



THE SIAM INDUSTRIAL WIRE CO., LTD.

A MEMBER OF  **NatSteel** AND **TATA STEEL**



TATA GROUP

The Tata Group is one of India's largest and most respected business conglomerates. The Group employs more than 200,000 people. The Group's 28 publicly listed enterprises—including stand out names such as Tata Steel, Tata Consultancy Services, Tata Motors and Tata Tea – have a combined market capitalisation that is the highest among Indian business houses in the private sector, and a shareholder base of over 2 million. The Tata Group has operations in more than 54 countries across six continents and its companies export products and services to 120 nations.

TATA STEEL

Established In 1907, Tata Steel is Asia's first and India's largest private sector steel company. It's products are targeted at the quality conscious auto sector and the burgeoning construction industry. Tata Steel is among the lowest cost producers of steel in the world. Its captive raw material resources and the state-of-the-art 5 million tonne per annum plant at Jamshedpur, in Jharkhand State, India give it a competitive edge. Tata Steel has included in its fold NatSteel Asia with 2 million tonne capacity and Tata Steel, Thailand (previously Millennium Steel, Thailand) with 1.7 million tonne capacity creating a manufacturing network in eight markets in South East Asia and Pacific rim countries.

NatSteel Asia

With more than 3,000 employees in seven countries and counting, NatSteel Asia is one of the largest steel producers in the Asia-Pacific.

As a wholly-owned subsidiary of Tata Steel, NatSteel Asia harnesses Tata Steel's extensive resources to provide an integrated value-chain of customised steel products and services across Asia. At the forefront of the Asian steel market, NatSteel Asia produces more than two million tonnes of premium steel products for the construction industry in the region, through its operations in Singapore, China, Thailand, Vietnam, Malaysia, the Philippines and Australia. The Siam Industrial Wire (SIW) in Thailand and Wuxi Jinyang Metal Products (WJMP) in China are part of the NatSteel Asia Group.

Its flagship plant in Singapore also serves as the group's Asia Pacific hub, providing research and development, engineering consultancy, logistics, procurement and other support services. With more than 40 years of industry experience, NatSteel Asia is poised to fulfill its vision of becoming a world-class and well-admired regional steel group.



The Siam Industrial Wire Co., Ltd (SIW)

SIW, a member of NatSteel Asia, is one of the largest manufacturers of prestressed concrete products in the ASEAN region. SIW has an annual production capacity of 180,000 metric tons. It manufactures prestressed concrete strands, prestressed concrete wire, cold drawn wire, hard drawn wire and welded wire meshes and distributes these quality products throughout Europe, Oceania, Middle East, America, Africa and Asia.

SIW products are made of prime quality raw materials and by superior production technology. Each of the finished goods is manufactured well in accordance with the latest versions of major international standards. SIW products have been tested and accepted by worldwide accreditation institutes and laboratories. All distributors and end customers will undoubtedly have confidence in and will be impressed with SIW's consistently superior wire technology and its reliable business approach.



Quality Assurance

Adhering to the company's philosophy to make and bring quality to customers, SIW selects only the most reliable raw materials and uses the best technology in the whole production and quality control process. Every machine and mechanical instrument is regularly checked and calibrated by internationally accredited laboratories such as Instron of Singapore and ACS of Australia. SIW was the first Thai steel wire manufacturer to earn the ISO9001 : 2000 certification for its high standard of overall quality management and was the first Thai steel wire producer to have received ISO/IEC 17025 from the Thai Industrial Standard Institute (TISI). SIW has been accepted by the National Association of Testing Authorities, Australia (NATA) as an accredited laboratory for mechanical testing.



International Approval

SIW is accepted worldwide to supply its quality products to many projects throughout the 6 continents. Many well-known post-tensioning contractors accepted our products for the construction of bridges, sports stadiums, high-rise buildings, airport runways, railway sleepers, LNG tanks and many more. SIW products have been approved by many institutes and countries such as

- QDMR(Queensland Department of Main Roads, Australia) as the registered PC Strand supplier
- Portugal, Switzerland and Czech Republic as the homologated supplier of PC Strand
- Japanese Industrial Standard, JIS G 3536 as the approved supplier for PC Strand and Wire

Apart from its capability to produce a wide varieties of strand and wire products in accordance to international standards, SIW can also produce special grade products according to customer's requirements.



Environmental and Social Awareness

SIW is concerned for the environment and society. Environmental responsibility is one of our key commitments. SIW installed the Closed-Tunnel Pickling Process, Acid Recovery procedures, and Water Treatment System to prevent accidental pollution. We conserve electricity by using transparent roof tiles so that natural lighting is used during the daytime. Insulators were also installed under the rooftop to provide a more comfortable working environment. SIW earned the Green Technology Award from Thailand's Ministry of Science, Technology and Environment in 1998, and was the first Thai steel wire manufacturer to have received ISO 14001:2004.



Health and Safety Awareness

SIW recognises the importance of health and safety for the well-being of its employees. Health and safety responsibility is another of our company's commitments. To ensure that we maintain the high level of standard, we are fully certified by OHSAS 18001 :1999 for Occupational Health and Safety Management System.



PC STRAND



Ø 9.3 -16.0 mm.

Low Relaxation Pre-Stressed Concrete Uncoated 7-Wire Strand

SIW PC Strands have been granted the Thai Industrial Standard, TIS 420 by the Ministry of Industry and are manufactured in accordance with AS/NZS 4672, ASTM A416A, BS 5896, JIS G 3536 and pr EN 10138-3. SIW also produces special-grade products according to customer's requirements.

Major applications

- Pre-stressed concrete Girders
- Bonded post-tensioned flooring systems
- Hollow-core slabs
- Ground and Rock anchors





THE SIAM INDUSTRIAL WIRE CO., LTD.

PC STRAND

LOW RELAXATION

STANDARD	SPECIFICATION GRADE	NOMINAL DIAMETER mm.	DIAMETER TOLERANCE mm.	NOMINAL AREA mm ²	NOMINAL WEIGHT kg./1,000 m.	WEIGHT TOLERANCE %	PITCH times of Diameter	MINIMUM BREAKING LOAD KN.	MINIMUM YIELD LOAD KN.		MINIMUM ELONGATION %	1,000-HR. RELAXATION (% MAX.) INITIAL LOAD (80%)	
									0.1%	0.2%			
TIS 420 - 1997	1 720	9.30	-	51.60	405			88.8	72.8	75.4			
		10.80	-	69.70	546	+4/-2	12-18	120.0	98.4	102.0	3.5	4.5 (B)	
		12.40	-	92.90	729			160.0	131.0	136.0			
		15.20	-	139.00	1,101			239.0	196.0	203.0			
		9.50	-	54.80	432			102.0	83.6	86.6			
	1 860	11.10	-	74.20	580	+4/-2	12-18	136.0	113.0	117.0	3.5	4.5 (B)	
		12.70	-	98.70	774			184.0	151.0	156.0			
		15.20	-	139.00	1,101			259.0	212.0	220.0			
		9.30	-	51.60	405			88.8	72.8	75.4			
		9.50	-	55.00	432			102.0	83.6	86.6			
ASINZS 4672 - 2007	1 720	11.10	-	73.90	580	+4/-2	12-18	138.0	113.0	117.0	3.5	3.5 (B)	
		12.40	-	92.90	729			160.0	131.0	136.0			
		12.70	-	98.70	774			184.0	151.0	156.0			
		15.20	-	143.00	1,122			250.0	205.0	212.0			
		15.20	-	143.00	1,122			261.0	214.0	222.0			
	1 725	9.50	-	51.60	405			89.0		80.1	3.5	3.5 (B)	
		11.10	+/-0.4	69.70	548		12-16	120.1	108.1	108.1			
		12.70	-	92.90	730			160.1	144.1	144.1			
		15.20	-	139.40	1,094			240.2		216.2			
		9.53	-	54.80	432			102.3		92.1			
1 860	1 860	11.11	-	74.20	582		12-16	137.9		124.1	3.5	3.5 (B)	
		12.70	+0.65/-0.15	98.70	775			183.7		165.3			
		15.24	-	140.00	1,102			260.7		234.6			
		9.30	+0.3/-0.15	52.00	408			92.0		81.0			
		11.00	+0.3/+0.15	71.00	557	+4/-2	12-18	125.0	106.0	110.0	3.5	4.5 (B)	
	BS 5896 - 1980	Standard	12.50	+0.4/-0.2	93.00	730			164.0	139.0	144.0		
			15.20	+0.4/+0.2	139.00	1,090			232.0	197.0	204.0		
			9.60	+0.3/-0.15	55.00	432			102.0		90.0		
			11.30	+0.3/+0.15	75.00	590	+4/-2	12-18	139.0	118.0	122.0	3.5	4.5 (B)
			12.90	+0.4/-0.2	100.00	785			186.0	158.0	163.0		
prEN 10138 - 2004	Super	15.70	+0.4/-0.2	150.00	1,180			265.0	225.0	233.0			
		9.30	-	52.00	406			92.0		79.1			
		9.60	-	55.00	430			97.4		83.8			
		11.00	-	70.00	547			124.0		107.0			
		12.50	-	93.00	726	+2/-2	14-18	165.0	142.0	145.0	3.5	4.5 (A)	
	Y1770S7	Y1770S7	12.90	-	100.00	781			177.0	152.0	157.0		
			15.20	-	139.00	1,086			246.0	212.0	212.0		
			15.70	-	150.00	1,172			266.0	229.0	230.0		
			9.30	-	52.00	406			96.7		83.2		
			9.60	-	55.00	430			102.0		87.7		
Y1860S7	Y1860S7	11.00	-	70.00	547			130.0		112.0			
		11.30	-	75.00	586	+2/-2	14-18	140.0	120.0	120.0	3.5	4.5 (A)	
		12.50	-	93.00	726			173.0	149.0	149.0			
		12.90	-	100.00	781			186.0	160.0	160.0			
		15.20	-	139.00	1,086			259.0	223.0	223.0			
	JIS G 3536 - 1999	SWPR7AL	15.70	-	150.00	1,172			279.0	240.0	240.0		INITIAL LOAD (70%)
			9.30	-	51.61	405			88.8		75.5		
			10.80	+0.4/-0.2	69.68	546	+4/-2	12-18	120.0		102.0	3.5	2.5 (B)
			12.40	-	92.90	729			160.0		136.0		
			15.20	-	138.70	1,101			240.0		204.0		
SWPR7BL	SWPR7BL	9.50	-	54.84	432			102.0		86.8			
		11.10	+0.4/-0.2	74.19	580	+4/-2	12-18	138.0		118.0	3.5	2.5 (B)	
		12.70	-	98.71	774			183.0		156.0			
		15.20	-	138.70	1,101			261.0		222.0			

(A) = PERCENTAGE OF ACTUAL BREAKING LOAD

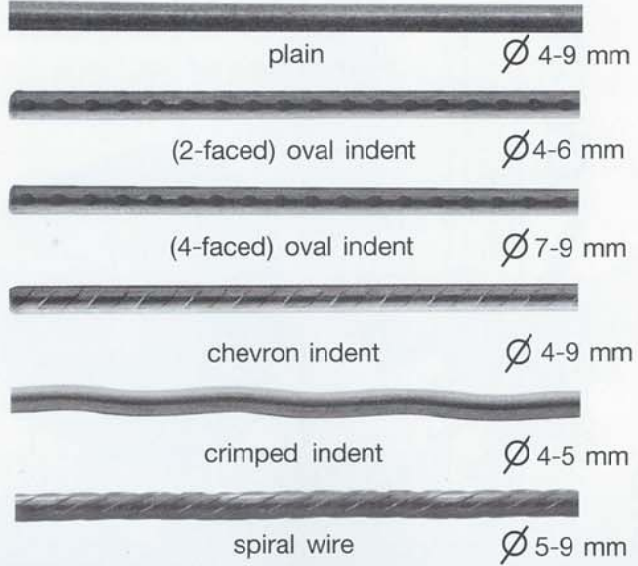
(B) = PERCENTAGE OF MINIMUM BREAKING LOAD

Low Relaxation Pre-Stressed Concrete Single Wire

SIW PC Wires have been granted the Thai Industrial Standard, TIS 95 and are manufactured in accordance with ASTM A421, JIS G3536, AS/NZS 4672, BS 5896 and pr EN 10138-2. SIW also produces special grade products according to customer's requirements.

Major applications

- Pre-stressed concrete piles & pipes
- Electric poles
- Hollow-core slabs
- Railway sleepers
- Concrete panels for pre-cast segments
- Ground and rock anchors





LOW RELAXATION

STANDARD	SPECIFICATION GRADE	NOMINAL DIAMETER mm.	DIAMETER TOLERANCE mm.	NOMINAL AREA mm ²	NOMINAL WEIGHT 1,000 m. kg./	WEIGHT TOLERANCE 1,000 m. kg./	MINIMUM BREAKING LOAD kN	MINIMUM YIELD LOAD kN			INDENT DEPTH mm.	MINIMUM ELONGATION %	MINIMUM REVERSE BEND Times	STRAIGHTNESS	1,000-HR. RELAXATION (% MAX.) INITIAL LOAD (80%)
								0.1%	0.2%	1.0%					
TIS 95 - 1997	1770	4.00	-	12.60	98.90	+/-2.0	22.30	18.50	-	-	0.05 - 0.20	-	-	-	-
	1670	4.00	-	12.60	98.90	+/-2.0	21.00	17.50	-	-	0.05 - 0.20	-	-	-	-
	1770	5.00	-	19.60	154.00	+/-3.1	34.70	28.80	-	-	0.05 - 0.20	-	-	-	-
	1670	5.00	-	19.60	154.00	+/-3.1	32.70	27.20	-	-	0.05 - 0.20	-	-	-	-
	1670	7.00	-	38.50	302.00	+/-4.3	64.30	53.40	-	-	0.10 - 0.25	-	-	-	4.5 (B)
	1570	7.00	-	38.50	302.00	+/-4.3	60.40	50.10	-	-	0.10 - 0.25	-	-	-	-
	1470	9.00	-	63.60	499.00	+/-7.2	93.50	74.80	-	-	0.10 - 0.25	-	-	-	-
ASINZS 4672 - 2007	1770	4.00	-	12.60	98.90	+/-2.0	22.30	18.50	17.90	-	-	-	-	-	-
	1770	5.00	-	19.60	154.00	+/-3.1	34.70	28.80	29.50	-	-	-	-	-	-
	1670	5.00	-	19.60	154.00	+/-3.1	32.70	27.20	27.80	-	-	-	-	-	-
	1700	5.03	-	19.90	156.00	+/-3.2	33.80	28.10	28.70	-	-	-	-	-	3.0 (B)
	1670	7.00	-	38.50	302.00	+/-4.3	64.30	53.40	54.70	-	-	-	-	-	-
	1570	7.00	-	38.50	302.00	+/-4.3	60.40	50.10	51.30	-	-	-	-	-	-
	1470	9.00	-	63.60	499.00	+/-7.2	93.50	74.80	76.70	-	-	-	-	-	-
ASTM A421 - 2005	WA	4.98	+/-0.05	19.48	153.86	-	33.60	-	-	28.54	-	-	-	-	3.5 (B)
		6.35	+/-0.05	31.67	248.61	-	52.41	-	-	44.56	-	-	-	-	-
		7.01	+/-0.05	38.59	302.66	-	62.52	-	-	53.14	-	-	-	-	3.5 (B)
BS 5896 - 1980	1770	4.00	+/-0.04	12.60	98.90	+/-2.0	22.30	18.50	-	19.00	0.07 - 0.17	-	-	-	-
	1670	4.00	+/-0.04	12.60	98.90	+/-2.0	21.00	17.50	-	17.90	0.07 - 0.17	-	-	-	-
	1620	4.50	+/-0.05	15.90	125.00	+/-2.7	25.80	21.40	-	21.90	0.07 - 0.17	-	-	-	-
	1770	5.00	+/-0.05	19.60	154.00	+/-3.1	34.70	28.80	-	29.50	0.07 - 0.17	-	-	-	-
	1670	5.00	+/-0.05	19.60	154.00	+/-3.1	32.70	27.20	-	21.80	0.07 - 0.17	-	-	-	4.5 (B)
	1770	6.00	+/-0.05	28.30	222.00	+/-3.7	50.10	41.60	-	42.60	0.10 - 0.20	-	-	-	-
	1670	6.00	+/-0.05	28.30	222.00	+/-3.7	47.30	39.30	-	40.20	0.10 - 0.20	-	-	-	-
	1670	7.00	+/-0.05	38.50	302.00	+/-4.3	64.30	53.40	-	54.70	0.10 - 0.20	-	-	-	-
	1570	7.00	+/-0.05	38.50	302.00	+/-4.3	60.40	50.10	-	51.30	0.10 - 0.20	-	-	-	-
	Y1860C	4.00	-	12.60	98.40	+/-2.0	23.40	20.80	-	-	0.06 - 0.13	-	-	-	-
	Y1770C	4.00	-	12.60	98.40	+/-2.0	22.30	19.60	-	-	0.06 - 0.13	-	-	-	-
pTEN 10138 - 2004	Y1770C	5.00	-	19.60	153.10	+/-3.1	34.70	30.50	-	-	0.06 - 0.13	-	-	-	-
	Y1670C	5.00	-	19.60	153.10	+/-3.1	32.70	28.80	-	-	0.06 - 0.13	-	-	-	-
	Y1770C	6.00	-	28.30	221.00	+/-4.4	50.10	44.10	-	-	0.09 - 0.16	-	-	-	4.5 (A)
	Y1670C	6.00	-	28.30	221.00	+/-4.4	47.30	41.60	-	-	0.09 - 0.16	-	-	-	-
	Y1670C	7.00	-	38.50	300.70	+/-6.0	64.30	56.60	-	-	0.09 - 0.16	-	-	-	-
	Y1570C	7.00	-	38.50	300.70	+/-6.0	60.40	53.20	-	-	0.09 - 0.16	-	-	-	INITIAL LOAD (70%)
JIS G 3536 - 1999	SWPD1L (indent)	4.00	+/-0.04	12.57	98.70	-	21.10	-	18.60	-	-	-	-	-	-
	SWPR1AL (plain)	5.00	+/-0.05	19.64	154.00	-	31.90	-	27.90	-	-	-	-	-	2.5 (B)
		6.00	+/-0.05	28.27	222.00	-	44.10	-	38.70	-	-	-	-	-	-
		7.00	+/-0.05	38.48	302.00	-	58.30	-	51.00	-	-	-	-	-	-
		8.00	+/-0.06	50.27	395.00	-	74.00	-	64.20	-	-	-	-	-	-

(A) = PERCENTAGE OF ACTUAL BREAKING LOAD

(B) = PERCENTAGE OF MINIMUM BREAKING LOAD

PE UNBONDED STRAND



∅ 12.7-15.7 mm.

Low Relaxation PE Extruded Strand

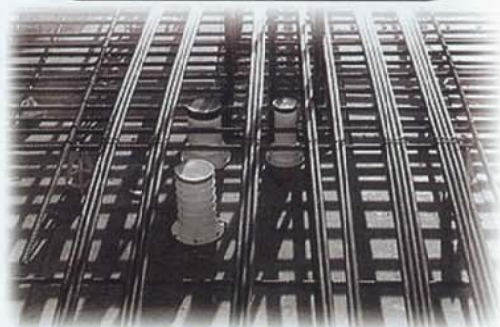
SIW Unbonded PC Strands are bare strands coated with grease and polyethylene. Mechanical properties of the bare strand are the same as PC Strand which is manufactured in accordance with AS/NZS 4672, ASTM A416, BS 5896, JIS G 3536 and pr EN 10138-3. SIW also produces special grade products according to customer's requirements.

Major applications

Unbonded post-tensioned flooring systems

Subway Tunnels

Ground Slabs





THE SIAM INDUSTRIAL WIRE CO., LTD.

PE UNBONDED

LOW RELAXATION

SPECIFICATION OF PC STRAND STANDARD	GRADE	NOMINAL DIAMETER mm.	DIAMETER TOLERANCE mm.	NOMINAL AREA mm.2	NOMINAL WEIGHT kg./1,000 m.	WEIGHT TOLERANCE %	PITCH % Diameter	MINIMUM BREAKING LOAD kN.	MINIMUM YIELD LOAD kN.			MINIMUM ELONGATION %	1,000-HR. RELAXATION (% MAX.) INITIAL LOAD (80%)
									0.1%	0.2%	1.0%		
TIS 420 - 1997	1 860	12.70	-	98.70	774	+4/-2	12-18	184.00	151.00	156.00	3.5	4.5 (B)	
		15.20	-	139.00	1,101			259.00	212.00	220.00			
ASINZS 4672 - 2007	1 870 1 750 1 830	12.70	-	98.70	774	+4/-2	12-18	184.0	151.0	156.0	3.5	3.5 (B)	
		15.20	-	143.00	1,122			250.0	205.0	212.0			
		15.20	-	143.00	1,122			261.0	214.0	222.0			
ASTM A416 - 2006	1 725	12.70	+/-0.4	92.90	730	-	12-16	160.10	-	144.10	3.5	3.5 (B)	
		15.20	+/-0.4	139.40	1,094			240.20	-	216.20			
BS 5896 - 1980	1 860	12.70	+0.65/-0.15	98.70	775	-	12-16	183.70	-	165.30	3.5	3.5 (B)	
		15.24	+0.65/-0.15	140.00	1,102			260.70	-	234.60			
pr EN 10138 - 2004	Super	12.90	+0.4/-0.2	100.00	785	+4/-2	12-18	186.00	158.00	163.00	3.5	4.5 (B)	
		15.70	+0.4/-0.2	150.00	1,180			265.0	225.0	233.0			
Y1770S7	12.90 15.20 15.70	12.90	-	100.00	781	+2/-2	14-18	177.00	152.00	-	3.5	4.5 (A)	
		15.20	-	139.00	1,086			246.00	212.00	-			
		15.70	-	150.00	1,172			266.0	229.0	-			
Y1860S7	12.90 15.20 15.70	12.90	-	100.00	781	+2/-2	14-18	186.00	160.00	-	3.5	4.5 (A)	
		15.20	-	139.00	1,086			259.00	223.00	-			
		15.70	-	150.00	1,172			279.0	240.0	-			
G 3536 - 1999	SWPR7AL SWPR7BL	15.20	+0.4/-0.2	138.70	1,101	+4/-2	12-18	240.00	-	204.00	3.5	INITIAL LOAD (70%) 2.5 (B)	
		12.70	+0.4/-0.2	98.71	774			183.00	-	156.00			
		15.20	+0.4/-0.2	138.70	1,101	+4/-2	12-18	261.00	-	222.00	3.5	2.5 (B)	

(A) = PERCENTAGE OF ACTUAL BREAKING LOAD

(B) = PERCENTAGE OF MINIMUM BREAKING LOAD

Standard specification of sheathing	Outside Diameter of Sheath mm. (inch.)	Thickness of Sheath mm. (inch.)	Weight of Grease g./m. (oz./ft.)	Unit weight of Tendron g./m. (lb./ft.)
12.70 mm. (1/2 inch.)	15.70 (0.62)	1.0 (0.040)	32 (0.34)	850 (0.57)
12.90 mm. (1/2 inch.)	15.90 (0.63)	1.0 (0.040)	32 (0.34)	870 (0.59)
15.20 mm. (6/10 inch.)	18.00 (0.71)	1.0 (0.040)	45 (0.48)	1,230 (0.83)
15.70 mm. (6/10 inch.)	18.20 (0.72)	1.0 (0.040)	45 (0.48)	1,280 (0.86)

Properties of plastic sheath	Testing method	Value
Tensile strength (kg./sq.cm.)	ASTM D638	350
Elongation (%)	ASTM D638	500
Stiffness (kg./sq.cm.)	ASTM D747	11000
Softening point (°C)	ASTM D1525	125
Hardness (Shore D)	ASTM D2240	64

Properties of grease	Testing method	Value
Consistency at 25 °C	ASTM D217	365
Dropping Point (°C)	ASTM D586	181
Free Alkali (%wt.)	IP 37	0
Salt Spray Test	ASTM B117	96

Cold Drawn and Hard Drawn Wire for Reinforcement Concrete

Cold Drawn Wire has been granted the Thai Industrial Standard, TIS 747 for plain type and TIS 943 for deformed/ribbed type and is manufactured in accordance with ASTM A82(plain type), ASTM A 496 (deformed/ribbed type), BS 4482, AS 1303 and AS/NZS 4671 Hard drawn wire is manufactured in accordance with ASTM A648

Both cold drawn and hard drawn wire can also be produced according to customer's special requirements.

Major applications

- Wire meshes
- Water pipes
- Steel stirrups



plain

Ø 2.8- 12.5 mm.



deformed

Ø 4-12 mm.





THE SIAM INDUSTRIAL WIRE CO., LTD.

COLD DRAWN /

HARD DRAWN WIRE

SPECIFICATION STANDARD	NOMINAL DIAMETER mm.	DIAMETER TOLERANCE mm.	NOMINAL AREA mm.2	NOMINAL WEIGHT kg./m.	WEIGHT TOLERANCE %	RIB SPACING mm.	TENSILE STRENGTH Mpa	YIELD STRENGTH Mpa (0.5%)	DEFORMED HEIGHT mm.	MINIMUM REDUCTION OF AREA %
ASTM A 82	2.5	+/- 0.08	5.00	-	-	-	-	-	-	-
	4.4	+/- 0.08	15.00	-	-	-	-	-	-	-
	5.0	+/- 0.08	20.00	-	-	-	550	485	-	30
	6.7	+/- 0.10	35.00	-	-	-	-	-	-	-
	8.7	+/- 0.10	60.00	-	-	-	-	-	-	-
ASTM A 496	5.6	-	25.00	0.1962	-	-	-	-	-	-
	6.7	-	35.00	0.2747	-	-	-	-	-	-
	7.6	-	45.00	0.3532	+/- 6	4.62 - 7.24	585	515	-	-
	8.0	-	50.00	0.3925	-	-	-	-	-	-
	8.7	-	60.00	0.4709	-	-	-	-	-	-
TIS 747	3.00	-	7.07	-	-	-	-	-	-	-
	4.00	-	12.57	-	-	-	-	-	-	-
	5.00	+/- 0.1	19.64	-	-	-	-	485	-	30
	6.00	-	28.29	-	-	-	-	-	-	-
	7.00	-	38.50	-	-	-	-	-	-	-
	8.00	-	50.27	-	-	-	-	-	-	-
	9.00	-	63.63	-	-	-	-	-	-	-
TIS 943	4.00	-	12.57	0.099	-	4.62-7.25	-	-	0.16	-
	5.00	-	19.64	0.154	-	-	-	-	0.22	-
	6.00	-	28.28	0.222	-	4.62-7.29	-	-	0.27	-
	7.00	-	38.49	0.302	+/- 6	4.62-7.31	585	515	0.32	-
	8.00	-	50.27	0.395	-	4.62-7.33	-	-	0.36	-
	9.00	-	63.63	0.499	-	4.62-7.35	-	-	0.4	-
	2.80	+/- 0.08	7.07	0.055	-	-	540-1080	-	-	-
	3.00	+/- 0.08	9.62	0.076	-	-	540-1080	-	-	-
	4.00	+/- 0.10	15.91	0.125	-	-	440-930	-	-	-
	5.00	+/- 0.10	23.76	0.186	-	-	390-830	-	-	-
TIS 194	6.00	+/- 0.13	28.28	0.222	-	-	390-830	-	-	-
	7.50	+/- 0.15	33.19	0.260	-	-	390-830	-	-	-
	8.00	+/- 0.15	38.49	0.302	-	-	390-830	-	-	-
	3.70	-	10.75	0.084	-	1.35 - 3.70	-	-	-	-
	4.00	-	12.57	0.099	+/- 4.5	2.00 - 4.00	-	500 - 750	-	-
AS/ NZS 4671 (500L)	5.00	-	19.64	0.154	-	2.50 - 5.00	-	-	-	-
	7.00	-	38.49	0.302	-	3.50 - 7.00	-	-	-	-
							BREAKING LOAD (kN)			
ASTM A648 (CLASS III)	4.88	+/- 0.05	18.70	0.147	-	-	32.5 - 36.3	-	-	35
	6.35	-	31.67	0.249	-	-	52.4 - 58.9	-	-	30
	7.92	-	49.27	0.387	-	-	75.2 - 85.4	-	-	30

WELDED WIRE MESH

Welded Wire Fabric

SIW welded wire mesh has been granted the Thai Industrial Standard, TIS 737 for plain type and TIS 926 for deformed/ribbed type, and is manufactured in accordance with ASTM A185 (plain type), ASTM A497 (deformed/ribbed type), and BS 4483. Welded wire mesh can also be produced in accordance with customer's special requirements.

SIW welded wire Mesh greatly reduces placing time, manpower, and save considerable construction cost. Moreover, the deformed/ribbed wire mesh increases bonding strength between concrete and ribbed surfaces of wire up to 3 times more than ordinary smooth wire mesh. This enables more tolerance and durability to constructions.

Major applications

- On ground slabs
- Pavements
- Box culverts
- Bottom mesh on post-tensioned floors

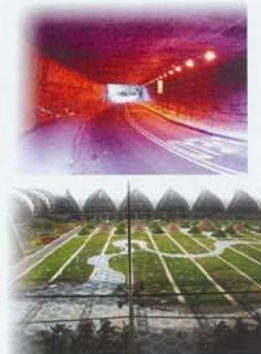


Made to order

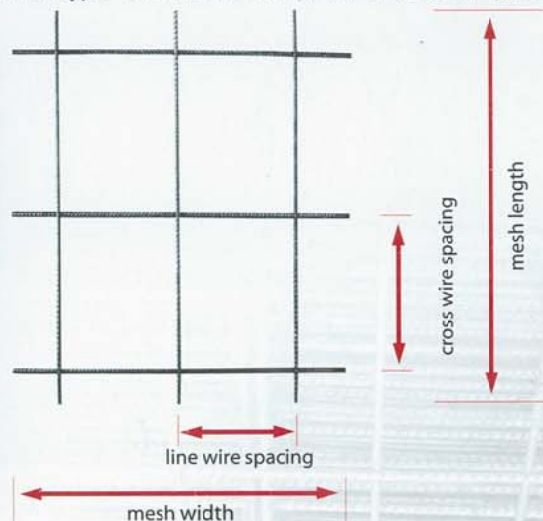
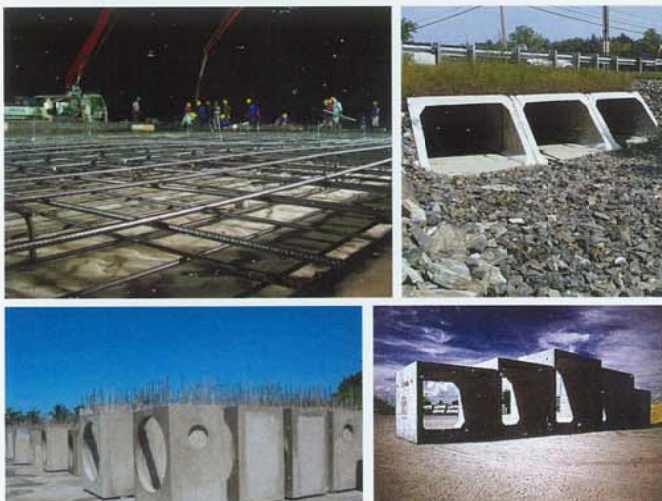
WIRE DIAMETER		MESH SPACING		MESH WIDTH	MESH LENGTH	
(mm)		(cm)		(m)	(m)	
ROUND	DEFORMED	CROSS WIRE	LINE WIRE		SHEET	ROLL
4-12	4-12	10-50	10-50	1-3.5	1-12	50

Specification

MIN. YIELD STRENGTH		MIN. TENSILE STRENGTH	
(kg/cm. ²)		(kg/cm. ²)	
ROUND	DEFORMED	ROUND	DEFORMED
4,590	4,940	5,250	5,600



**Yield and tensile strength conform to ASTM A185 for round type and ASTM A496 for deformed type*



PACKAGING

SIW's packaging is known as one of the best in the industry because of its stringent material selection and packing expertise.

With layers of high-density polyethylene (HDPE) and plastic films on PC wire, PC strand, cold drawn and hard drawn wire, corrugate paper on Unbonded PC Strand, outer SIW-logo label and identification labels, the product is well protected from damages and humidity. An exterior tag briefly describes each coil's important details such as coil number, weight, and production date. These allow users to easily store, identify, acquire, distribute or trace back in the future. The coil is secured onto wooden pallets with eye-to-side (eye horizontal), or eye-to-sky (eye skyward) settings, or without pallet depending on customer's requirement.



PC STRAND (EYE HORIZONTAL)

coil inside Ø (cm.)	coil outside Ø (cm.)	width (cm.)	weight approx (kg.)
75	120	76	3,000



PC STRAND (EYE SKYWARD)

coil inside Ø (cm.)	coil outside Ø (cm.)	width (cm.)	weight approx (kg.)
75	120	76	3,000



PE UNBONDED STRAND

coil inside Ø (cm.)	width (cm.)	weight approx (kg.)
140	100	3,000



PC WIRE

Wire (mm)	coil outside (cm.)	weight approx (kg.)
4 - 9	220	600-2,400



Cold-Drawn

coil inside Ø (cm.)	coil outside Ø (cm.)	width (cm.)	weight approx (kg.)
55	80	80	1,000



PERFORMANCE AND EXPERIENCE

SIW's products have been widely used in almost every region of the world, including ASEAN countries and the rest of Asia, the Middle East, Oceania, America, Africa and Europe. Many well-known post-tensioning contractors and pre-cast manufacturers have selected SIW as their top approved supplier. With its superior and consistent quality, a large production capacity combined with a fast and flexible delivery schedule, SIW has gained widespread acceptance and has received awards both locally and internationally.

SIW provides personal and quality service to all our customers. We customize our sales and technical activities to meet their needs, paying close attention to their requirements and meeting their expectations throughout the entire process.

Major Projects:

Domestic

Suvarnabhumi International Airport

Airport Rail Link, Bangkok

Rama 8 Bridge, Bangkok

BTS Skytrain, Bangkok

Siam Commercial Bank - Head office, Bangkok

Bangna - Chonburi Expressway

Industrial Ring Road & Bridge, Prapradang

Overseas

M5 freeway tunnels, Sydney, N.S.W., Australia

Alice Springs to Darwin rail line, Australia

Victoria Fast Rail, Australia

Darwin LNG Tank, Australia

Eastlink Project: Mitcham-Frankston, Victoria, Australia

Rupsa Bridge, Khulna, Bangladesh

Bridge Over Mekong River, Kampong Cham Cambodia

Route - 8 Express Way, Hong Kong

Deep Bay Link Northern Section, Hong Kong

City Lofts Apartment, Jarkata, Indonesia

Tabriz Bridge, Iran

Track Rehabilitation, Baghdad, Iraq

Malampaya Deepwater Gas-to-Power Station, Philippines

A11/IP9 Lanco Braga-Guimaraes, Portugal

Viaduto sobre o vale do Rio Mezio, Lousada Portugal

Rabigh Cement Factory, Jeddah, Saudi Arabia

Changi Airport Terminal 3, Singapore

Guanyue Bridge Project, Taiwan

Ski Dome Dubai, U.A.E

Thanh Tri Bridge, Hanoi, Vietnam

Saigon - Trung Luong Express Way, Vietnam



1. BTS Skytrain : Bangkok,
2. Suvarnabhumi International Airport,
3. Industrial Ring Road & Bridge, Prapradang,



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11

4. Dubai Ski Dome, UAE
5. MyThuan Bridge, Vietnam
6. Rabigh Cement Factory, Saudi Arabia
7. Alice Spring to Darwin rail line, Australia

8. Malampaya Deepwater Gas - to - Power Station, Philippines
9. Eastlink: Mitcham Frankston, Australia
10. Route 8, Hong Kong
11. Darwin LNG tank, Australia



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