



HSM Wire International, Inc

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www.hsmwire.com

Hardness Conversion Chart for Nickel and High-Nickel Alloys

HV	HK	HRA	HRB	HRC	HRD	HRE	HRF	HRG	HRK	HR15N	HR30N	HR45N	HR15T	HR30T	HR45T	HBS
520		75.4		50	63.1					85.5	68.2	54.7				
500		74.8		48.9	62.2					84.9	67.1	53.3				
480		74.2		47.6	61.2					84.3	66	51.9				449
460		73.6		46.3	60.2					83.6	64.9	50.3				432
440		72.9		44.8	59.1					82.9	63.6	48.6				414
420		72.1		43.3	57.9					82.1	62.3	46.8				397
400		71.3		41.6	56.6					81.3	60.8	44.9				379
380	433	70.4		39.8	55.2					80.4	59.3	42.8				361
360	411	69.4		37.8	53.7					79.5	57.6	40.6				343
340	388	68.3		37.8	53.7					78.4	55.7	38.1				325
320	365	67.2		33.3	50.3					77.2	53.7	35.4	94.9	86.3	77.4	307
300	342	65.9		30.7	48.4					76	51.5	32.5	94.4	85.2	75.9	289
280	320	64.5		27.9	46.2			90		74.5	49	29.2	93.7	84	74.2	271
260	297	62.8		24.6	43.7			86.7		72.9	46.3	25.5	93	82.6	72.2	252
240	274	61	99	21	41			82.9		71.2	43.1	21.5	92.1	80.9	69.9	234
220	251	59	96.1		37.9			78.3		69.1	39.6	16.8	91	78.9	67.1	215
200	228	56.6	92.5		34.3			72.8	96.9	66.8	35.6	11.4	89.8	76.5	63.8	196
195	223	55.9	91.5		33.4			71.2	96	66.1	34.4	10	89.5	75.8	62.8	191
190	217	55.3	90.5		32.3			69.6	95	65.4	33.3	8.4	89.1	75.1	61.8	187
185	211	54.5	89.4		31.3			67.9	94	64.7	32.1	6.8	88.7	74.4	60.8	182
180	206	53.8	88.2		30.2			66.1	93	64	30.8	5.2	88.3	73.6	59.7	177
175	200	53	87		29			64.2	91.9	63.2	29.5		87.9	72.8	58.5	172
170	194	52.2	85.7		27.8			62.1	90.7	62.4	28.1		87.4	71.9	57.2	167
165	189	51.4	84.3		26.6			60	89.4	61.6	26.7		86.9	71	55.9	163
160	183	50.5	82.9		25.3			57.7	88.1				86.4	70	54.4	158

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155	177	49.6	81.3		23.9			55.2	86.7				85.8	68.9	52.9	153
150	171	48.6	79.6		22.4			52.7	85.2				85.2	67.8	51.3	148
145	166	47.6	77.9		20.9			49.9	83.5				84.6	66.6	49.5	143
140	160	46.5	75.9			99.4	99.5	46.9	81.8				83.9	65.3	47.6	139
135	154	45.3	73.9			98.1	98.3	43.7	79.9				83.2	63.9	45.6	134
130	149	44.1	71.7			96.7	97	40.3	77.9				82.4	62.4	43.4	129
125	143	42.8	69.3			95.2	95.7	36.5	75.8				81.6	60.8	41	124
120	137	41.4	66.7			93.5	94.2	32.5	73.4				80.7	59.1	38.4	119
115	132	40	63.9			91.8	92.5		70.9				79.7	57.1	35.5	114
110	126		60.9			89.8	90.8		68.1				78.6	55.1	32.4	110
105	120		57.5			87.7	88.8		65				77.4	52.8	48.9	105
100	115		53.8			85.3	86.7		61.7				76.1	50.3	25	100
95	109		49.8			82.7	84.4		58				74.7	47.5	20.7	95
90	103		45.2			79.8	81.8		53.8				73.1	44.4	15.9	90
85	97		40.2			76.5	78.8		49.2				71.2	40.9	10.4	85
80	92		34.5			72.9	75.6		44				69.2	37		80
75	86		28			68.8	71.8		38.2				66.9	32.6		75

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