www.ehansun.co.kr

HEAD OFFICE & SHINPYEONG FACTORY
(49470) 27, HASINBEONYEONG-RO, SAHA-GU, BUSAN, KOREA
Tel : 80-51-200-4400 / Fax: 80-51-200-4488

HAKJANG FACTORY
(47025) 35, SAEBYEOK-RO 45BEON-GIL, SASANG-GU, BUSAN, KOREA
Tel: 82-51-322-0416 / Fax: 82-51-322-0420

MILYANG FACTORY
(50457) 27, YANGDONGNONGGONGDANJI-GIL, HANAM-EUP,
MIRYANG-SI, GYEONGANGNAM-DO, KOREA
Tel : 82-55-391-0155 / Fax : 82-55-391-0156

NOKSAN FACTORY
(46755) 460, NOKSANSANEOPBUK-RO, GANGSEO-GU, BUSAN, KOREA
Tel : 82-51-831-0175 / Fax : 82-51-831-0173

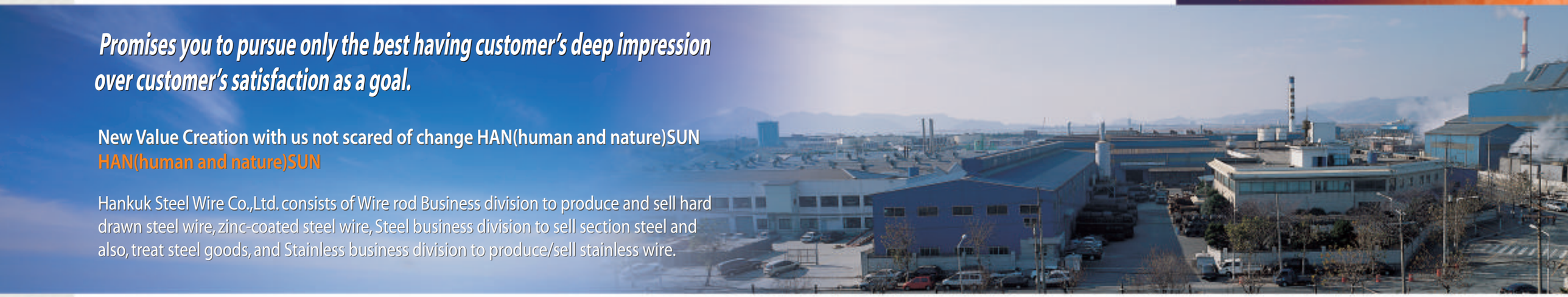
SEOUL OFFICE
(07997) 1910, 293 MOKDONGDONGRO, YANGCHEON-GU, SEOUL, KOREA
Tel : 82-1577-7489 / Fax : 82-2-2648-7479

HANSUN WEBSITE

HanSun

HARD DRAWN STEEL WIRE

韓國線材株式會社
HANKUK STEEL WIRE CO., LTD.



Promises you to pursue only the best having customer's deep impression over customer's satisfaction as a goal.

New Value Creation with us not scared of change HAN(human and nature)SUN
HAN(human and nature)SUN

Hankuk Steel Wire Co.,Ltd. consists of Wire rod Business division to produce and sell hard drawn steel wire, zinc-coated steel wire, Steel business division to sell section steel and also, treat steel goods, and Stainless business division to produce/sell stainless wire.

COMPANY HISTORY

1970	1974. 05. 21	Foundation of "Hanskuk Steel Wire Industrial Company"(148-1 Gamjeon-Dong, Buk-Gu, Busan)
	1978. 06. 20	Acquired the license of trade(Busan No.781666)
1980	1984. 08. 22	Joined in Korea Standards Association
	1984. 11. 30	Awarded the prize of achieving 10million dollar export on the 21st Export Day
	1984. 11. 30	Awarded the Presidential Medal for export merit
	1985. 02. 21	Obtained Korean Industrial Standards KS mark for low carbon steel wires
	1985. 03. 24	Received the award of Minister of Finance for model Tax Payer on the 19th Taxation Day
1990	1990. 08. 01	Incorporation of Hankuk Steel Wire Co., Ltd.
	1995. 06. 12	Registered in the KOSDAQ stock market
	1995. 10. 10	Establishment of Milyang Factory(Stainless Steel Wires)
	1995. 12. 07	Obtained Japanese Industrial Standards JIS mark for galvanized steel wires
	1997. 05. 07	Obtained Korean Industrial Standards KS mark for galvanized steel wires
	1998. 11. 16	Obtained Quality Management System Certificate(ISO 9002)
2000	2000. 01. 01	Relocation of the head office(370-34, Shinpyeong-dong, Saha-gu, Busan)
	2000. 05. 18	Won the Prime Minister's Prize on Hanmaeum meeting of small- and medium-sized enterprise people
	2002. 08. 27	Completion of a construction work for Noksan Factory
	2004. 03. 24	Co-CEO organization system by Lee, Myoungho & Lee, Jyehun
	2005. 05. 06	Establishment of HanSun R&D center under Hankuk Steel Wire Co., Ltd.
	2006. 06. 23	Certification of "Technology Innovative Small and Medium Enterprise(INNO-BIZ)
	2007. 03. 09	First export of armoring wires for submarine cable to Japan
	2008. 02. 29	New JIS mark for zinc-coated low carbon steel wires
	2009. 03. 03	Received the award of Minister of Finance for Tax Payer on the 43rd Taxation Day
	2009. 03. 19	Acknowlegement of "Venture Enterprises" by Kibo Technology Fund
2010	2010. 10. 15	Renewal of Quality Management System Certificate(ISO 9001:2008)
2011	2011. 04. 01	New product development : ALUTEN(Zn-10%Al alloy coated steel wires)
2012	2012. 02. 22	Established an affiliate company :HANSUN ENGINEERING CO., LTD."(100% shares of investment)
	2012. 09. 25	Won the Ministry of Knowledge Economy's Award at "2012 Korea-Japan Fair for Industry and Technology"
2013	2013. 10. 30	Won the Presidental prize of component, material and technique developer in 2013
	2013. 12. 05	Awarded the prize of achieving 30million dollar export on the 50st annual Trade Day
2015	2015. 01. 15	Obtained Japanese Industrial Standards JIS mark for stainless steel wires
2016	2016. 06. 30	Obtained Japanese Industrial Standards JIS mark for hard drawn steel wires

Main Office & Shinpyeong Factory

Factory area : 16,528㎡

Hansun has been the leading specialist in the manufacture of wire for a truly global range of applications.

Items

Ungalvanized Steel Wire

- Hard drawn steel wires
- Piano wires
- Low carbon steel wires
- Shaped wires

Galvanized Steel Wire

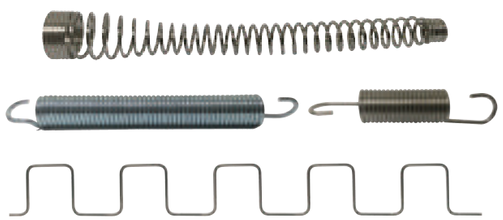
- Zinc coated low carbon steel wires
- Zinc coated steel wires
- ALUTEN: Zn-10%Al alloy coated steel wires

Chemical Composition (JIS G 3506 / KS D 3559)

Designation	Chemical Composition Limits (%)				
	C	Si	Mn	P	S
SWRH 27	0.24~0.31	0.15~0.35	0.30~0.60	0.030 max	0.030 max
SWRH 32	0.29~0.36	0.15~0.35	0.30~0.60	0.030 max	0.030 max
SWRH 37	0.34~0.41	0.15~0.35	0.30~0.60	0.030 max	0.030 max
SWRH 42A	0.39~0.46	0.15~0.35	0.30~0.60	0.030 max	0.030 max
SWRH 42B	0.39~0.46	0.15~0.35	0.60~0.90	0.030 max	0.030 max
SWRH 47A	0.44~0.51	0.15~0.35	0.30~0.60	0.030 max	0.030 max
SWRH 47B	0.44~0.51	0.15~0.35	0.60~0.90	0.030 max	0.030 max
SWRH 52A	0.49~0.56	0.15~0.35	0.30~0.60	0.030 max	0.030 max
SWRH 52B	0.49~0.56	0.15~0.35	0.60~0.90	0.030 max	0.030 max
SWRH 57A	0.54~0.61	0.15~0.35	0.30~0.60	0.030 max	0.030 max
SWRH 57B	0.54~0.61	0.15~0.35	0.60~0.90	0.030 max	0.030 max
SWRH 62A	0.59~0.66	0.15~0.35	0.30~0.60	0.030 max	0.030 max
SWRH 62B	0.59~0.66	0.15~0.35	0.60~0.90	0.030 max	0.030 max
SWRH 67A	0.64~0.71	0.15~0.35	0.30~0.60	0.030 max	0.030 max
SWRH 67B	0.64~0.71	0.15~0.35	0.60~0.90	0.030 max	0.030 max
SWRH 72A	0.69~0.76	0.15~0.35	0.30~0.60	0.030 max	0.030 max
SWRH 72B	0.69~0.76	0.15~0.35	0.60~0.90	0.030 max	0.030 max
SWRH 77A	0.74~0.81	0.15~0.35	0.30~0.60	0.030 max	0.030 max
SWRH 77B	0.74~0.81	0.15~0.35	0.60~0.90	0.030 max	0.030 max
SWRH 82A	0.79~0.86	0.15~0.35	0.30~0.60	0.030 max	0.030 max
SWRH 82B	0.79~0.86	0.15~0.35	0.60~0.90	0.030 max	0.030 max

Torsion (JIS G 3521 / KS D 3510)

Wire Diameter	Torsion
0.70mm ~ 2.00mm	20 min
2.00mm ~ 3.50mm	15 min
3.50mm ~ 6.00mm	10 min



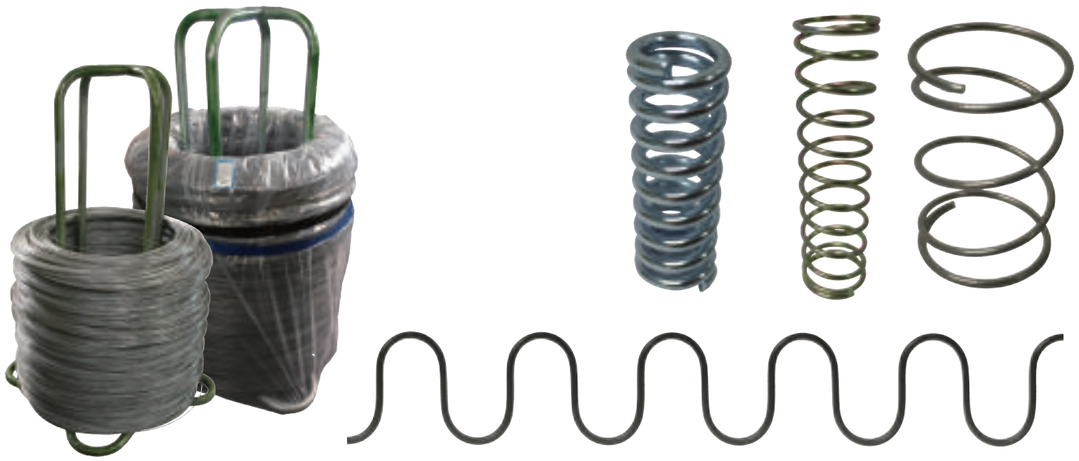
Diamter Tolerance & Ovality (JIS G 3521 / KS D 3510)

Wire Diameter	Tolerance	Ovality
0.08 ~ 0.10	± 0.006	0.006 max
0.10 ~ 0.20	± 0.008	0.008 max
0.20 ~ 0.50	± 0.015	0.015 max
0.50 ~ 1.00	± 0.020	0.020 max
1.00 ~ 2.00	± 0.030	0.030 max
2.00 ~ 3.20	± 0.040	0.040 max
3.20 ~ 5.50	± 0.050	0.050 max
5.50 ~ 8.50	± 0.060	0.060 max
8.50 ~ 13.00	± 0.070	0.070 max

unit : mm

Tensile Strength (JIS G 3521 / KS D 3510)

Dia (㎜)	Tensile Strength (N/㎟)		
	SW-A	SW-B	SW-C
0.70	1 520 ~ 1 770	1 770 ~ 2 060	2 060 ~ 2 350
0.80	1 520 ~ 1 770	1 770 ~ 2 010	2 010 ~ 2 300
0.90	1 520 ~ 1 770	1 770 ~ 2 010	2 010 ~ 2 260
1.00	1 470 ~ 1 720	1 720 ~ 1 960	1 960 ~ 2 210
1.20	1 420 ~ 1 670	1 670 ~ 1 910	1 910 ~ 2 160
1.40	1 370 ~ 1 620	1 620 ~ 1 860	1 860 ~ 2 110
1.60	1 320 ~ 1 570	1 570 ~ 1 810	1 810 ~ 2 060
1.80	1 270 ~ 1 520	1 520 ~ 1 770	1 770 ~ 2 010
2.00	1 270 ~ 1 470	1 470 ~ 1 720	1 720 ~ 1 960
2.30	1 230 ~ 1 420	1 420 ~ 1 670	1 670 ~ 1 910
2.60	1 230 ~ 1 420	1 420 ~ 1 670	1 670 ~ 1 910
2.90	1 180 ~ 1 370	1 370 ~ 1 620	1 620 ~ 1 860
3.20	1 180 ~ 1 370	1 370 ~ 1 570	1 570 ~ 1 810
3.50	1 180 ~ 1 370	1 370 ~ 1 570	1 570 ~ 1 770
4.00	1 180 ~ 1 370	1 370 ~ 1 570	1 570 ~ 1 770
4.50	1 130 ~ 1 320	1 320 ~ 1 520	1 520 ~ 1 720
5.00	1 130 ~ 1 320	1 320 ~ 1 520	1 520 ~ 1 720
5.50	1 080 ~ 1 270	1 270 ~ 1 470	1 470 ~ 1 670
6.00	1 030 ~ 1 230	1 230 ~ 1 420	1 420 ~ 1 620
6.50	1 030 ~ 1 230	1 230 ~ 1 420	1 420 ~ 1 620
7.00	0 980 ~ 1 180	1 180 ~ 1 370	1 370 ~ 1 570



Chemical Composition (JIS G 3502 / KS D 3509)

Designation	Chemical Composition Limits (%)					
	C	Si	Mn	P	S	Cu
SWRS 62A	0.60~0.65	0.12~0.32	0.30~0.60	0.025 max	0.025 max	0.20 max
SWRS 62B	0.60~0.65	0.12~0.32	0.60~0.90	0.025 max	0.025 max	0.20 max
SWRS 67A	0.65~0.70	0.12~0.32	0.30~0.60	0.025 max	0.025 max	0.20 max
SWRS 67B	0.65~0.70	0.12~0.32	0.60~0.90	0.025 max	0.025 max	0.20 max
SWRS 72A	0.70~0.75	0.12~0.32	0.30~0.60	0.025 max	0.025 max	0.20 max
SWRS 72B	0.70~0.75	0.12~0.32	0.60~0.90	0.025 max	0.025 max	0.20 max
SWRS 75A	0.73~0.78	0.12~0.32	0.30~0.60	0.025 max	0.025 max	0.20 max
SWRS 75B	0.73~0.78	0.12~0.32	0.60~0.90	0.025 max	0.025 max	0.20 max
SWRS 77A	0.75~0.80	0.12~0.32	0.30~0.60	0.025 max	0.025 max	0.20 max
SWRS 77B	0.75~0.80	0.12~0.32	0.60~0.90	0.025 max	0.025 max	0.20 max
SWRS 80A	0.78~0.83	0.12~0.32	0.30~0.60	0.025 max	0.025 max	0.20 max
SWRS 80B	0.78~0.83	0.12~0.32	0.60~0.90	0.025 max	0.025 max	0.20 max
SWRS 82A	0.80~0.85	0.12~0.32	0.30~0.60	0.025 max	0.025 max	0.20 max
SWRS 82B	0.80~0.85	0.12~0.32	0.60~0.90	0.025 max	0.025 max	0.20 max
SWRS 87A	0.85~0.90	0.12~0.32	0.30~0.60	0.025 max	0.025 max	0.20 max
SWRS 87B	0.85~0.90	0.12~0.32	0.60~0.90	0.025 max	0.025 max	0.20 max
SWRS 92A	0.90~0.95	0.12~0.32	0.30~0.60	0.025 max	0.025 max	0.20 max
SWRS 92B	0.90~0.95	0.12~0.32	0.60~0.90	0.025 max	0.025 max	0.20 max

Torsion (JIS G 3522 / KS D 3556)

Wire Diameter		Torsion
SWP-A(PW-1)	0.70mm ~ 2.00mm	25 min
&	2.00mm ~ 3.50mm	20 min
SWP-B(PW-2)	3.50mm ~ 6.00mm	15 min
SWP-V(PW-3)	1.00mm ~ 6.00mm	25 min

Diamter Tolerance & Ovality (JIS G 3522 / KS D 3556)

Wire Diameter	Tolerance	Ovality
0.08 ~ 0.20	± 0.004	0.004 max
0.20 ~ 0.50	± 0.008	0.008 max
0.50 ~ 1.00	± 0.010	0.010 max
1.00 ~ 2.00	± 0.015	0.015 max
2.00 ~ 3.20	± 0.020	0.020 max
3.20 ~ 5.50	± 0.030	0.030 max
5.50 ~ 8.50	± 0.040	0.040 max
8.50 ~ 10.00	± 0.050	0.050 max

unit : mm

Tensile Strength (JIS G 3522 / KS D 3556)

Dia (㎜)	Tensile Strength(N/㎟)		
	SWP-A(PW-1)	SWP-B(PW-2)	SWP-V(PW-3)
0.70	2 160 ~ 2 400	2 400 ~ 2 650	–
0.80	2 110 ~ 2 350	2 350 ~ 2 600	–
0.90	2 110 ~ 2 300	2 300 ~ 2 500	–
1.00	2 060 ~ 2 260	2 260 ~ 2 450	2 010 ~ 2 210
1.20	2 010 ~ 2 210	2 210 ~ 2 400	1 960 ~ 2 160
1.40	1 960 ~ 2 160	2 160 ~ 2 350	1 910 ~ 2 110
1.60	1 910 ~ 2 110	2 110 ~ 2 300	1 860 ~ 2 060
1.80	1 860 ~ 2 060	2 060 ~ 2 260	1 810 ~ 2 010
2.00	1 810 ~ 2 010	2 010 ~ 2 210	1 770 ~ 1 910
2.30	1 770 ~ 1 960	1 960 ~ 2 160	1 720 ~ 1 860
2.60	1 770 ~ 1 960	1 960 ~ 2 160	1 720 ~ 1 860
2.90	1 720 ~ 1 910	1 910 ~ 2 110	1 720 ~ 1 860
3.20	1 670 ~ 1 860	1 860 ~ 2 060	1 670 ~ 1 810
3.50	1 670 ~ 1 810	1 810 ~ 1 960	1 670 ~ 1 810
4.00	1 670 ~ 1 810	1 810 ~ 1 960	1 670 ~ 1 810
4.50	1 620 ~ 1 770	1 770 ~ 1 910	1 620 ~ 1 770
5.00	1 620 ~ 1 770	1 770 ~ 1 910	1 620 ~ 1 770
5.50	1 570 ~ 1 710	1 710 ~ 1 860	1 570 ~ 1 720
6.00	1 520 ~ 1 670	1 670 ~ 1 810	1 520 ~ 1 670
6.50	1 520 ~ 1 670	1 670 ~ 1 810	–
7.00	1 470 ~ 1 620	1 620 ~ 1 770	–

Tensile Strength (JIS G 3548 / KS D 7063)

Wire Diameter (㎜)	Tensile Strength(N/㎟)				
	SWGF-1 SWGF-2 SWGF-3	SWGF-4 SWGF-5 SWGF-6	SWGD-1	SWGD-2	SWGD-3
0.29 ~ 0.45			1 670 ~ 1 960	1 960 ~ 2 260	2 260 ~ 2 550
0.45 ~ 0.60			1 570 ~ 1 860	1 860 ~ 2 160	2 160 ~ 2 450
0.60 ~ 0.80			1 520 ~ 1 770	1 770 ~ 2 060	2 060 ~ 2 350
0.80 ~ 1.00	880 min	1 230 min		1 770 ~ 2 010	2 010 ~ 2 260
1.00 ~ 1.20			1 470 ~ 1 720	1 720 ~ 1 960	1 960 ~ 2 210
1.20 ~ 1.40			1 420 ~ 1 670	1 670 ~ 1 910	1 910 ~ 2 160
1.40 ~ 1.60			1 370 ~ 1 620	1 620 ~ 1 860	1 860 ~ 2 110
1.60 ~ 1.80			1 320 ~ 1 570	1 570 ~ 1 810	1 810 ~ 2 060
1.80 ~ 2.00			1 270 ~ 1 520	1 520 ~ 1 770	1 770 ~ 2 010
2.00 ~ 2.30			1 270 ~ 1 470	1 470 ~ 1 720	1 720 ~ 1 960
2.30 ~ 2.60			1 230 ~ 1 420	1 420 ~ 1 670	1 670 ~ 1 910
2.60 ~ 2.90					
2.90 ~ 3.20	830 min		1 180 ~ 1 370	1 370 ~ 1 620	1 620 ~ 1 860
3.20 ~ 3.50				1 370 ~ 1 570	1 570 ~ 1 810
3.50 ~ 4.00	780 min				1 570 ~ 1 770
4.00 ~ 4.50					
4.50 ~ 5.00			1 130 ~ 1 320	1 320 ~ 1 520	1 520 ~ 1 720
5.00 ~ 5.50					
5.50 ~ 6.00			1 080 ~ 1 270	1 270 ~ 1 470	1 470 ~ 1 670

Diamter Tolerance & Ovality (JIS G 3548 / KS D 7063)

unit : mm

Wire Diameter (㎜)	Tolerance		Ovality
	SWGF-1 SWGF-2 SWGF-3 SWGF-4 SWGF-5 SWGF-6	SWGD-1 SWGD-2 SWGD-3	SWGD-1 SWGD-2 SWGD-3
0.29 ~ 0.45		± 0.015	0.015
0.45 ~ 0.80		± 0.02	0.02
0.80 ~ 1.00	± 0.04		
1.00 ~ 1.20		± 0.03	0.03
1.20 ~ 2.00	± 0.05		
2.00 ~ 3.20	± 0.07	± 0.04	0.04
3.20 ~ 4.50	± 0.08	± 0.05	0.05
4.50 ~ 5.00	± 0.10		
5.00 ~ 5.50	± 0.12		
5.20 ~ 6.00		± 0.06	0.06

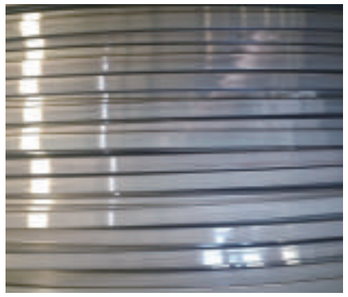
Minimum of Elongation / Torsion (JIS G 3548 / KS D 7063)

Wire Diameter (㎜)	Elongation(%)	Torsion (turn)	
	SWGF-1 SWGF-2 SWGF-3 SWGF-4 SWGF-5 SWGF-6	SWGF-1 SWGF-2 SWGF-3 SWGF-4 SWGF-5 SWGF-6	SWGD-1 SWGD-2 SWGD-3
0.29 ~ 0.45			20
0.45 ~ 0.60			
0.60 ~ 0.80			
0.80 ~ 1.00	2.0	18	
1.00 ~ 1.20			
1.20 ~ 1.40			
1.40 ~ 1.60			
1.60 ~ 1.80	3.0	16	
1.80 ~ 2.00			
2.00 ~ 2.30		14	15
2.30 ~ 2.60			
2.60 ~ 2.90			
2.90 ~ 3.20			
3.20 ~ 3.50			
3.50 ~ 4.00	–	10	10
4.00 ~ 4.50			
4.50 ~ 5.00			
5.00 ~ 5.50		8	
5.50 ~ 6.00			

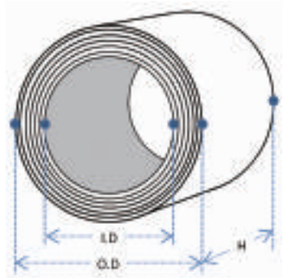
Minimum Weight of Zinc (JIS G 3548 / KS D 7063)

unit : g/m²

Wire Diameter (㎜)	SWGF-1 SWGF-4	SWGF-2 SWGF-5	SWGF-3 SWGF-6	SWGD-1 SWGD-2 SWGD-3
0.29 ~ 0.45				30
0.40 ~ 0.50				40
0.50 ~ 0.60				50
0.60 ~ 0.80				60
0.80 ~ 1.00	130	90	20	70
1.00 ~ 1.20	150	105	25	80
1.20 ~ 1.50	165			90
1.50 ~ 1.90	180	120	30	100
1.90 ~ 2.50	205	155	40	110
2.50 ~ 3.20	230	185	45	125
3.20 ~ 3.60	250	230	50	135
3.60 ~ 4.00			60	
4.00 ~ 4.40	260	245		
4.40 ~ 5.20	270		70	150
5.20 ~ 6.00	290	275	80	–



Hard drawn steel wires

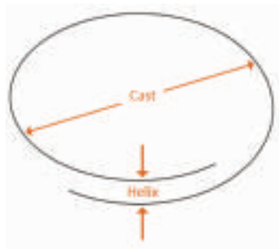


	Weight(kg)		Coil Size(㎜)	
inch	min	max	I/D	O/D
36"	500	1000	780 ~ 800	1000 ~ 1040
30"	200	1000	540 ~ 600	890 ~ 910
24"	100	800	450 ~ 470	750 ~ 790
16"	50	350	290 ~ 320	500 ~ 510
12"	50	250	170 ~ 200	400 ~ 410
8"	30	150	100 ~ 120	300 ~ 310

Zinc coated steel wires

Diameter (㎜)	inch	Weight (kg)	Coil Size (㎜)		
			I/D	O/D	H
0.70 ~ 1.00	12	50	170 ~ 200	400 ~ 410	120 ~ 140
1.10 ~ 2.00	16	50	290 ~ 320	500 ~ 510	100 ~ 120
	16	100	290 ~ 320	500 ~ 510	160 ~ 190
1.60 ~ 6.00	24	50	500 ~ 530	690 ~ 720	75 ~ 80
	24	100	490 ~ 520	700 ~ 730	110 ~ 130
	24	800	450 ~ 470	750 ~ 790	600 ~ 630
1.60 ~ 6.00	26	50	570 ~ 590	720 ~ 740	70 ~ 80
	26	1000	400 ~ 430	850 ~ 900	600 ~ 630
2.00 ~ 6.00	30	1000	540 ~ 600	890 ~ 910	900 ~ 1000
2.00 ~ 6.00	36	1000	780 ~ 800	1,000 ~ 1,040	850 ~ 950

Cast & Helix



Diameter(㎜)	inch	Cast(㎜)	Helix(㎜)
0.20 ~ 0.40	8	200~300	30 max
0.40 ~ 0.50	8	200~300	
	10	250~370	
0.50 ~ 0.80	12	300~450	
0.80 ~ 0.90	16	400~600	
0.90 ~ 1.00			50 max
1.00 ~ 1.80			
1.80 ~ 2.30	24	600~900	60 max
2.30 ~ 7.00			