

HARDNESS COMPARISON TABLE								TABLE OF GAUGES																														
Temper Designation		HARDNESS NUMBERS			TENSILE STRENGTH			GAUGE NUMBER	IMPERIAL	STANDARD	GAUGE NUMBER	IMPERIAL	STANDARD																									
		VPN	BHN	RB	KG / sq.mm.	POUND / sq.in.	TON / sq.in.																															
EXTRA HARD	HARD GRADE	260	255		90.1	128128	57.2	0	8.229	19	1.016																											
		250	245		86.6	123200	55.0																															
		240	235	100	83.1	118272	52.8																															
		230	225	98.5	79.7	113344	50.6																															
FULL HARD	HARD GRADE	220	215	97	76.2	108416	48.4							1	7.620	20	0.914																					
		210	205	95.5	72.7	103488	46.2																															
		200	195	94	69.3	98560	44.0																															
		195	190	92.5	67.5	96096	42.9																															
THREE QUARTER HARD	MEDIUM HARD BRIGHT - NOT INTER ANNEALED	190	185	91	65.8	93632	41.8													2	7.010	21	0.812															
		185	180	90	64	91168	40.7																															
		180	175	89	62.4	88704	39.6																															
		175	170	87.5	60.4	86240	38.5																															
ANNEALED AND RE-ROLLED	HALF-HARD	170	165	86	58.9	83776	37.4																			3	6.400	22	0.711									
		165	160	84.5	57.1	81312	36.3																															
		160	155	83	55.4	78848	35.2																															
		155	150	82	53.7	76384	34.1																															
	QUARTER HARD	MEDIUM HARD BRIGHT - NOT INTER ANNEALED	150	145	81	52.0	73920																									33.0	4	5.892	23	0.609		
			148	143	80	51.3	73024																									32.6						
			146	141	79	50.5	71904	32.1																														
			144	139	78	49.9	71008	31.7																														
			142	137	77.5	49.1	69888	31.2																														
			140	135	77	48.5	68992	30.8																														
			138	133	76	47.7	67872	30.3																														
			136	131	75	47.1	66976	29.9																														
PINCH PASSED	NON-KINKING	134	129	73	46.4	66080	29.5	5	5.348	24	0.558																											
		132	127	72	45.6	64960	29.0																															
		130	125	71	45.0	64064	28.6																															
		128	123	70	44.3	62944	28.1																															
		126	121	68.5	43.6	62048	27.7																															
		124	119	67.5	43.0	61152	27.3																															
		122	117	66	42.2	60032	26.8																															
		120	115	65	41.5	59136	26.4																															
ORDINARY SOFT STEEL	ANNEALED	118	113	64	40.9	58240	26.0							6	4.876	25	0.508																					
		116	111	63	40.2	57120	25.5																															
		114	109	62	39.5	56224	25.1																															
		112	107	60.5	38.7	55104	24.6																															
ORDINARY SOFT STEEL	ANNEALED	110	105	59.5	38.1	54208	24.2													7	4.470	26	0.457															
		108	103	58.5	37.5	53312	23.8																															
		106	101	57	36.7	52192	23.3																															
		104	99	56	36.1	51296	22.9																															
ORDINARY SOFT STEEL	ANNEALED	102	97	55	35.3	50176	22.4																			8	4.064	27	0.416									
		100	95	54	34.6	49290	22.0																															
		98	93	53	34.0	48384	21.6																															
		96	91	52	33.2	47764	21.1																															
ORDINARY SOFT STEEL	ANNEALED	94	89	51	32.6	46368	20.7	9	3.657	28	0.375																											
		92	87	50	31.8	45448	20.2																															
		90	85	49	31.2	44352	19.8																															
		88	83	48	30.6	43456	19.4																															
ORDINARY SOFT STEEL	ANNEALED	86	81	46	29.8	42336	18.9																									10	3.251	29	0.345			
		84	79	44	29.1	41440	18.5																															
		82	77	42	28.5	40544	18.1																															
		80	75	40	-	-	-																															
ORDINARY SOFT STEEL	ANNEALED	86	81	46	29.8	42336	18.9							11	2.946	30	0.314																					
		84	79	44	29.1	41440	18.5																															
		82	77	42	28.5	40544	18.1																															
		80	75	40	-	-	-																															
ORDINARY SOFT STEEL	ANNEALED	86	81	46	29.8	42336	18.9													12	2.640	31	0.294															
		84	79	44	29.1	41440	18.5																															
		82	77	42	28.5	40544	18.1																															
		80	75	40	-	-	-																															
ORDINARY SOFT STEEL	ANNEALED	86	81	46	29.8	42336	18.9																			13	2.336	32	0.274									
		84	79	44	29.1	41440	18.5																															
		82	77	42	28.5	40544	18.1																															
		80	75	40	-	-	-																															
ORDINARY SOFT STEEL	ANNEALED	86	81	46	29.8	42336	18.9	14	2.032	33	0.254																											
		84	79	44	29.1	41440	18.5																															
		82	77	42	28.5	40544	18.1																															
		80	75	40	-	-	-																															
ORDINARY SOFT STEEL	ANNEALED	86	81	46	29.8	42336	18.9																									15	1.828	34	0.233			
		84	79	44	29.1	41440	18.5																															
		82	77	42	28.5	40544	18.1																															
		80	75	40	-	-	-																															
ORDINARY SOFT STEEL	ANNEALED	86	81	46	29.8	42336	18.9							16	1.625	35	0.213																					
		84	79	44	29.1	41440	18.5																															
		82	77	42	28.5	40544	18.1																															
		80	75	40	-	-	-																															
ORDINARY SOFT STEEL	ANNEALED	86	81	46	29.8	42336	18.9													17	1.422	36	0.193															
		84	79	44	29.1	41440	18.5																															
		82	77	42	28.5	40544	18.1																															
		80	75	40	-	-	-																															
ORDINARY SOFT STEEL	ANNEALED	86	81	46	29.8	42336	18.9																			18	1.219	37	0.172									
		84	79	44	29.1	41440	18.5																															
		82	77	42	28.5	40544	18.1																															
		80	75	40	-	-	-																															