

INDUSTRIAL WIRE



Tree Island Steel is a world-class wire drawing company with locations in the United States and Canada. We have the manufacturing capabilities to produce high-carbon and low-carbon steel wire in a wide range of diameters and tensile. Our wire manufacturing process includes both mechanical and chemical cleaning options.



Tree Island Steel also has the capability to galvanize wire using the hot-dip process which chemically bonds a protective zinc coat to the underlying steel. Should the bare steel be exposed to moisture or other corrosives, the steel is protected by the sacrificial loss of zinc, greatly extending the useful life of the wire.

Our annealed wire is manufactured using a heat-treatment process where the wire is heated and cooled in a specific, controlled cycle. This process gives the wire greater ductility while retaining its strength.

Technical Assistance

Tree Island Steel will provide technical expertise to identify the most efficient unit wire size and strength, conforming to international standards.

Quality Assurance

Our quality management system complies with ISO 9001 standards guaranteeing specifications are met for our customers around the world.



DIAMETER & TENSILE RANGES			
WIRE TYPE	DIAMETER RANGE		TENSILE RANGES UP TO
	Minimum	Maximum	Maximum
High-carbon galvanized	0.062"	0.178"	260 ksi*
High-carbon bright	0.062"	0.178"	310 ksi*
Low-carbon galvanized	0.048"	0.322"	170 ksi*
Low-carbon bright	0.055"	0.610"	170 ksi*
Black annealed	0.055"	0.192"	80 ksi*

* depending on the wire size and end application

Zinc Coating Options

Available Zinc galvanized coatings: ASTM A641 Regular (commercial), Class 1, Class 3, Class 4 and Class 5. Other classes and/or weights of zinc coating available upon request.

ZINC COAT OPTIONS		
STANDARD COATING CLASSES	ZINC COATING WEIGHT	
	oz/ft ²	g/m ²
Regular (Commercial) Coat	full surface coverage of zinc	full surface coverage of zinc
Class 1	0.25 - 0.50 oz/ft ²	76 - 153 g/m ²
Class 3	0.60 - 1.00 oz/ft ²	183 - 305 g/m ²
Class 4	min. avg. 1.20 oz/ft ²	min. avg. 366 g/m ²
Class 5	min. avg. 2.00 oz/ft ²	min. avg. 610 g/m ²

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PACKAGING OPTIONS:



HIGH-CARBON WIRE

OEM High-Carbon Wire (Galvanized & Bright)

Tree Island Steel high-carbon original equipment manufacturer (OEM) galvanized wire can be custom manufactured for a variety of wire-forming applications.

Our high-quality wire is manufactured to have a consistent coating surface with minimal tensile variation and minimal helix. This consistency allows the wire to run optimally with wire-forming equipment (such as computer numerical control (CNC) machines and four-slide machines).

Typically, our bright high-carbon wire is used in industrial wire forming and in manufacturing automotive, bedding, construction, furniture, household and consumer goods as well as point-of-purchase products and fasteners.

Our galvanizing process mitigates corrosion which is critical in agricultural (vineyard wire, game and field fence), construction (solar fencing), and automotive (cold-formed helical springs) applications.

Available coatings: ASTM regular (commercial), Class 1, and Class 3 galvanized. Other coating weights available upon request. Meets ASTM A641/A641M specifications for regular (commercial) galvanized coating.

GALVANIZED WIRE:

Diameter: 0.072" to 0.225" (1.8mm to 5.7mm)

Packaging: Tubular carrier or wrapack – approx. 2,000 lb (907 kg)

BRIGHT WIRE:

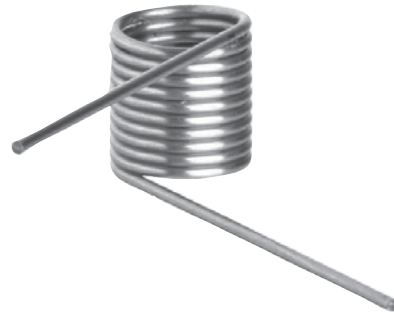
Diameter: 0.048" to 0.192"

Packaging: Tubular carrier or coil

Agricultural Clip



Mechanical Spring



HIGH-CARBON WIRE

Galvanized Recycling Wire

Galvanized high-carbon wire is used to bundle products for the recycling industry such as cardboard, plastic and aluminum. Tree Island Steel's consistency in tensile and packaging makes our wire the top choice of the industry. Runs efficiently with industry-standard tying equipment. Common wire sizes: 11, 12 or 13 gauge. Meets ASTM A641/A641M specifications for regular (commercial) galvanized coating.

Diameter: 0.091" to 0.120" (2.3 mm to 3.05 mm)

Packaging: Tubular carrier or wrapack – approx. 1,800 lb (816 kg)



Galvanized Unitizing & Pulp Baling Wire

Galvanized unitizing and pulp baling wire is manufactured to rigorous standards to ensure compliance with all international marine cargo and transportation regulations used in mechanical lifting devices. This engineered round wire strapping has been designed to work with industry standardized tying equipment. Our assurance of quality and compliance is a mill test certificate which is provided with every shipment.

All unitizing and pulp baling wire has regular (commercial) galvanized coating. Meets ASTM A641/A641M specifications for regular (commercial) galvanized coating.

Diameter: 0.072" to 0.124"

Packaging: Uniform, pattern laid, continuous coils on tubular carriers, compact coils or wrapack – approx. 2,200 lb (998 kg)



HIGH-CARBON WIRE

Spring Wire (Mattress, Lacing & Upholstery)

Tree Island Steel manufactures a complete range of spring wire including mattress wire for innersprings and box springs; lacing wire for mattress border springs; and upholstery wire for automobile seating and home and office furniture. Types include: automatic coiling and knotting, border and brace, square form, furniture sinuous, and lacing. Our technical service team expertly matches your requirements with the correct wire for all spring wire applications.

Tree Island Steel's manufacturing process provides a consistency in all mechanical properties which ensures uniform quality surface finish and consistency to the industry's specifications resulting in wire that will run smoothly in our customers' machines.

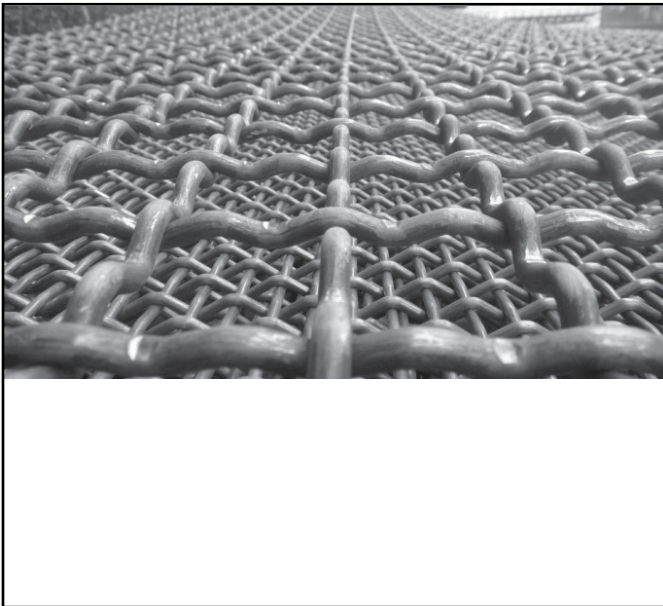
Tree Island Steel spring wire meets or exceeds ASTM A407 for upholstery spring wire and ASTM A227/A227M, A679/679M and A764 for mechanical spring wire.

Mechanical spring wire is available in hard drawn bright finish and galvanized regular (commercial), Class 1, and Class 3.

Diameter: 0.048" to 0.192" (1.22 mm to 4.88 mm)

Packaging: Tubular carrier – approx. 1,800 lb (816 kg)

Marshall Pack (Pocket Coil)



Automatic Coiling & Knotting (AC&K)



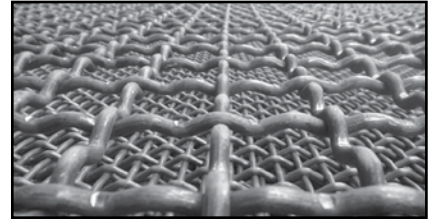
HIGH-CARBON WIRE

Bright Gravel Screen Wire

High carbon screen wire is used in the manufacture of heavy-duty industrial screening and filtering, offering high resistance to abrasion and impact.

Diameter: 0.062" to 0.500" (2.03 mm to 12.7 mm)

Packaging: Tubular carrier – approx. 2,000 lb (907 kg)



Bright Snap Tie Wire

Tree Island Steel snap tie wire is used to hold wall forms for concrete walls and foundations. This high strength wire is designed to withstand the extreme pressure within building forms. Full range of tensiles available.

Diameter: 0.224" to 0.262"

Packaging: Tubular carrier – approx. 2,000 lb (907 kg)



Bright Duct Wire

Tree Island Steel's quality control procedures and special annealing and drawing processes allow us to produce the highest quality duct wire. By sourcing only the highest quality carbon raw material and implementing a stringent quality control process at every production stage, our product yields excellent ductility while meeting all physical and mechanical properties to ASTM A227 and A764 standards and specific customer requirements.

Diameter: 0.043" to 0.065"

Packaging: Reel-less coil – approx. 1,000 lb (454 kg)



LOW-CARBON WIRE

OEM Low-Carbon Wire (Galvanized & Bright)

Tree Island Steel low-carbon original equipment manufacturer (OEM) galvanized wire can be custom manufactured for a variety of wire-forming applications.

Our high-quality wire is manufactured to have a consistent surface finish with minimal tensile variation and minimal helix. This consistency allows the wire to run optimally with wire-forming equipment (such as computer numerical control (CNC) machines and four-slide machines).

Our low-carbon galvanized wire is manufactured for resistance welding and can be tailored to meet a wide variety of customer requirements such as tree supports.

Low-carbon bright wire can be used in a number of applications from coat hangers to display stands. The smooth surface finish is ideal for powder-coating applications. Tree Island Steel wire is precision drawn to exacting tolerances. We also have the ability to customize to your specific applications, producing a wide variety of diameters to a wide array of specifications.

Available coatings: ASTM A641 regular (commercial), Class 1, and Class 3 galvanized. Other coating weights available upon request.

GALVANIZED:

Diameter: 0.051" to 0.312" (1.29 mm to 7.92 mm)

Packaging: Tubular carrier or wrapack – approx. 2,000 lb (907 kg)

BRIGHT:

Diameter: 0.041" to 0.625" (1.04 mm to 15.88 mm)

Packaging: Tubular carrier – approx. 2,000 lb (907 kg)



Straightened & Cut Wire (Galvanized & Bright)

Tree Island Steel carbon steel straight and cut wire can be cut in lengths from 12" to 40'. Used in various commercial or agricultural applications such as ceiling hanger wire and ground support stakes. Available in galvanized or bright wire.

Diameter: 0.051" to 0.625" (1.29 mm to 15.88 mm)

Packaging: Strapped bundles



LOW-CARBON WIRE

Chain Link Wire

Hot Dipped Galvanized (Zinc Coated)

Tree Island Steel galvanized chain link wire is manufactured to optimize our customers' chain link weaving machine performance. Our state-of-the-art zinc application process provides an industry-leading quality surface finish, and provides a wide variety of zinc coating thickness options. Offered in 6 to 11 gauge.

Tree Island Steel chain link wire is manufactured to ASTM specifications of ASTM A817 Type II, AASHTO M1 81 Type II, and CAN/CGSB-138.1, Type 1, Class A.

Diameter: 0.106" to 0.192" (2.69 mm to 4.88 mm)

Packaging: Uniform, pattern-laid, continuous length coils in wrapack – approx. 2,200 lb (998 kg)



LOW-CARBON WIRE

Bright Shaped Wire

Tree Island Steel carbon steel shaped wire is available in a variety of shapes to meet our customers' needs. These include: triangles, flat, square, hex and specialty shapes.

Diameter: 0.080" to 0.250" (2.03 mm to 6.35 mm)

Packaging: Compact coils – approx. 100 lb (45 kg)
Tubular carriers – approx. 2,200 lb (998 kg)
Bundles of straight and cut pieces



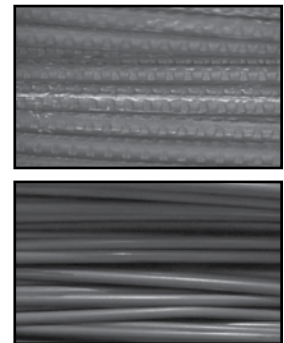
Bright Concrete Wire (ASTM A1064)

Tree Island Steel's concrete reinforcing wire is a premium wire for precast and cast-in-place applications, available with plain or deformed wire surface profiles. Concrete wire is available on wire carriers or in strapped coils with maximum package weights of 6,000 lbs.

Made from low carbon steel that meets ASTM A1064 / A1064M standards. Plain or deformed wire.

Diameter: D2.5 to D20

Packaging: Tubular carriers, compact coils or bundles of straight and cut pieces



BLACK ANNEALED WIRE

Tree Island Steel's annealed wire is produced in state-of-the-art annealing furnaces. The wire is manufactured using a heat treatment process where the wire is heated and cooled in a specific, controlled cycle. This process gives the wire greater ductility while retaining its strength. Annealed wire is ideal for tying and baling applications in the recycling industry.

Diameter: 0.062" to 0.192" (1.56 mm to 4.88 mm)

Packaging: Uniform, pattern laid, continuous coils on tubular carriers or wrapack – approx. 1,800 lb (816 kg)
Catch-coils – 10 lb (4.54 kg), 50 lb (22.68 kg), 100 lb (45.36 kg)
Rewound coils – 100 lb carton (45 kg)



WIRE GAUGE CHART

AS&W WIRE GAUGE	DIAM. INCHES	LBS./FT.	FT./LB.	DIAM. mm	KG/M	MW/MD SIZE	WD GAUGE
18 3/4	0.0426	0.00485	206.15	1.08	0.00722	0.9	0.14
18 1/2	0.0443	0.00525	190.63	1.13	0.00781	1.0	0.15
18 1/4	0.0459	0.00563	177.57	1.17	0.00838	1.1	0.17
18	0.0475	0.00603	165.81	1.21	0.00898	1.1	0.18
17 3/4	0.0490	0.00642	155.81	1.24	0.00955	1.2	0.19
17 1/2	0.0510	0.00695	143.83	1.30	0.01035	1.3	0.20
17 1/4	0.0520	0.00723	138.35	1.32	0.01076	1.4	0.21
17	0.0540	0.00779	128.30	1.37	0.01160	1.5	0.23
16 3/4	0.0560	0.00838	119.30	1.42	0.01247	1.6	0.25
16 1/2	0.0580	0.00899	111.21	1.47	0.01338	1.7	0.26
16 1/4	0.0600	0.00962	103.92	1.52	0.01432	1.8	0.28
16	0.0625	0.01044	95.77	1.59	0.01554	2.0	0.31
15 3/4	0.0650	0.01129	88.55	1.65	0.01681	2.1	0.33
15 1/2	0.0670	0.01200	83.34	1.70	0.01786	2.3	0.35
15 1/4	0.0700	0.01310	76.35	1.78	0.01949	2.5	0.38
15	0.0720	0.01386	72.17	1.83	0.02062	2.6	0.41
14 3/4	0.0740	0.01464	68.32	1.88	0.02178	2.8	0.43
14 1/2	0.0760	0.01544	64.77	1.93	0.02298	2.9	0.45
14 1/4	0.0780	0.01626	61.49	1.98	0.02420	3.1	0.48
14	0.0800	0.01711	58.45	2.03	0.02546	3.2	0.50
13 3/4	0.0830	0.01841	54.31	2.11	0.02740	3.5	0.54
13 1/2	0.0860	0.01977	50.58	2.18	0.02942	3.7	0.58
13 1/4	0.0890	0.02117	47.23	2.26	0.03151	4.0	0.62
13	0.0915	0.02238	44.68	2.32	0.03330	4.2	0.66
12 3/4	0.0950	0.02412	41.45	2.41	0.03590	4.6	0.71
12 1/2	0.0990	0.02620	38.17	2.51	0.03899	5.0	0.77
12 1/4	0.1020	0.02781	35.96	2.59	0.04139	5.3	0.82
12	0.1055	0.02975	33.61	2.68	0.04427	5.6	0.87
11 3/4	0.1090	0.03176	31.49	2.77	0.04726	6.0	0.93
11 1/2	0.1130	0.03413	29.30	2.87	0.05079	6.5	1.00
11 1/4	0.1170	0.03659	27.33	2.97	0.05445	6.9	1.08
11	0.1200	0.03849	25.98	3.05	0.05728	7.3	1.13
10 3/4	0.1240	0.04110	24.33	3.15	0.06116	7.8	1.21
10 1/2	0.1280	0.04379	22.83	3.25	0.06517	8.3	1.29
10 1/4	0.1310	0.04587	21.80	3.33	0.06826	8.7	1.35
10	0.1350	0.04872	20.53	3.43	0.07250	9.2	1.43
9 3/4	0.1380	0.05090	19.64	3.51	0.07575	9.6	1.50
9 1/2	0.1420	0.05390	18.55	3.61	0.08021	10.2	1.58
9 1/4	0.1450	0.05620	17.79	3.68	0.08363	10.7	1.65
9	0.1480	0.05855	17.08	3.76	0.08713	11.1	1.72
8 3/4	0.1520	0.06176	16.19	3.86	0.09190	11.7	1.81
8 1/2	0.1550	0.06422	15.57	3.94	0.09557	12.2	1.89
8 1/4	0.1590	0.06758	14.80	4.04	0.10056	12.8	1.99
8	0.1620	0.07015	14.26	4.11	0.10439	13.3	2.06
7 3/4	0.1660	0.07366	13.58	4.22	0.10961	14.0	2.16
7 1/2	0.1700	0.07725	12.95	4.32	0.11496	14.6	2.27
7 1/4	0.1730	0.08000	12.50	4.39	0.11905	15.2	2.35
7	0.1770	0.08374	11.94	4.50	0.12462	15.9	2.46

AS&W WIRE GAUGE	DIAM. INCHES	LBS./FT.	FT./LB.	DIAM. mm	KG/M	MW/MD SIZE	WD GAUGE
6 3/4	0.1810	0.08757	11.42	4.60	0.13032	16.6	2.57
6 1/2	0.1850	0.09148	10.93	4.70	0.13614	17.3	2.69
6 1/4	0.1880	0.09447	10.58	4.78	0.14059	17.9	2.78
6	0.1920	0.09854	10.15	4.88	0.14664	18.7	2.90
5 3/4	0.1960	0.10269	9.74	4.98	0.15281	19.5	3.02
5 1/2	0.2000	0.10692	9.35	5.08	0.15911	20.3	3.14
5 1/4	0.2030	0.11015	9.08	5.16	0.16392	20.9	3.24
5	0.2070	0.11454	8.73	5.26	0.17045	21.7	3.37
4 3/4	0.2120	0.12014	8.32	5.38	0.17878	22.8	3.53
4 1/2	0.2160	0.12471	8.02	5.49	0.18559	23.6	3.66
4 1/4	0.2210	0.13055	7.66	5.61	0.19428	24.7	3.84
4	0.2250	0.13532	7.39	5.72	0.20138	25.7	3.98
3 3/4	0.2300	0.14140	7.07	5.84	0.21043	26.8	4.15
3 1/2	0.2350	0.14762	6.77	5.97	0.21968	28.0	4.34
3 1/4	0.2390	0.15268	6.55	6.07	0.22722	28.9	4.49
3	0.2440	0.15914	6.28	6.20	0.23683	30.2	4.68
2 3/4	0.2480	0.16440	6.08	6.30	0.24465	31.2	4.83
2 1/2	0.2530	0.17110	5.84	6.43	0.25462	32.4	5.03
2 1/4	0.2580	0.17793	5.62	6.55	0.26478	33.7	5.23
2	0.2620	0.18349	5.45	6.65	0.27306	34.8	5.39
1 3/4	0.2680	0.19199	5.21	6.81	0.28571	36.4	5.64
1 1/2	0.2730	0.19922	5.02	6.93	0.29647	37.8	5.85
1 1/4	0.2780	0.20658	4.84	7.06	0.30742	39.2	6.07
1	0.2830	0.21408	4.67	7.19	0.31858	40.6	6.29
1/0 3/4	0.2890	0.22325	4.48	7.34	0.33223	42.3	6.56
1/0 1/2	0.2950	0.23262	4.30	7.49	0.34617	44.1	6.83
1/0 1/4	0.3010	0.24218	4.13	7.65	0.36040	45.9	7.12
1/0	0.3060	0.25029	4.00	7.77	0.37247	47.4	7.35
2/0 3/4	0.3130	0.26187	3.82	7.95	0.38971	49.6	7.69
2/0 1/2	0.3190	0.27201	3.68	8.10	0.40479	51.6	7.99
2/0 1/4	0.3250	0.28234	3.54	8.26	0.42016	53.5	8.30
2/0	0.3310	0.29286	3.41	8.41	0.43582	55.5	8.60
3/0 3/4	0.3390	0.30718	3.26	8.61	0.45714	58.2	9.03
3/0 1/2	0.3470	0.32185	3.11	8.81	0.47897	61.0	9.46
3/0 1/4	0.3550	0.33686	2.97	9.02	0.50131	63.9	9.90
3/0	0.3620	0.35028	2.85	9.19	0.52127	66.4	10.29
4/0 3/4	0.3700	0.36593	2.73	9.40	0.54457	69.4	10.75
4/0 1/2	0.3780	0.38193	2.62	9.60	0.56837	72.4	11.22
4/0 1/4	0.3860	0.39827	2.51	9.80	0.59268	75.5	11.70
4/0	0.3940	0.41495	2.41	10.01	0.61751	78.7	12.19
5/0 3/4	0.4030	0.43412	2.30	10.24	0.64604	82.3	12.76
5/0 1/2	0.4120	0.45373	2.20	10.46	0.67522	86.0	13.33
5/0 1/4	0.4210	0.47377	2.11	10.69	0.70504	89.8	13.92
5/0	0.4300	0.49424	2.02	10.92	0.73550	93.7	14.52
6/0 3/4	0.4380	0.51280	1.95	11.13	0.76313	97.2	15.07
6/0 1/2	0.4460	0.53170	1.88	11.33	0.79126	100.8	15.62
6/0 1/4	0.4540	0.55095	1.82	11.53	0.81990	104.4	16.19
6/0	0.4620	0.57054	1.75	11.73	0.84905	108.2	16.76

Tree Island Steel

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