRc max
1,5	56	61
3	56	61
5	55	61
7	54	60
9	52	60
11	48	59
13	46	59
15	44	58
20	41	56
25	39	53
30	38	51
35	36	48
40	36	47
45	35	46
50	34	45

Diagramma di Rinvenimento
Tempering curve



Temperatura di rinvenimento °C
Tempering temperature °C

Diagramma T.T.T.
T.T.T. diagram



TEMPO / *TIME*

Tratt.: su Ø 11 mm
Treatment: on Ø 11 mm

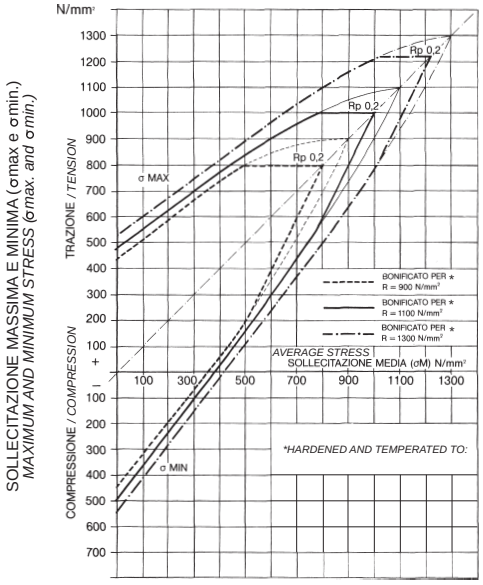
Tempra: 850 °C olio
Hardening: 850 °C oil

Rinv. per 2 ore
Tempering for 2 hours

Quadro: 10 mm
Square: 10 mm

Austenitizzazione: 850 °C
Austenitizing: 850 °C

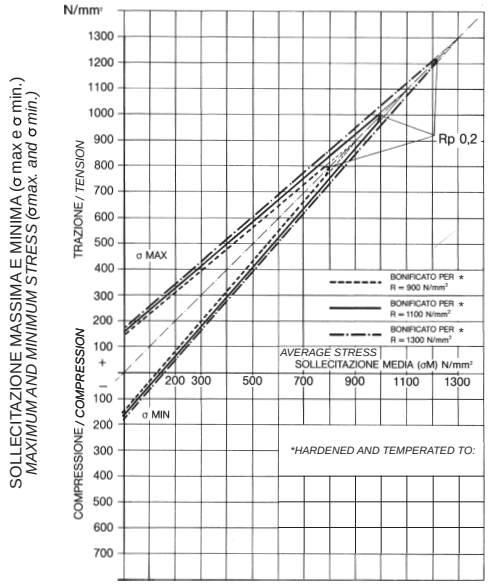
Diagramma di Goodman-Smith - *Goodman-Smith diagram*



Provette non tagliate Ø 10 mm. con superficie speculare (Ra ≤ 0.1 micron)

10 mm Ø non-notched test specimens with mirror surface (ra ≤ 0.1 micron)

Diagramma di Goodman-Smith - *Goodman-Smith diagram*



Provette Ø 10 mm. con intaglio profondo 0,92 mm e raggio di raccordo a fondo intaglio = 0,21 mm (corrispondente alla filettatura M 10 passo grosso) sollecitazione unitaria calcolata sulla sezione di fondo intaglio.

10 mm diameter test specimens with 0.92 mm deep notch and radius at bottom of notch = 0.21 mm (corresponding to M 10 large pitch thread) unitary stress calculated on the bottom of notch section.