

WIRE RODS

High Carbon Steel Wire Rods
Medium Carbon Steel Wire Rods
Low Carbon Steel Wire Rods

TIS (Thailand Industrial Standard), SIRIM, CIDB



Tata Steel (Thailand) Public Company Limited



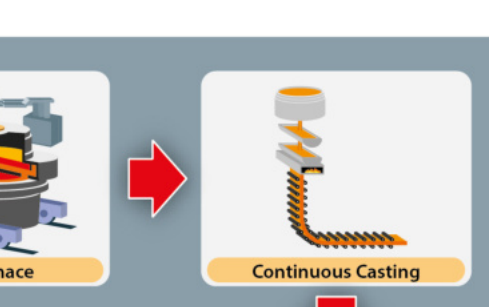
Tata Steel Group, established in 1907, was the first steel manufacturer in Asia and the biggest private steel manufacturer in India. The group invested in Thailand in 2006 and founded Tata Steel (Thailand) Public Company Limited consisting of three steel manufacturing plants NTS Steel Group Public Company Limited, SISCO (2001) Co., Ltd. and SCSC Co., Ltd., with total productivity of 1.7 million tons per year. It is the first leading company both in production and popularity in steel products such as High carbon steel wire rods, Medium carbon steel wire rods, and Low carbon steel wire rods. And also construction rebars under Tata Tisco Brand, with a variety of quality and grades such as SD 40, SD 50, Tata Tisco S super ductile (earthquake resistance rebar) Cut and Bend services, channel and angle bars, stirrups.

The product and service group of TATA Steel (Thailand) Plc. Are

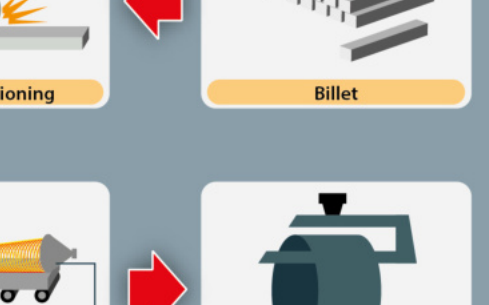
- Reinforcing bars : round bar and deformed bar
- Low carbon wire rods
- High carbon wire rods
- Small section (Angles and channels)
- Cut and Bend service



The Siam Iron and Steel (2001) Co., Ltd.
Plant location: Amphur Banmor (Talung),
Saraburi Province, Thailand.
Products: Wire Rods, Channels, and Angles

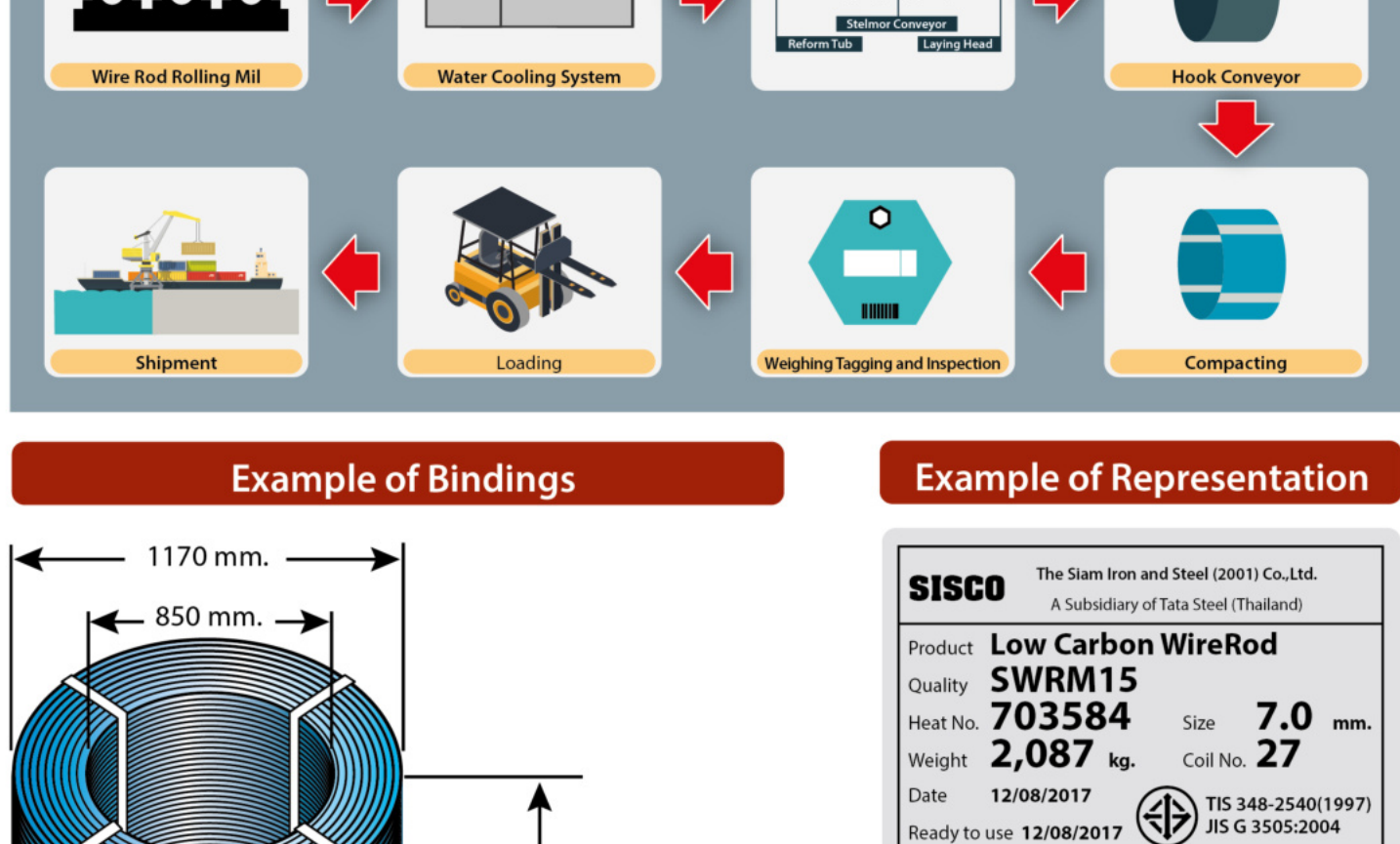


N.T.S. Steel Group Plc.
Plant location: Chonburi Industrial Estate (Bowin),
Chonburi Province, Thailand.
Products: Rebars, Wire Rods

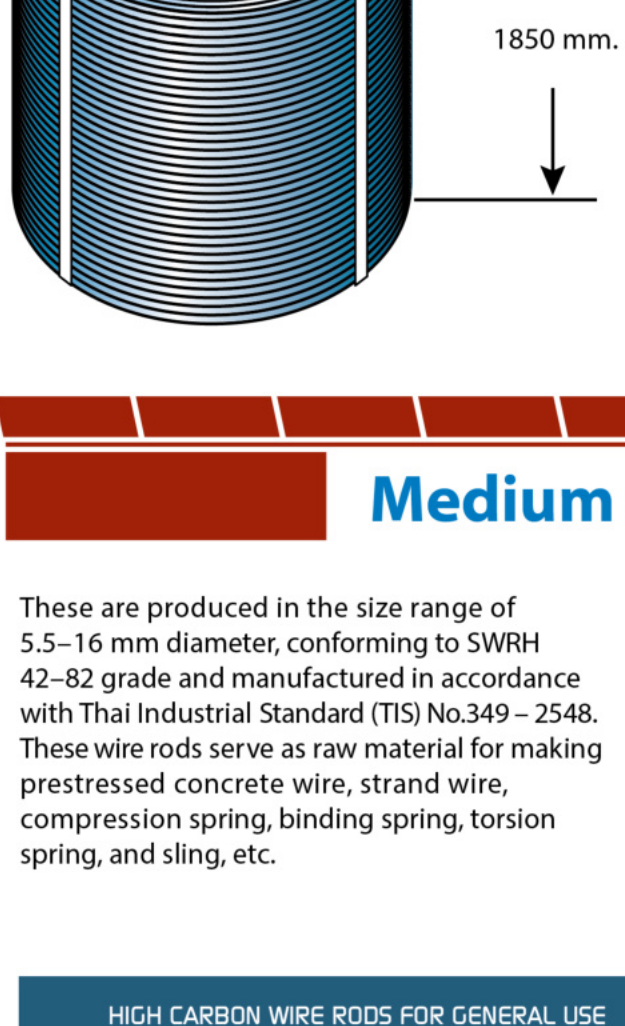


The Siam Construction Steel Co., Ltd.
Plant location: Plot I-7 Map Ta Phut Industrial Estate,
Rayong Province, Thailand.
Products: Rebars

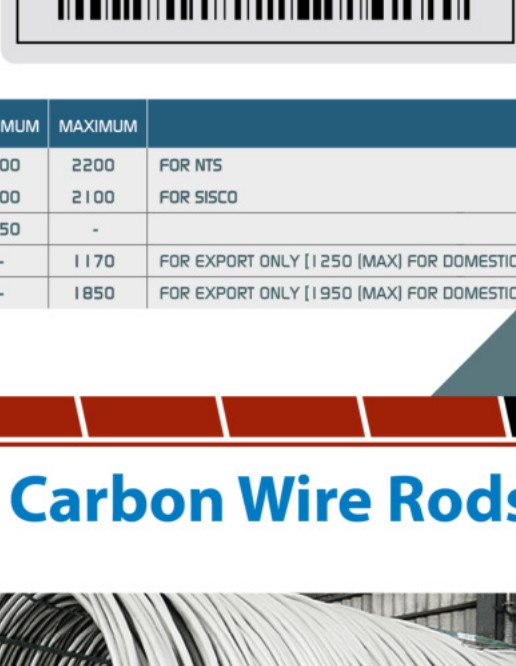
Manufacturing Process



Example of Bindings



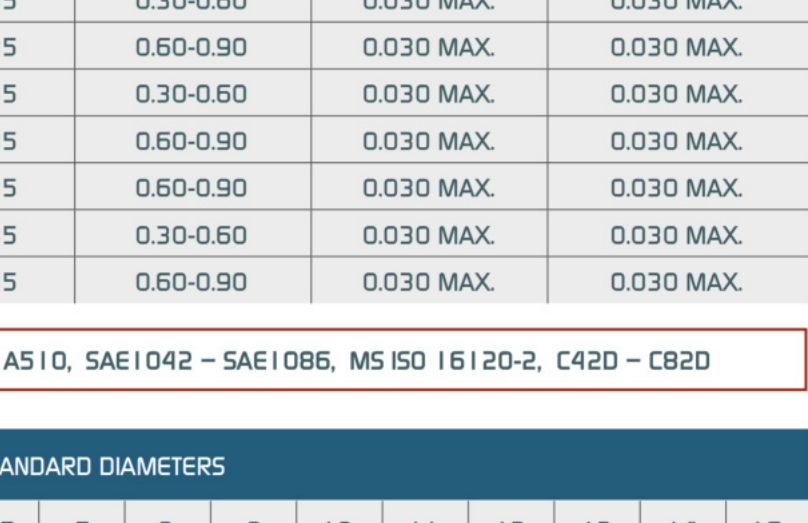
Example of Representation



ITEM	UNIT	MINIMUM	MAXIMUM	FOR NTS	FOR SISCO
COIL WEIGHT	KG.	1800	2200	FOR NTS	FOR SISCO
INSIDE DIAMETER	MM.	1500	2100	FOR NTS	FOR SISCO
OUTSIDE DIAMETER	MM.	850	-	FOR EXPORT ONLY (11250) (MAX) FOR DOMESTIC	FOR EXPORT ONLY (11250) (MAX) FOR DOMESTIC
COIL LENGTH	MM.	-	1170	FOR EXPORT ONLY (11250) (MAX) FOR DOMESTIC	FOR EXPORT ONLY (11250) (MAX) FOR DOMESTIC

Medium and High Carbon Wire Rods

These are produced in the size range of 5.5 – 16 mm diameter, conforming to SWRH 42–82 grade and manufactured in accordance with Thai Industrial Standard (TIS) No.349 – 2548. These wire rods serve as raw material for making prestressed concrete wire, strand wire, compression spring, binding spring, torsion spring, and sling, etc.



HIGH CARBON WIRE RODS FOR GENERAL USE			CHEMICAL COMPOSITION (%) JIS G 3506 [2004], TIS 349-2548		
GRADE*	CARBON	SILICON	MANGANESE	PHOSPHORUS	SULPHUR
SWRH42A	0.39-0.46	0.15-0.35	0.30-0.60	0.030 MAX.	0.030 MAX.
SWRH52A	0.49-0.56	0.15-0.35	0.30-0.60	0.030 MAX.	0.030 MAX.
SWRH52B	0.49-0.56	0.15-0.35	0.60-0.90	0.030 MAX.	0.030 MAX.
SWRH57A	0.54-0.61	0.15-0.35	0.30-0.60	0.030 MAX.	0.030 MAX.
SWRH62A	0.59-0.66	0.15-0.35	0.30-0.60	0.030 MAX.	0.030 MAX.
SWRH62B	0.59-0.66	0.15-0.35	0.60-0.90	0.030 MAX.	0.030 MAX.
SWRH67A	0.64-0.71	0.15-0.35	0.30-0.60	0.030 MAX.	0.030 MAX.
SWRH67B	0.64-0.71	0.15-0.35	0.60-0.90	0.030 MAX.	0.030 MAX.
SWRH72A	0.69-0.76	0.15-0.35	0.30-0.60	0.030 MAX.	0.030 MAX.
SWRH72B	0.69-0.76	0.15-0.35	0.60-0.90	0.030 MAX.	0.030 MAX.
SWRH77B	0.74-0.81	0.15-0.35	0.60-0.90	0.030 MAX.	0.030 MAX.
SWRH82A	0.79-0.86	0.15-0.35	0.30-0.60	0.030 MAX.	0.030 MAX.
SWRH82B	0.79-0.86	0.15-0.35	0.60-0.90	0.030 MAX.	0.030 MAX.

*SWRH42A – SWRH82B = JIS G 3506, ASTM A510, SAE 1042 – SAE 1086, MS ISO 16120-2, C420 – C820

STANDARD DIAMETERS												
STANDARD DIAMETERS [MM.]	5.5	6	6.5	7	8	9	10	11	12	13	14	16

PHYSICAL PROPERTIES	
TOLERANCE	+/- 0.40 MM
OUR OF ROUND	0.64 MM. MAX



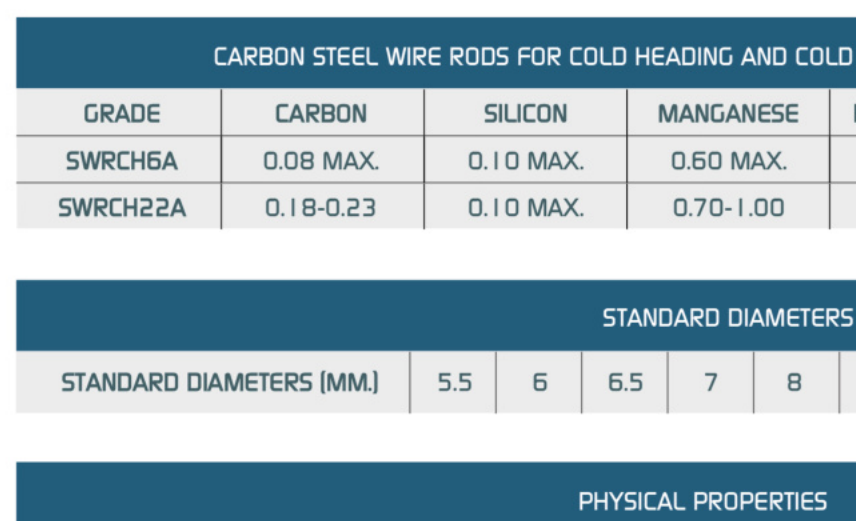
Application for Medium Carbon Wire Rods



Application for High Carbon Wire Rods



Low Carbon Wire Rods and SWRY 11



These are produced in the size range 5.5 – 16 mm diameter, conforming to SWRM 6 – 22 grade and in accordance with Thai Industrial Standard (TIS) No. 348-2540. Major application of wires made from Low Carbon Wire Rods including binding wire, nail, wire mesh, galvanized wire, barbed wire, numeral wire, and chain, etc.

LOW CARBON WIRE RODS FOR GENERAL USE			CHEMICAL COMPOSITION (%) JIS G 3505 [2004], TIS 348-2540		
GRADE*	CARBON	MANGANESE	PHOSPHORUS	SULPHUR	
SWRM6	0.08 MAX.	0.60 MAX.	0.040 MAX.	0.040 MAX.	
SWRM8	0.10 MAX.	0.60 MAX.	0.040 MAX.	0.040 MAX.	
SWRM10	0.08-0.13	0.30-0.60	0.040 MAX.	0.040 MAX.	
SWRM12	0.10-0.15	0.30-0.60	0.040 MAX.	0.040 MAX.	
SWRM15	0.13-0.18	0.30-0.60	0.040 MAX.	0.040 MAX.	

*SWRM6 – SWRM15 = JIS G 3505, ASTM A510, SAE 1006 – SAE 1015, MS ISO 16120-2, C60 – C150

WIRE RODS FOR CORE WIRE OF COVERED ELECTRODE			CHEMICAL COMPOSITION (%) JIS G 3503 [1980]			
GRADE	CARBON	SILICON	MANGANESE	PHOSPHORUS	SULPHUR	COPPER
SWRY11	0.09 MAX.	0.03 MAX.	0.35-0.65	0.020 MAX.	0.023 MAX.	0.020 MAX.

CARBON STEEL WIRE RODS FOR COLD HEADING AND COLD FORGING JIS G 3507-1 [1991]						
GRADE	CARBON	SILICON	MANGANESE	PHOSPHORUS	SULPHUR	COPPER
SWRCH6A	0.08 MAX.	0.10 MAX.	0.60 MAX.	0.030 MAX.	0.035 MAX.	0.02 MAX.
SWRCH22A	0.18-0.23	0.10 MAX.	0.70-1.00	0.030 MAX.	0.035 MAX.	0.02 MAX.

STANDARD DIAMETERS												
STANDARD DIAMETERS [MM.]	5.5	6	6.5	7	8	9	10	11	12	13	14	16

PHYSICAL PROPERTIES		
TOLERANCE	5.5-15 MM.	+15 MM.
JIS G 3505 [2004]	+/- 0.4 MM.	+/- 0.5 MM.
JIS G 3503 [1980]	+/- 0.5 MM.	+/- 0.5 MM.
JIS G 3507 [1991]	+/- 0.3 MM.	+/- 0.4 MM.
OUR OF ROUND	5.5-15 MM.	+15 MM.
JIS G 3505 [2004]	0.64 MM.	0.80 MM.
JIS G 3503 [1980]	0.65 MM.	0.65 MM.
JIS G 3507 [1991]	0.40 MM.	0.50 MM.

Application for Low Carbon Wire Rods



World Class Manufacture World Class Steel

High Carbon Wire Rods Low Carbon Wire Rods

International Standard: TIS, SIRIM, CIDB, BIS



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