Growing into tomorrow with you

Message from the CEO

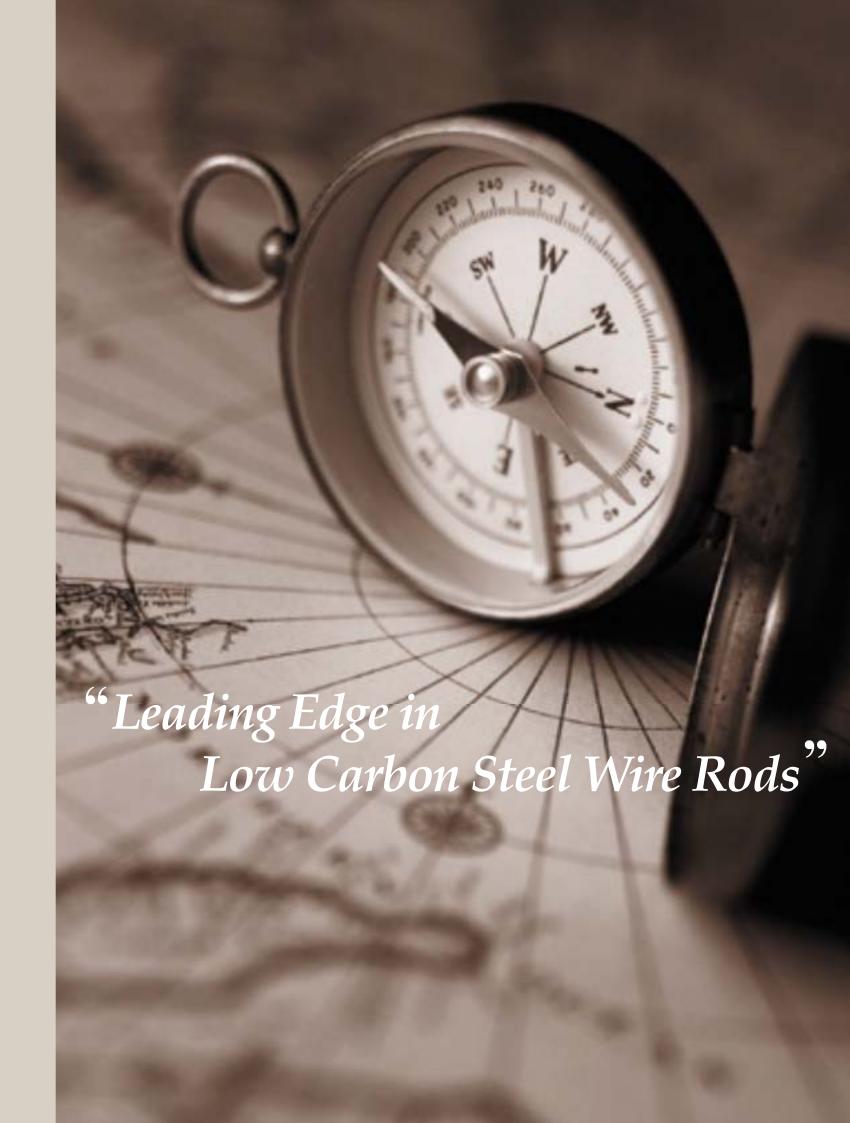
Welcome to KOSTEEL and I hope you find our brochure helpful in comprehending our growing range of products and services.

For nearly three decades, KOSTEEL has been a domestic market leader in products ranging from low carbon wire rods to second-stage products. And the company's international role and reputation are growing along with our wider range of products, production capacities, and technical expertise. In 2003, we renovated our wire rod production systems, streamlined production facilities, increased production capacity, further improved product quality, and reduced production costs to increase our international competitiveness. In addition, we implemented e-process system that provide clients with integrated information on sales and production in real time basis, and we set a firm foundation for expanded international activities by establishing our first overseas subsidiary, KOSTEEL-VINA, in Vietnam, and Beijing Office in China.

In order to meet growing demand from the client at home and abroad, KOSTEEL is also augmenting prime investments in core business to guarantee a steady flow of expert human resources for quality products and high technology.

As a leading edge company in low carbon steel wire rod, we sincerely look forward to working closely with you in the years to come.

KOSTEEL CO., LTD.

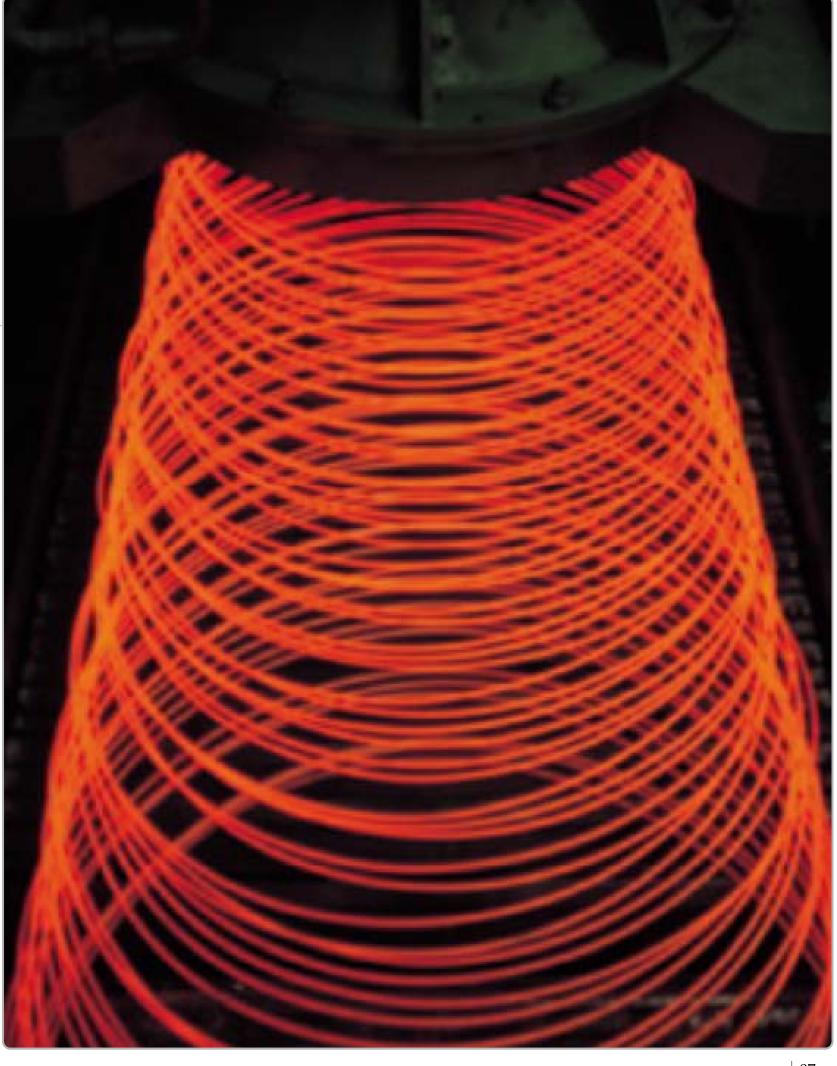


"Korea's finest technology in low carbon steel wire rods"

Low Carbon Steel Wire Rods

KOSTEEL specializes in low carbon steel wire rods (5.5-15.0mm in diameter) according to KSD 3554 and is proud of various usages with best quality.

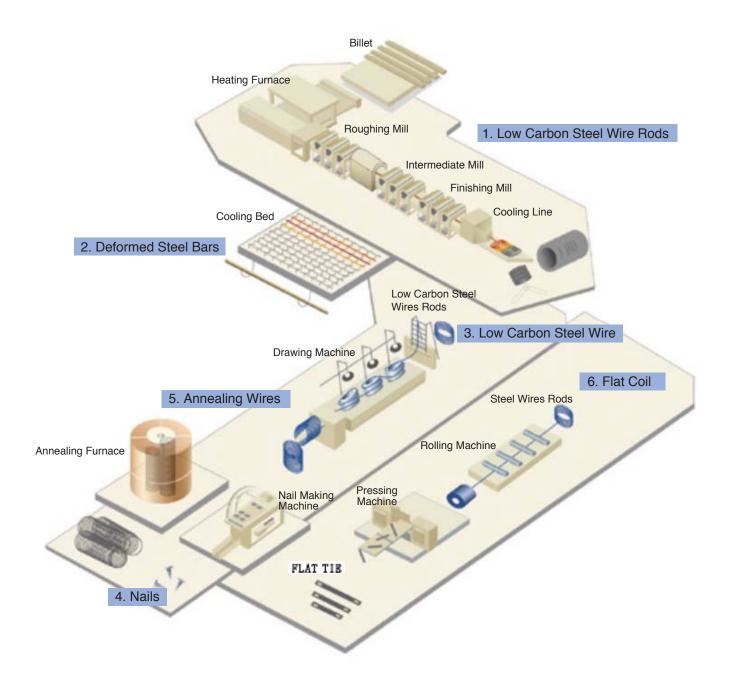




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Excellent rods for excellent end products **

Low carbon steel wire rods are used in the manufacture of such second-stage products as common steel wire, nails, and wire netting. To guarantee the quality of such end products, KOSTEEL enforces a total quality control system that includes all processes, from raw material procurement to zero-defect process control to final inspection. Kosteel confidently guarantees excellent end products with excellent rods.



Chemical Composition & Mechanical Properties

Con siting tipe	Co. do	Chemical Composition (%)							
Spe cification	Co de	С	Si	Mn	Р	S			
	SWRM 6A	0,01>	0.05>	0,20>	0,030>	0,015>			
	SWRM 6T	0.01>	0.03>	0,25>	0.020>	0,016~0,0			
	SWRM 6N2	0.01>	0,03>	0,201~0,30	0.020>	0,015>			
	SWRM 6N3	0.01>	0,03>	0,301~0,45	0.040>	0,030>			
	SWRM 6N6	0.01>	0,05>	0,201~0,65	0.040>	0,040>			
	SWRM 6N8	0.01>	0,10>	0,651~1,00	0,031~0,100	0,050>			
	SWRM 6AP	0.01>	0,10>	0,20>	0.031~0.090	0,050>			
	SWRM 6NP	0.01>	0.10>	0,201~0,65	0.041~0.090	0,050>			
SWRM 6	SWRM 6AS	0.01>	0.051~0.35	0,30>	0.045>	0.045>			
	SWRM 6NS	0.01>	0,051~0,35	0,301~0,65	0.045>	0,045>			
	SWRM 6M	0.011~0.03	0,03>	0,101~0,25	0.030>	0,030>			
	SWRM 6M3	0.031~0.04	0.04>	0,101~0,30	0.030>	0,030>			
	SWRM 6L	0.041~0.05	0.04>	0,30>	0.030>	0,030>			
	SWRM 6LP	0.011~0.08	0.10>	0,60>	0.031~0.090	0,050>			
	SWRM 6LS	0,031~0,05	0,101~0,35	0,301~0,90	0.045>	0,045>			
	SWRM 6Y	0,031~0,08	0.10>	0,401~0,85	0.040>	0,040>			
	SWRM 6Y	0,031~0,08	0.10>	0,401~0,85	0.040>	0,040>			
	SWRM 8A	0.051~0.07	0.04>	0.201~0.40	0.030>	0,030>			
	SWRM 8L	0.071~0.10	0.04>	0,401~0,60	0.030>	0,030>			
	SWRM 8LP	0.061~0.10	0,10>	0,60>	0.035~0.100	0,050>			
SWRM 8	SWRM 8LS	0.061~0.10	0,35>	0,90>	0.045>	0,045>			
	SWRM 8Y	0.031~0.10	0,35>	0,851~1,20	0.040>	0,040>			
	SWRM 8N	0.031~0.10	0,051~0,35	0,451~1,40	0.040>	0,040>			
SWRM 10	SWRM 10L	0.101~0.12	0,05>	0,301~0,60	0.040>	0,040>			
SWRM 12	SWRM 12L	0,121~0,15	0,05>	0,301~0,60	0.040>	0,040>			
CUEL 15	SWRM 15L	0,131~0,18	0,05>	0,301~0,90	0.045>	0,045>			
SWRM 15	SWRM 15K	0,101~0,18	0,051~0,35	0,301~0,90	0,050>	0,050>			
SWRM 17	SWRM 17L	0,151~0,18	0,05>	0,601~0,90	0.045>	0,045>			
011014.00	SWRM 20L	0.181~0.23	0,05>	0.601~1.20	0.045>	0,045>			
SWRM 20	SWRM 20N	0,031~0,10	1,50>	1,401~1,80	0.050>	0,050>			

Production Processes

















"Advanced mass production for outstanding, uniform quality"

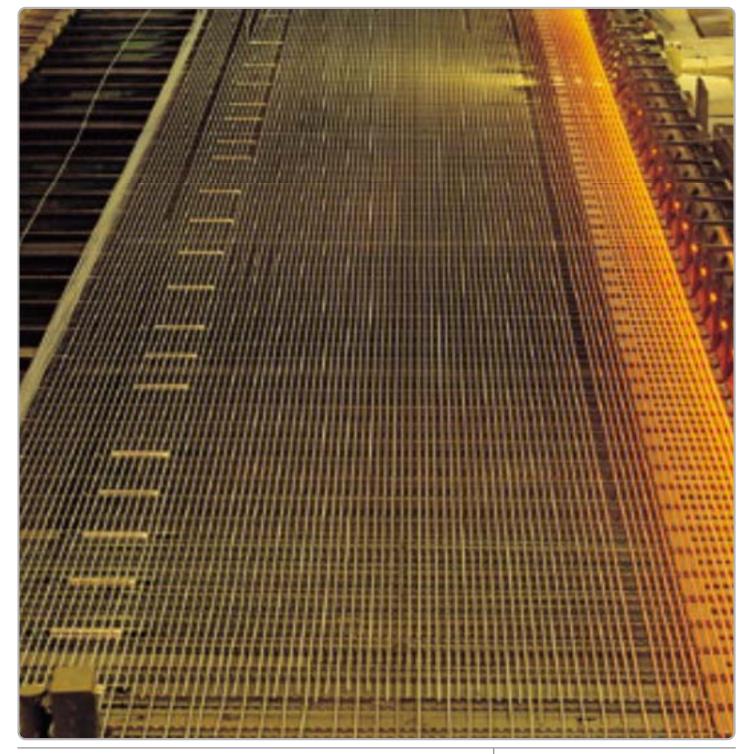
Deformed Steel Bars

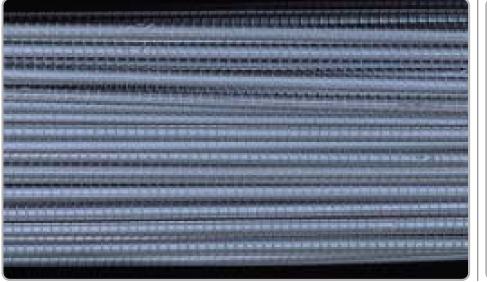
KOSTEEL enforces strict quality control according to KSD3504 to guarantee perfect reinforcement products for the housing, apartment and general construction industries. These deformed steel bars are also excellent materials for such social overhead capital (S.O.C) projects as bridges, railways, dams, etc.



Chemical Composition & Mechanical Properties

KSD3504	KSD3504 Deformed Steel Bars																
Specifica		Mechanical Properties			Chemical Composition (%)			Carbon		1	BUNDL	.E					
-tion	Code	T.S (Kgf/m²)	Y. P (N/m²)	EL (%)	С	Si	Mn	Р	S	Equivalent				(Tally)	Dia me -t er	Piece	Weight (KG)
SD300	2 C	440↑	300↑	16↑	0,36↓	0.40↑	1,00↑	0.045↓	0.045↓	0.300~0.390	Green	D10	210	941			
SD350	3 C	490↑	350↑	18↑	0.27↓	0,55↓	1,50 ↓	"	<i>h</i> ′	0.370~0.450	Red						
SD400	4 C	560↑	400↑	16↑	0,35↓	"	1,80↓	n	"	0.430~0.550	Yellow	D13	120	955			







Complete customer satisfaction through advanced processes and rigid QC







Low Carbon Steel Wire

KOSTEEL applies rigid quality control according to ISO and KS for zero defects in the production of common steel wires derived from low carbon steel wire rods.

Mechanical Properties

KSD3552 Ste	el Wires							
Low Carbon Steel Wires(SWM-B) Steel Wire for Nails(SWM-N)								
Size(mm) Tensile Strength			Size(mm) Tensile Strength			Strength		
Dia met er	To le ra n ce	Size(mm)	N/mm²	Dia met er	Tolerance	Size(mm)	N/mm²	
0,81~2,00	±0,03	1,80~2,30	590~1270	0 1.50~1.90	±0.05	1,40~2,30	750~1200	
2.01~3.20	±0.04	2,31~3,20	540~1130	215~287	±0.6	2,31~3,20	700~1100	
		3,21~4,50	440~1030			3,21~4,00	600~1000	
3,21~6,00 	±0.05	4,51~7,50	390~930	3,05~3,75	±0.08	4.01~5.50	550~900	
6,01 ↑	±0.06	7.50 ↑	320~880	4.20~5.20	±0.10	5,51~7,00	500~850	

⁶⁶ A Korean pioneer in Deck Plate system ⁹⁹

KOSTEEL's integral Super Deck maximizes your construction efficiency and productivity

Super Deck

KOSTEEL is the first Korean company to produce Super Deck with deforming wire through cold rolling process that features improved concrete adhesiveness with high yield point.

(Production Processes)







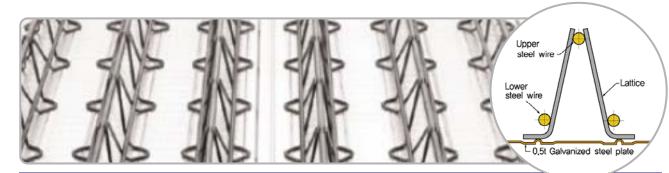


· Top Quality · Reduced Construction Time Highly Economical Complete Design Support)

· Added Construction Safety)

Super Deck System

Through "non-form, non-support slab" technology, truss girder are assembled with high-yield strength reinforced steel wire which is applied onto 0.5mm-thick galvanized steel plate (instead of onto floor slab plywood) by electric resistance welding to produce an integral product. As a result, simplified onsite work eliminates the need for form setting and deformed steel bar. The benefits are numerous: time and cost efficiency, improved quality, reduced vibration, and immediate follow-up.



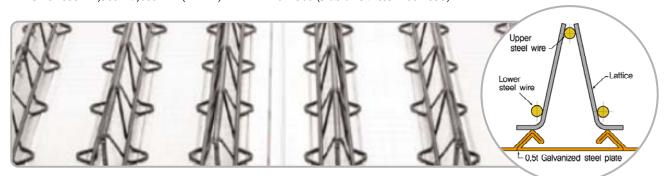
T-Type				•	
El em en. Pattern	T1	T2	T3	Tn1	Tn2
Jpper steel wire	1210 ×1	DI3×1	D13 ×1	D10 ×1	DI3×1
Lower stee wire	D10×2	D10×2	D13×2	D8×2	D8×2

Feature

Highly stable triangular truss structure facilitates easy, long span construction without separate support

Spec

- Lattice : ϕ 5 ~ ϕ 7 - Deck plate : 0.5T (Galvanized steel plate) - Size : 600 X 1,500 ~ 9,000mm (W X L) - H : 70 ~ 300 (Slab thickness : 100 ~ 330)



W-Type					
Elemen: Pattern	W1	W2	W3	Wn1	Wn2
Jpper stee wire	D10 ×1	D13 ×1	D13 ×1	D10 ×1	D13 ×1
Lower stee wire	D10×2	D10×2	D13×2	D8×2	D8×2

• Feature

Easy to work with 750mm Wide slab and Products of improved economic

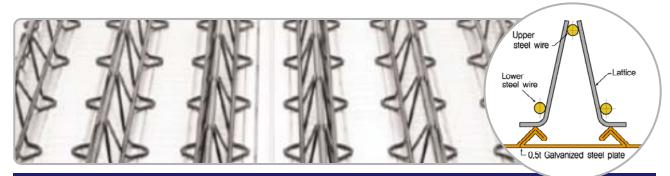
Spec

- Lattice : $\phi 5 \sim \phi 7$

- Deck plate : 0.5T (Galvanized steel plate)

- Size: 750 X 1,500 ~ 9,000mm (W X L) - H: 70

- H: 70 ~ 300 (Slab thickness: 100 ~ 330)



N-Type					
Pattern	N1	N2	N3	Nn1	Nn2
Jppor stoe wire	DIO×I	DI3×1	D13×1	D10 ×1	DI3 ×1
Lower stee wire	D10×2	DI0×2	D13×2	D8×2	D8×2

• Feature

Graceful aesthetics and increased stiffness of the deck with reinforcing joints improved and Welding points unexposured

Spec

- Lattice : $\phi 5 \sim \phi 7$

- Deck plate: 0.5T (Galvanized steel plate)

- Size : 750 X 1,500 ~ 9,000mm (W X L)

- H: 70 ~ 300 (Slab thickness: 100 ~ 330)

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Reduced production time and costs through process innovation

Common Nails

KOSTEEL produces multi-purpose common nails for various usage according to KSD 3553.







Specification

KSD35534	Commo	n Nails			
Designation	Overall Length (L)	Body Diameter (d)	Head Diameter (D)	Sharp Tip Length (Min)	Appearances & Cognomen
N 19	19±1.0	1,50 ±0,05	3,6±0,5	2,55	
N 22	22±1,2	1,50 ±0,05	3,6±0,5	2,55	
N 25	25±1,3	1,70 ±0,05	4.0±0.5	2,85	
N 32	32±1,5	1,90 ±0,05	4.5±0.5	3,20	
N 38	38±1,5	2,15±0,06	5,1±0,6	3,63	Head Neck Body Sharp Tip
N 45	45±2.0	2.45±0.06	5,8±0,6	4.13	
N 50	50±2,0	2.75±0.06	6,6±0,6	4.68	D & Immun d
N 60	60±2.0	2,87±0,06	6.7±0.6	4.79	<u> </u>
N 65	65± 2,5	3,05±0,08	7.3 ±0.8	5,18	/
N 75	75±3,0	3,40±0,08	7.9 ±0.8	5,65	D: Head Diameter L: Overall Length
N 80	80±3,0	3.75±0.08	7.9 ±0.8	5,83	d: Body Diameter S: Sharp Tip Length
N 90	90±3,5	3.75±0.08	8.8±0.8	6,28	Θ : Rake Angle of Head Lower Surface : 120°
N 100	100±3,5	4,20±0,10	9,8±1,0	7,00	
N 115	115±4,0	4,20±0,10	9,8±1,0	7.00	
N 125	125±4,0	4,20±0,10	10,3±1,0	7.45	

Black Annealed Wire

Having secured KS Quality Control Standard for these products, KOSTEEL has further enhanced a mass production system for black annealed wire. Thermally treated immediately after drawing from high quality rods, the wire features comparatively outstanding ductility.



Mechanical Properties

KSD3552 Black Annealed Wire																
Allowance		Weight	Ten sile Strength	Twist Endurance												
Dimension	Tolerance	1Coil(Kg)	T/S(N/mm²)	Size(mm)	Times	Size(mm)	Times									
0,18–2,00	±0.04			1,80 ↓	61	3.51-4.0	61									
							1,80-2.0	55	4.01-45	55						
2,01–3,20	± 0.06			2,01–2,3	48	4.51-5.0	48									
		13~650	13~650	13~650	13~650	13~650	13~650	13~650	$13 \sim 650$	$13 \sim 650$	13~650	260~590	2,31-2,6	42	5.01-55	42
3,21-6,00	± 0.08			2.61-2.9	36	5,51-6,0	36									
			-	2,91-3,2	33	6,01-7,0	33									
6.01 ↑	± 0.10			3,21-3,5	30	7, 01-7,5	30									



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Meeting all requirements through strict QC and client services*

Flat Coil

(KOSTEEL offers high quality flat coil, in a variety of sizes with outstanding tensility, to produce newly developed cold rolled flat tie.)



Flat Coil			
Designation	Thick ness	Width	Ap p eara nce
2,8×19,0			
3,0×19.0]		_T
3,2×19,0	1000	1.0.50	T fi
3,5×19,0	±0,20	±0,50	U 41
3,9×19,0			
4.0×19.0]		

Deforming Wire

KOSTEEL uses the latest facilities for cold rolling the hot rolled products one more time, resulting in high quality deforming wire that is recognized for its enhanced quality and unique gloss.

Mechanical properies								
Section Mechanical properies Conversion								
Tensile Strength, Ft	57Kg/mm² Above	540N/mm²						
Yield Strength, Fy	51 Kg/mm² Above	440N/mm²						
Design-based Strength	45Kg/mm² Above	440N/mm²						
∃ongation, Fy	12% Above	5db						

Weight Allowance per length								
Dia met er We ight Toler and e								
D6	0,222Kg/m	±8%						
D8	0,395Kg/m	±8%						
D10	0,617Kg/m	±5%						
D13	1.042Kg/mKg/m	±5%						



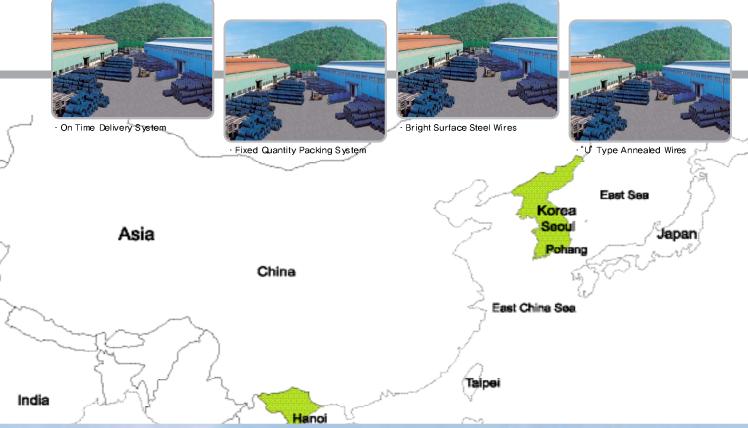




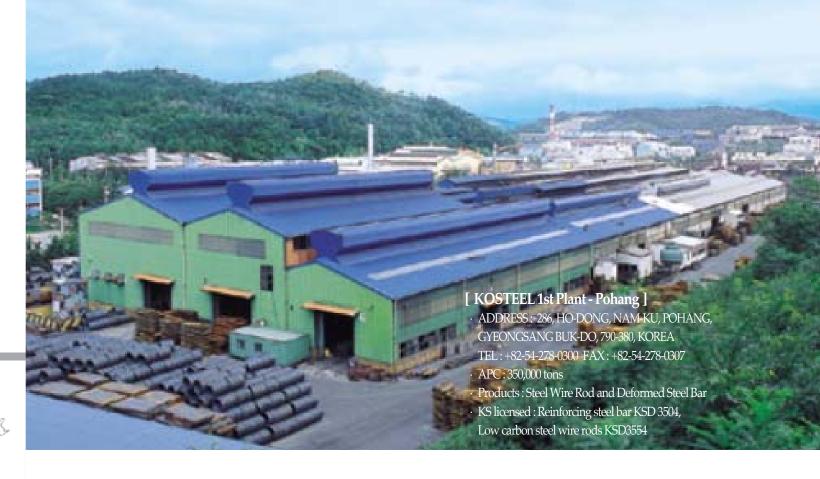


KOSTEEL-VINA : KOSTEEL's new footstone to the world

Having established a solid reputation for quality products and services, KOSTEEL is poised to grow as a truly international name in the industry









[KOSTEEL 2nd Plant - Pohang]

- · ADDRESS: 594, HO-DONG, NAM-KU, POHANG, GYUNGSANG BUK-DO, 790-380, KOREA TEL: +82-54-278-0314 FAX: +82-54-278-0317
- · APC: 100,000 tons
- · Products : Low carbon steel wire, Common nails, Black Annealed Wire, Flat Tie, Flat Coil
- · KS licensed: Low carbon steel wire KSD3552, common nails KSD3553



[KOSTEEL 3rd Plant - Eumsung]

- · ADDRESS: 2-6, SOSEOK-RI, DAESO-MYUN, EUMSUNG-KUN, CHOONGCHEONG BUK-DO, 369-820, KOREA
- TEL:+82-43-882-7893 FAX:+82-43-882-7898
- · (APC): 1.8 million m²
- · (Products): Super Deck, Low carbon steel wire

