



A-1 Wire Tech, Inc.

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Document:
Mechanical Properties Guideline

Originated By
Production Manager

Approved By
Management Council

COLD DRAWN WIRE .032-.250" GUIDELINE FOR MECHANICAL PROPERTIES

	M400	MK500	NI200	301	300	I600	I625	I718	IX750	IN800
<u>TENSILE KSI</u>										
ANNEALED	70-95	80-110	50-85	85-115	SAME AS	85-130	120-150	110-130	110-130	80-110
No. 1 TEMPER	85-100	95-120	70-90	100-135	301	120-155	130-170	130-175	130-165	95-130
QUARTER HARD	95-120		70-90	100-135		120-155	140-180	130-175	130-165	
HALF HARD	110-135						150-190			
3/4 HARD	125-150						170-225			
FULL HARD SPRING	145-180	145-190	100-130	170-210		170-220	200-275	210-245	210-245	140-175
ANNEALED-AGE HARD.		120-150		160-190				170-200	170-200	
No. 1 TEMPER-AGE HARD.		130-160		170-200				190-230	180-210	
SPRING AGE-HARD.		160-200		200-240				275-310	260-295	
<u>YIELD KSI</u>										
ANNEALED	30-55	35-60	20-50	35-65		35-85	60-75	45-85	45-85	35-65
No. 1 TEMPER	50-75	50-80	40-60	60-95		75-120	75-100	85-145	85-145	60-95
QUARTER HARD	65-95		40-60	60-95		75-120	100-140	85-145	85-145	
HALF HARD	85-120						120-160			
3/4 HARD	100-135						140-180			
FULL HARD-SPRING	125-170	125-180	100-125	150-200		150-210	150-200	190-235	190-235	130-170
ANNEALED-AGE HARD.		90-110		120-150				140-170	140-170	
No. 1 TEMPER-AGE HARD.		95-125		150-180				160-190	150-180	
SPRING-AGE HARD.		140-190		180-220				240-290	230-275	
<u>ELONG 2%</u>										
ANNEALED	45-25	40-20	50-30	40-20		45-25	40-55	40-15	40-15	45-25
No.1 TEMPER	30-20	30-15	40-20	30-15		30-15	25-10	25-10	25-10	35-15
QUARTER HARD	25-15						20-10			
HALF HARD	15-8						15-5			
3/4 HARD	8-5						5-2			
FULL HARD-SPRING	5-2	5-2	5-2	5-2		5-2	4-2	5-2	5-2	5-2
ANNEALED-AGE HARD.		30-15		25-10				20-10	20-10	
No.1 TEMPER- AGE HARD.		25-10		20-8				15-8	15-8	
SPRING-AGE HARD.		8-3		10-5				8-3	8-3	