

Low Carbon Steel Wire Rod JIS G 3505

Grade Equivalent	% C	% Mn	% P Max	% S Max	% Si	UTS (Max) N/mm ²	Elong Min %	Typical End Use
1005	0.07 max	0.40 max	0.040	0.040	0.10 max	400	35	Fine wire drawing
SWRM 6/1006	0.08 max	0.60 max	0.040	0.040	0.15 max	420	30	Binding wire, Annealed wire
SWRM 8/1008	0.10 max	0.60 max	0.040	0.040	0.15 max	440	25	Telegraph wire, nails
SWRM 10/1010	0.08/0.13	0.30/0.60	0.040	0.040	0.20 max	460	23	Galvanized wire, Barbed wire
SWRM 12/1012	0.10/0.15	0.30/0.60	0.040	0.040	0.20 max	510	22	Nail wire, Staple wire, wire mesh
SWRM 15/1015	0.13/0.18	0.30/0.60	0.040	0.040	0.20 max	520	21	Rivet wire
SWRM 22/1022	0.20/0.25	0.30/0.60	0.045	0.045	0.25 max	600	20	Concrete Reinforcement
Commercial 1020	0.3 max	1.50 max	0.050	0.050	1.00 max	-	-	Miscellaneous

High Carbon Steel Wire Rod JIS G 3506

Grade	% C	% Mn	% P Max	% S Max	% Si	Typical UTS (5.5 mm) N/mm2	Elong % Approx	Typical end use	
SWRH 27	0.24/0. 31	0.40/0.6 0	0.030	0.030	0.15/0.3 0	565/695	16	Concrete nail Wire for umbrella rib, Cycle spoke, Motor cycle spoke	
SWRH 32	0.29/0. 36	0.40/0.6 0	0.030	0.030	0.15/0.3 0	600/715	15		
SWRH 37	0.34/0. 41	0.40/0.6 0	0.030	0.030	0.15/0.3 0	620/745	15		
SWRH 42A	0.39/0. 46	0.40/0.6 0	0.030	0.030	0.15/0.3 0	665/775	14		
SWRH 42B	0.39/0. 46	0.60/0.8 0	0.030	0.030	0.15/0.3 0	685/815	14		
SWRH 47A	0.44/0. 51	0.40/0.6 0	0.030	0.030	0.15/0.3 0	735/855	13		Crimping wire for bed spring. Spring wire, rope wire, Tyre bead wire, ACSR wire, bale wire
SWRH 47B	0.44/0. 51	0.60/0.8 0	0.030	0.030	0.15/0.3 0	755/875	13		
SWRH 52A	0.49/0. 56	0.40/0.6 0	0.030	0.030	0.15/0.3 0	825/945	13		
SWRH 52B	0.49/0. 56	0.60/0.8 0	0.030	0.030	0.15/0.3 0	845/965	13		
SWRH 57A	0.54/0. 61	0.40/0.6 0	0.030	0.030	0.15/0.3 0	860/970	12		
SWRH 57B	0.54/0. 61	0.60/0.8 0	0.030	0.030	0.15/0.3 0	880/980	12		
SWRH 62A	0.59/0. 66	0.40/0.6 0	0.030	0.030	0.15/0.3 0	920/1040	11		
SWRH 62B	0.59/0. 66	0.60/0.8 0	0.030	0.030	0.15/0.3 0	950/1070	11		
SWRH 67A	0.64/0. 71	0.40/0.6 0	0.030	0.030	0.15/0.3 0	960/1080	10		
SWRH 67B	0.64/0. 71	0.60/0.8 0	0.030	0.030	0.15/0.3 0	970/1090	10		
SWRH 72A	0.69/0. 76	0.40/0.6 0	0.030	0.030	0.15/0.3 0	1030/1150	9	Tire bead wire, spring wire, ropes PC wire, PC strand, etc.	
SWRH 72B	0.69/0. 76	0.60/0.8 0	0.030	0.030	0.15/0.3 0	1050/1170	9		
SWRH 77A	0.74/0. 81	0.40/0.6 0	0.030	0.030	0.15/0.3 0	1090/1210	9		

Grade	% C	% Mn	% P Max	% S Max	% Si	Typical UTS (5.5 mm) N/mm2	Elong % Approx	Typical end use
SWRH 77B	0.74/0.81	0.60/0.80	0.030	0.030	0.15/0.30	1120/1250	8	
SWRH 82A	0.79/0.86	0.40/0.60	0.025	0.025	0.15/0.30	1140/1270	8	
SWRH 82B	0.79/0.86	0.60/0.80	0.025	0.025	0.15/0.30	1170/1290	8	
Similar grades of equivalent to SAE / AISI 1026, 1030, 1040, 1050, 1055, 1060, 1065, 1070, 1080 are also delivered.								

Cold Heading Quality Steel Wire Rod JIS G 3507

Grade Equivalent to	% C	% Mn	% P Max	% S Max	% Si	% Al Min	Typical End Use
SWRCH 6A	0.08 max	0.60 max	0.040	0.040	-	0.02	Fasteners
SWRCH 8A	0.10 max	0.60 max	0.040	0.040	-	0.02	
SWRCH 18A	0.15/0.20	0.60/0.90	0.030	0.030	0.10 max	0.02	

Welding Electrode Grades Steel Wire Rod JIS G 3503 or AWS

Grade JIS G 3503	% C Max	% Mn	% P Max	% S Max	% Si Max	% Cu Max	Mechanical Properties	Typical End Use
SWRY11	0.09	0.35/0.65	0.020	0.023	0.03	0.20	UTS-430 N/mm2 MAX %EL = 30 MIN	Stick electrodes

CO2 Gas Welding Rod for MIG/TIG Wire

Grade Equivalent to	% C	% Mn	% P Max	% S Max	% Si	% Cu Max	UTS Max (N/mm2)	RA Min %
ER-70-S4	0.040/0.10	1.00/1.35	0.025	0.025	0.50/0.70	0.10	520	80
ER-70-S6	0.040/0.10	1.00/1.70	0.025	0.025	0.85/1.05	0.10 (SG2)	550	75
EM 12K	0.060/0.12	0.80/1.20	0.025	0.025	0.05/0.35	0.15 (S2)	600	65
EM 12	0.06/0.12	0.8/1.20	0.025	0.025	0.05/0.1	0.15	550	65

UTS = Ultimate Tensile Strength