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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	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* 170 ksi* 170 ksi*								
Low-carbon galvanized	0.048"	0.322"									
Low-carbon bright	0.055"	0.610"									
Black annealed	0.055"	0.192"	80 ksi*								

<sup>\*</sup> 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/ft²	g/m²							
Regular (Commercial) Coat	full surface coverage of zinc	full surface coverage of zinc							
Class 1	0.25 - 0.50 oz/ft²	76 - 153 g/m²							
Class 3	0.60 - 1.00 oz/ft²	183 - 305 g/m²							
Class 4	min. avg. 1.20 oz/ft²	min. avg. 366 g/m <sup>2</sup>							
Class 5	min. avg. 2.00 oz/ft²	min. avg. 610 g/m <sup>2</sup>							



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### **PACKAGING OPTIONS:**









### **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





**Mechanical Spring** 



### **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)



# 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)



### **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 wireforming 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)



### Poly Vinyl Chloride (PVC) Coated

Tree Island Steel galvanized PVC coated chain link wire is available in green, black, brown and white.

Tree Island Steel PVC chain link wire meets or exceeds:

US: ASTM F668 Class 1

Canada: CAN/CGSB 138.1, Type 1, Class B

**Diameter:** 0.120" to 0.192" (3.08 mm to 4.88 mm) **Packaging:** Tubular carrier – approx. 1,800 lb (816 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-theart 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	W/D GAUGE	AS&W WIRE GAUGE	DIAM. INCHES	LBS./FT.	FT./LB.	DIAM. mm	KG/M	MW/MD SIZE	W/D GAUGE
18 3/4	0.0426	0.00485	206.15	1.08	0.00722	0.9	0.14	6 3/4	0.1810	0.08757	11.42	4.60	0.13032	16.6	2.57
18 1/2	0.0443	0.00525	190.63	1.13	0.00781	1.0	0.15	6 1/2	0.1850	0.09148	10.93	4.70	0.13614	17.3	2.69
18 1/4	0.0459	0.00563	177.57	1.17	0.00838	1.1	0.17	6 1/4	0.1880	0.09447	10.58	4.78	0.14059	17.9	2.78
18	0.0475	0.00603	165.81	1.21	0.00898	1.1	0.18	6	0.1920	0.09854	10.15	4.88	0.14664	18.7	2.90
17 3/4	0.0490	0.00642	155.81	1.24	0.00955	1.2	0.19	5 3/4	0.1960	0.10269	9.74	4.98	0.15281	19.5	3.02
17 1/2	0.0510	0.00695	143.83	1.30	0.01035	1.3	0.20	5 1/2	0.2000	0.10692	9.35	5.08	0.15911	20.3	3.14
17 1/4	0.0520	0.00723	138.35	1.32	0.01076	1.4	0.21	5 1/4	0.2030	0.11015	9.08	5.16	0.16392	20.9	3.24
17	0.0540	0.00779	128.30	1.37	0.01160	1.5	0.23	5	0.2070	0.11454	8.73	5.26	0.17045	21.7	3.37
16 3/4	0.0560	0.00838	119.30	1.42	0.01247	1.6	0.25	4 3/4	0.2120	0.12014	8.32	5.38	0.17878	22.8	3.53
16 1/2	0.0580	0.00899	111.21	1.47	0.01338	1.7	0.26	4 1/2	0.2160	0.12471	8.02	5.49	0.18559	23.6	3.66
16 1/4	0.0600	0.00962	103.92	1.52	0.01432	1.8	0.28	4 1/4	0.2210 <b>0.2250</b>	0.13055	7.66	5.61	0.19428	24.7 <b>25.7</b>	3.84
16	0.0625	0.01044	95.77	1.59	0.01554	2.0	0.31	2.24		0.13532	7.39	5.72	0.20138		3.98
15 3/4 15 1/2	0.0650 0.0670	0.01129 0.01200	88.55 83.34	1.65 1.70	0.01681	2.1	0.33	3 3/4 3 1/2	0.2300 0.2350	0.14140 0.14762	7.07 6.77	5.84 5.97	0.21043 0.21968	26.8 28.0	4.15 4.34
15 1/2	0.0070	0.01200	76.35	1.78	0.01786 0.01949	2.5	0.35 0.38	3 1/4	0.2390	0.14762	6.55	6.07	0.21900	28.9	4.49
15	0.0720	0.01316	72.17	1.83	0.01949	2.6	0.30	3	0.2330	0.15208	6.28	6.20	0.23683	30.2	4.68
14 3/4	0.0720	0.01360	68.32	1.88	0.02002	2.8	0.43	2 3/4	0.2480	0.16440	6.08	6.30	0.24465	31.2	4.83
14 1/2	0.0740	0.01544	64.77	1.93	0.02178	2.9	0.45	2 1/2	0.2530	0.10440	5.84	6.43	0.25462	32.4	5.03
14 1/4	0.0780	0.01544	61.49	1.98	0.02230	3.1	0.43	2 1/4	0.2580	0.17710	5.62	6.55	0.26478	33.7	5.23
14	0.0800	0.01711	58.45	2.03	0.02546	3.2	0.50	2	0.2620	0.18349	5.45	6.65	0.27306	34.8	5.39
13 3/4	0.0830	0.01841	54.31	2.11	0.02740	3.5	0.54	1 3/4	0.2680	0.19199	5.21	6.81	0.28571	36.4	5.64
13 1/2	0.0860	0.01977	50.58	2.18	0.02942	3.7	0.58	1 1/2	0.2730	0.19922	5.02	6.93	0.29647	37.8	5.85
13 1/4	0.0890	0.02117	47.23	2.26	0.03151	4.0	0.62	1 1/4	0.2780	0.20658	4.84	7.06	0.30742	39.2	6.07
13	0.0915	0.02238	44.68	2.32	0.03330	4.2	0.66	1	0.2830	0.21408	4.67	7.19	0.31858	40.6	6.29
12 3/4	0.0950	0.02412	41.45	2.41	0.03590	4.6	0.71	1/0 3/4	0.2890	0.22325	4.48	7.34	0.33223	42.3	6.56
12 1/2	0.0990	0.02620	38.17	2.51	0.03899	5.0	0.77	1/0 1/2	0.2950	0.23262	4.30	7.49	0.34617	44.1	6.83
12 1/4	0.1020	0.02781	35.96	2.59	0.04139	5.3	0.82	1/0 1/4	0.3010	0.24218	4.13	7.65	0.36040	45.9	7.12
12	0.1055	0.02975	33.61	2.68	0.04427	5.6	0.87	1/0	0.3060	0.25029	4.00	7.77	0.37247	47.4	7.35
11 3/4	0.1090	0.03176	31.49	2.77	0.04726	6.0	0.93	2/0 3/4	0.3130	0.26187	3.82	7.95	0.38971	49.6	7.69
11 1/2	0.1130	0.03413	29.30	2.87	0.05079	6.5	1.00	2/0 1/2	0.3190	0.27201	3.68	8.10	0.40479	51.6	7.99
11 1/4	0.1170	0.03659	27.33	2.97	0.05445	6.9	1.08	2/0 1/4	0.3250	0.28234	3.54	8.26	0.42016	53.5	8.30
11	0.1200	0.03849	25.98	3.05	0.05728	7.3	1.13	2/0	0.3310	0.29286	3.41	8.41	0.43582	55.5	8.60
10 3/4	0.1240	0.04110	24.33	3.15	0.06116	7.8	1.21	3/0 3/4	0.3390	0.30718	3.26	8.61	0.45714	58.2	9.03
10 1/2	0.1280	0.04379	22.83	3.25	0.06517	8.3	1.29	3/0 1/2	0.3470	0.32185	3.11	8.81	0.47897	61.0	9.46
10 1/4	0.1310	0.04587	21.80	3.33	0.06826	8.7	1.35	3/0 1/4	0.3550	0.33686	2.97	9.02	0.50131	63.9	9.90
10	0.1350	0.04872	20.53	3.43	0.07250	9.2	1.43	3/0	0.3620	0.35028	2.85	9.19	0.52127	66.4	10.29
9 3/4	0.1380	0.05090	19.64	3.51	0.07575	9.6	1.50	4/0 3/4	0.3700	0.36593	2.73	9.40	0.54457	69.4	10.75
9 1/2 9 1/4	0.1420 0.1450	0.05390 0.05620	18.55 17.79	3.61 3.68	0.08021 0.08363	10.2 10.7	1.58 1.65	4/0 1/2	0.3780 0.3860	0.38193 0.39827	2.62 2.51	9.60 9.80	0.56837 0.59268	72.4 75.5	11.22 11.70
9 1/4	0.1450							4/0 1/4 <b>4/0</b>							
8 3/4		0.05655	17.08	3.76		11.7	1.72		<b>0.3940</b> 0.4030	0.43412		10.01		82.3	
8 1/2	0.1520 0.1550	0.06176	16.19 15.57	3.86 3.94	0.09190 0.09557	12.2		5/0 3/4 5/0 1/2	0.4030	0.43412	2.30	10.24 10.46	0.64604 0.67522	86.0	12.76 13.33
8 1/4	0.1590	0.06758	14.80	4.04	0.10056	12.8		5/0 1/4	0.4120	0.43373	2.20	10.40	0.70504	89.8	13.92
8	0.1620	0.00735	14.26	4.11	0.10030	13.3		5/0	0.4210	0.49424	2.02	10.92	0.73550	93.7	14.52
7 3/4	0.1660	0.07366	13.58	4.22	0.10455	14.0		6/0 3/4	0.4380	0.51280	1.95	11.13	0.76313	97.2	15.07
7 1/2	0.1700	0.07725	12.95	4.32	0.11496	14.6		6/0 1/2	0.4460	0.53170	1.88	11.33		100.8	
7 1/4	0.1730	0.08000	12.50	4.39	0.11905		2.35	6/0 1/4	0.4540	0.55095	1.82	11.53		104.4	
كے ت	0.1770	0.08374	11.94	4.50	0.12462		2.46	6/0	0.4620	0.57054	1.75	11.73		108.2	



# **Tree Island Steel**

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