

LONGWEI HOLDING LIMITED COAGENT INTERNATIONAL TRADE

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Longwei

Quality prospers the industry and brand wins



WHO WE ARE

Wuxi Longwei High Precision Pipe Co., Ltd. is located beside the beautiful Taihu Lake, covering an area of more than 20,000 square meters. The company is located in Yaxi Industrial Park of Luoshe Town beside Wuxi 312 National Highway and Wuxi West Off-ramp of Wuxi-Yixing Highway, and is adjacent to Shanghai-Nanjing Highway with convenient transportation. Our company has 9mSRB skiving barreling machine, all-hydraulic high-precision cold drawing unit, honing unit and other advanced production equipment and testing equipment.

The company has a group of professional technical team which has been tested for a long time in technology, has rigorous style and is good at innovation. The company adheres to the concept of “Quality prospers the industry and brand wins”, sticks to high starting point, high level development and construction. Our company unites excellent talents, introduces advanced equipment, establishes strict and scientific management system, implements strict enterprise standards for the whole production process, and the main quality control parameters are higher than national standards and international standards to provide customers with good-quality products and service.

INDUSTRIES

Construction machinery equipment depends on Longwei, actually tubes from longwei can be found in manufacturing areas across the world?



Construction Machinery



Metallurgical Machinery



Textile Machinery



Car Drive Shaft



Plastic Robot



Mining Machinery

PRODUCTS

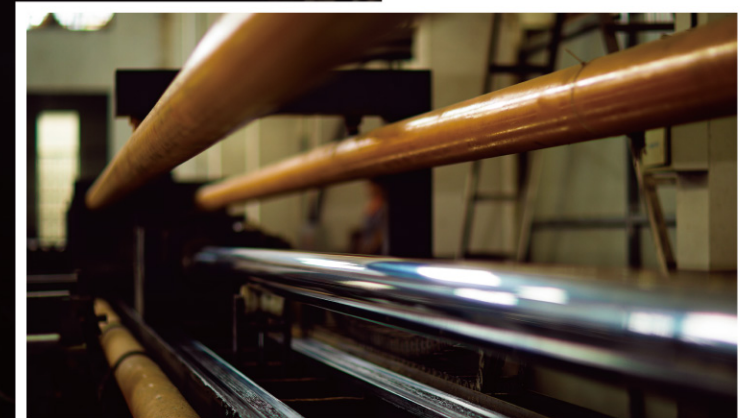
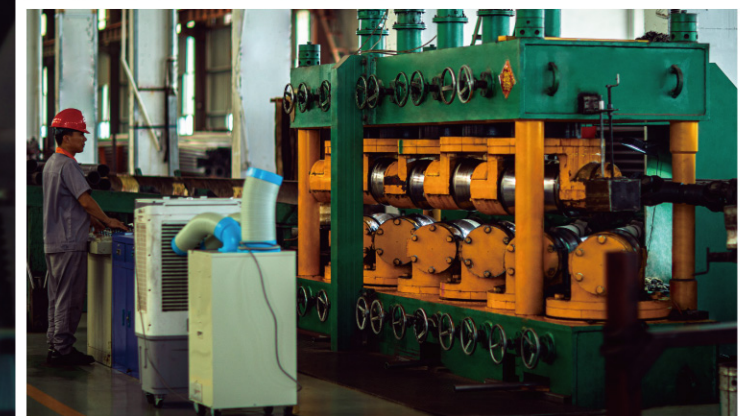
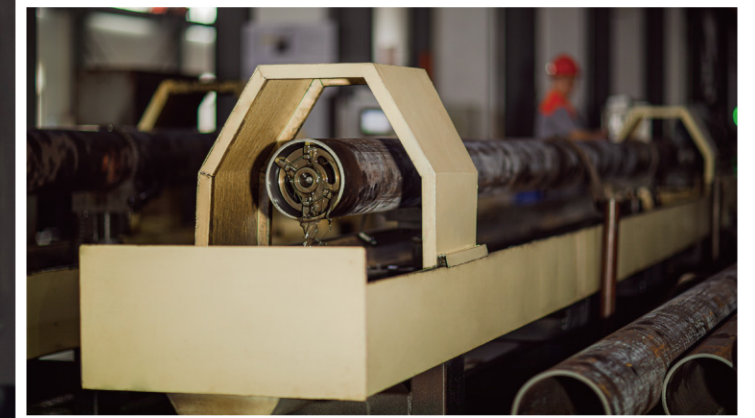
Our team of experts can guide you through the process of cost analysis, planning, and purchasing a wide variety of carbon & alloy tubing. These products are available immediately from any of our conveniently-located warehouses.

Drawn Over Mandrel (DOM) is a welded tube, drawn to improve tolerances, concentricity, and strength to offer a precision product. DOM tubing can be further honed or skived for cylinder applications.

Cold Drawn Seamless (CDS) is a carbon or alloy drawn steel at near-room temperature. This option is stronger and more polished looking than hot finish. Cold Drawing offers a precision tube with similar strength and larger outside diameter and wall thicknesses than DOM.

Hot Finish Seamless (HFS) is a great option for applications that don't require the close tolerances of a drawn product. HFS is ideal when machining is required to achieve desired tolerances, yet mechanical properties (such as yield and tensile) aren't as important as in a Cold Drawn tube. HFS is easy to machine and available in much larger dimensions (up to 36" OD and wall up to 4").

Chrome Bar is steel that has been plated with chrome for increased durability, which also increases the lifespan of the product. Chrome-plated bars are specifically designed to be used for most piston rod applications in hydraulic and pneumatic equipment. Heat treatment by induction is also available to further increase hardness and brittleness.



CYLINDER TUBE

Commonly used grade of steel and chemical component

20#,45#,Q345B,Q345D,25Mn,27SiMn,E355,SAE1026,STKM13C,E460,4130,4140

Grade of steel	CHEMICAL COMPOSITION,%								
	C	Si	Mn	P	S	Cr	Ni	V	Al
				≤					≥
20#	0.17-0.24	0.17-0.37	0.35-0.65	0.035	0.035	0.250	0.250	/	/
45#	0.42-0.50	0.17-0.37	0.50-0.80	0.035	0.035	0.250	0.300	/	/
Q345B	≤0.2	≤0.5	1.00-1.60	0.030	0.030	0.030	0.250	0.08	/
Q345D	≤0.2	≤0.5	1.00-1.60	0.030	0.030	0.250	0.250	0.150	0.015
25Mn	0.22-0.29	0.17-0.37	0.70-1.00	0.035	0.035	/	/	/	/
27SiMn	0.24-0.32	1.10-1.40	1.10-1.40	0.035	0.035	0.300	0.300	/	/
E355(ST52)	≤0.22	≤0.55	≤1.6	0.025	0.025	0.250	0.250	/	/
SAE1026	0.22-0.28	0.15-0.35	0.60-0.90	0.040	0.050	/	/	/	/
E460	≤0.22	≤0.60	1.20-1.60	0.030	0.030	0.300	0.800	0.200	0.020
4130	0.28-0.33	0.15-0.35	0.40-0.60	0.040	0.040	0.80-1.10	/	/	/
4140	0.36-0.43	0.15-0.35	0.75-1.00	0.040	0.040	0.80-1.10	/	/	/

Hydraulic and pneumatic cold-drawn or cold-rolled precise seamless tubes

1.Production Standard: GB/T 3639; GB/T 1519; GB/T 699; DIN2391; EN10305-1; ASTM A519

2.Delivery Condition

Delivery condition	Code	Notes
Cold drawn/hard	+C	Thermal treatment shall not be used after final cold-drawing or cold-rolling
Cold drawn and stress released	+SR	Stress relief annealing of steel tube shall be conducted after final cold-drawing or cold-rolling
Annealed	+A	Annealing of steel tube shall be conducted after final cold-drawing
Normalizing	+N	Normalizing of steel tube shall be conducted after final cooling

3.Mechanical Property

Designation			Delivery condition									
	+C		+SR			+A			+N			
	R _m /Mpa	A/%	R _m /Mpa	R _{el} /Mpa	A/%	KV ₂ /J	R _m /Mpa	A/%	R _m /Mpa	R _{el} /Mpa	A/%	KV ₂ /J
20#(ST45)	550	5	520	375	15	-	390	21	440~570	255	21	-
45#	645	5	600	520	10	-	390	14	540	340	18	-
Q345B	640	5	600	520	14	-	450	22	490~630	355	22	34
Q345D	640	5	600	520	14	27(-20°C)	450	22	490~630	355	22	34
25Mn(SAE1026)	640	5	600	520	15	-	430	20	460	300	20	-
★E355(ST52)	640	5	600	520	14	-	450	22	490~630	355	22	34
27SiMn	800	5	760	610	10	-	600	10		430	14	-
E460			690	620	13	-			650			

★Low temperature impact test upon request (27J/-20°C)

Remarks: Rm: indicates tensile strength; A: indicates percentages elongation after fracture;
Rel: indicates lower yield strength; KV2: indicates impact absorbed energy.

CYLINDER TUBE

Commonly used grade of steel and chemical component

4. Size range of cold-drawn and cold rolling tubes (Unit:mm)

I.DxO.D rr.mmø	Apply Pressure Kg/cm²	I.DxO.D rr.mmø	Apply Pressure Kg/cm²	I.DxO.D rr.mmø	Apply Pressure Kg/cm²	I.DxO.D rr.mmø	Apply Pressure Kg/cm²
18x31	751	50x57	145	65x85	320	88.9x105	190
18x35	980	50x58	166	70x80	148	90x100	115
20x30	520	50x60	208	70x82	178	90x105	173
20x40	1040	50x65	312	70x85	238	90x110	231
25x35	416	50x70	416	70x90	297	95x110	165
30x36	208	50.8x63.5	260	75x85	138	95x115	220
30x40	346	55x65	189	75x90	208	98.4x111.13	140
30x45	550	55x70	283	75x95	270	100x107	73
32x42	325	57x70	240	76.2x88.9	170	100x109	94
35x45	297	60x70	173	76.2x92.07	220	100x110	104
38x50	330	60x72	208	80x87	90	100x114	146
38.1x50.8	335	60x75	260	80x89	117	100x115	156
40x44	104	60x80	346	80x90	130	100x116	166
40x46	156	63.5x76.2	210	80x95	195	100x120	208
40x48	208	63x69	99	80x100	260	100x125	260
40x50	260	63x71	132	82.55x92.07	130	100x130	312
40x55	390	63x73	165	82.55x95	160	101.6x117.48	160
40x60	520	63x76	215	82.55x98.4	200	105x120	150
45x55	231	63x80	280	85x95	122	105x125	200
45x60	346	65x75	160	85x100	190	107.95x125	170
50x55	104	65x80	240	88.9x101.6	150	110x120	95

I.DxO.D rr.mmø	Apply Pressure Kg/cm²	I.DxO.D rr.mmø	Apply Pressure Kg/cm²	I.DxO.D rr.mmø	Apply Pressure Kg/cm²	I.DxO.D rr.mmø	Apply Pressure Kg/cm²
110x125	142	130x153	190	152.4x177.8	170	180x210	175
110x130	189	130x155	200	160x172	78	180x216	208
110x135	240	135x160	200	160x178	117	180x225	260
114.3x133.35	180	140x153	96	160x180	135	200x216	83
115x130	140	140x155	115	160x185	162	200x220	100
115x135	185	140x160	148	160x190	195	200x232	166
120x132	104	140x165	185	165x190	160	200x242	210
120x135	130	140x170	225	165.1x190.5	160	203.2x228.5	130
120x140	173	145x170	180	170x190	125	203.2x241.3	195
125x135	75	145x175	220	170x195	150	220x260	190
125x137	100	150x160	70	170x205	220	225x254	135
125x140	125	150x163	90	175x190	95	225x274	226
125x145	166	150x168	125	175x195	120	250x267	71
125x152	224	150x170	140	177.8x203.2	150	250x290	170
127x146	155	150x175	173	177.8x215.9	220	250x298	200
130x142	96	150x180	210	180x196	92	300x318	62
130x150	160	152.4x171.5	130	180x205	150	300x355	195

Remarks: 1. Special specifications can be customized according to customer requirements;
2. Maximum inner diameter up to 1 meter.

CHROME PLATED

Steel Bars

NIMAX CB / ICB - 50KSI / 75KSI / 100KSI - C4SE
NIMAX CBM / ICBM - 75KSI - 38MnVS6
NIMAX CBV / ICBV - 100KSI - 42CrMo4

CHEMICAL COMPOSITION - IN % BY WEIGHT ACCORDING TO EUROPEAN NORM

Steel grade	European Norm EN	C	Si	Mn	P max.	S	Cr	Mo	Ni max.	Cu max.	V	N	Steel grade ASTM equivalent
C45E	EN ISO 683-1	0.42÷0.50	0.10÷0.40	0.50÷0.80	0.025	max.0.035	max.0.40	max.0.10	0.40	0.30	-	-	1045
C50E	EN ISO 683-1	0.47÷0.55	0.10÷0.40	0.60÷0.90	0.025	max.0.035	max.0.40	max.0.10	0.40	0.30	-	-	1050
38MnVS6	EN 10267	0.34÷0.41	0.15÷0.80	1.20÷1.60	0.025	0.02÷0.06	max.0.30	max.0.08	-	-	0.08÷0.20	0.01÷0.02	10V45
42CrMo4	EN ISO 683-2	0.38÷0.45	0.10÷0.40	0.60÷0.90	0.025	max.0.035	0.90÷1.20	0.15÷0.30	-	0.40	-	-	4140

Dimensions	0.25"-6.25"
Diameter tolerance	ISO h8 / other, on request
Roundness	max. 1/2 from diameter tolerance
Standard length	18-24 ft / on request, cut and special lengths
Surface roughness	Ra: max.8 µinch
Chrome layer thickness	min. 0.0005" or min. 0.001" as per customer request
Chrome layer microhardness	min. 900 HV0.1
Straightness	ø < 0.625": max.0.0035 inch / ft ø ≥ 0.625": max.0.0024 inch / ft
Induction hardened	min.50 HRC @0.05"

TABLE OF DIMENSIONS TOLERANCE

Diameter mm	ISO h8 µm
6 < ø ≤ 10	0 / -22
10 < ø ≤ 18	0 / -27
18 < ø ≤ 30	0 / -33
30 < ø ≤ 50	0 / -39
50 < ø ≤ 80	0 / -46
80 < ø ≤ 120	0 / -54
120 < ø ≤ 160	0 / -63

STANDARD DIMENSIONS RANGE

Yield point R _{p0.2} KSI min. N/mm ² min.		Yield point ASTM	Steel grade EN equivalent	Dimension ø inch
50	345	1045/1050	C45E/C50E	0.25"-6.25"
75	517	1045/1045+QT 10V45	C4SE 38MnVS6	0.25"-6.25" 0.75"-6.25"
100	690	1045/1045+QT 4140+QT	C45E 42CrMo4	0.25"-6.25" 0.625"-6.25"

CORROSION RESISTANCE LEVELS

Medium corrosion resistance ASTM B117 ISO 9227 NSS	High corrosion resistance ASTM B117 ISO 9227 NSS	Extreme corrosion resistance ASTM B117 ISO 9227 NSS
NIMAX 200-CB NIMAX 200-CBM NIMAX 200-CBV	NIMAX 500-CB NIMAX 500-CBM NIMAX 500-CBV	NIMAX 1000-CB NIMAX 1000-CBM NIMAX 1000-CBV
Rating 10 after 120 h no corrosion	Rating 10 after 500 h no corrosion	Rating 10 after 1000 h no corrosion

Tested in our own laboratory according to ISO 9227 (ASTM B117),
evaluated according to ISO 10289.

Steel Tubes

NIMAX CT / ICT - E355+SR

CHEMICAL COMPOSITION - IN % BY WEIGHT ACCORDING TO EUROPEAN NORM

Steel grade	European Norm EN	C	Si	Mn	P	S	Cr	Mo	Ni	V	Cu	N	Steel grade ASTM equivalent
E355	EN 10305-1	max.0.22	max.0.55	max.1.60	max.0.025	max.0.025	-	-	-	-	-	-	1024

MECHANICAL PROPERTIES

Steel grade	Tensile strength R _m KSI min. N/mm ² min.		Yield point R _{p0.2} KSI min. N/mm ² min.		Elongation (longitudinal) A ₅ %	Impact energy (longitudinal direction) KV ₂ J	Hardness ** Brinell N/mm ²	Norm
E355+SR	580	590	65	450 ***	min.10	(min.27J/-20°C) *	min.175	EN 10305-1

SR = stress - relieved
* On request

** The hardness values is for information only
*** On request: min 517 N/mm²-75KSI

Outside diameter - OD	ø0.5"-5.5"
Inside diameter - ID	according to standard dimensions range
Outside tolerance - OD	ISO h8 / other, on request
Roundness - OD	max. 1/2 from diameter tolerance
Standard lengths	18-24 ft/ on request, cut and special lengths
Surface roughness - OD	max. Ra: 8 µinch
Chrome layer thickness	min. 0.0005" or min. 0.001" as per customer request
Chrome layer microhardness	min. 900 HV0.1
Straightness	max. 0.003 inch/ft
Induction hardened	min. 50 HRC @0.05"

CONVERSION TABLE

for units of measurement - length

in / inch	×	25.399	=	millimeters / mm
ft / feet	×	304.799	=	millimeters / mm

CORROSION RESISTANCE LEVELS

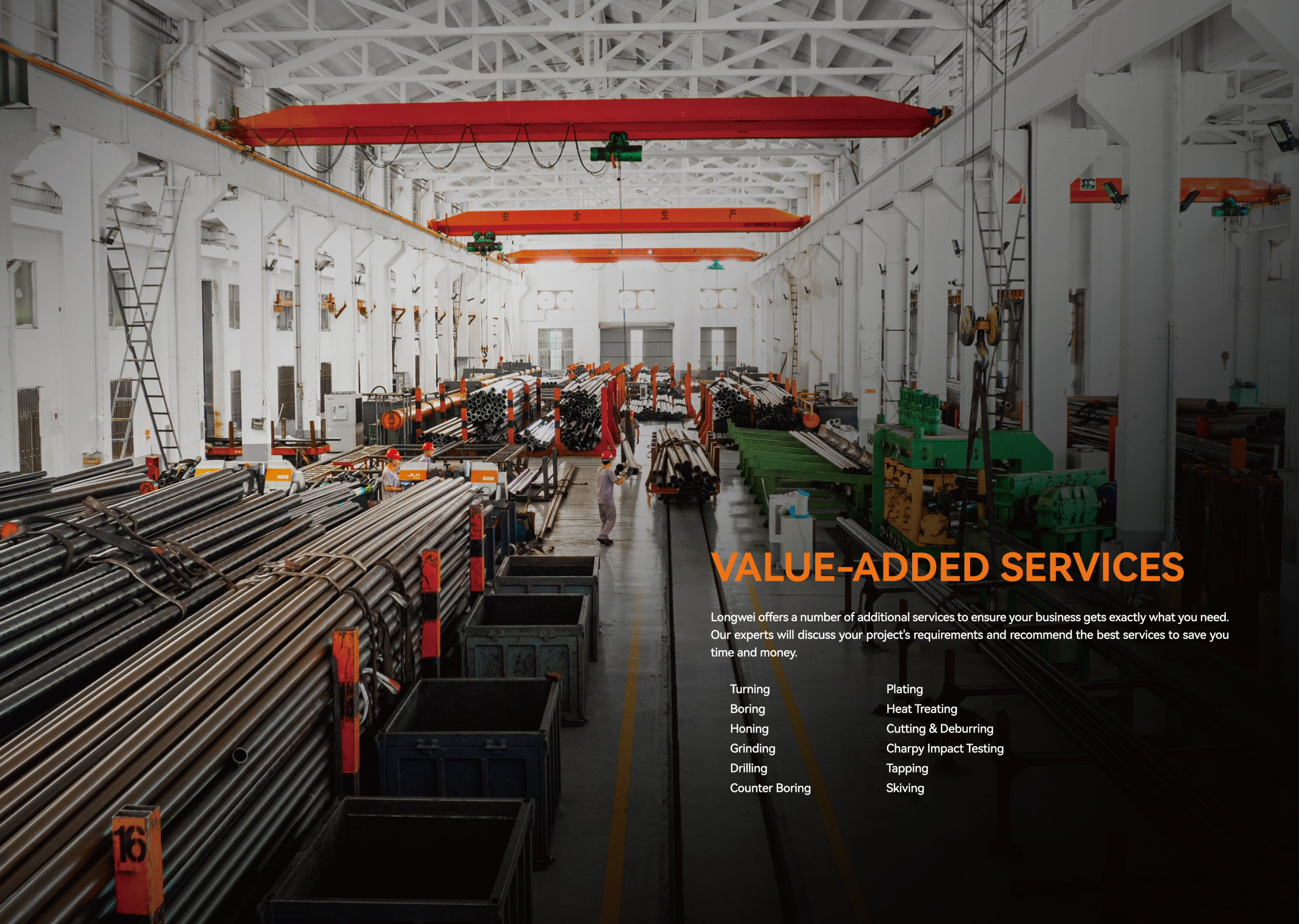
Medium corrosion resistance ASTM B117 ISO 9227 NSS	High corrosion resistance ASTM B117 ISO 9227 NSS	Extreme corrosion resistance ASTM B117 ISO 9227 NSS
NIMAX 200-CT	NIMAX 500-CT	NIMAX 1000-CT
Rating 10 after 120 h no corrosion	Rating 10 after 500 h no corrosion	Rating 10 after 1000 h no corrosion

Tested in our own laboratory according to ISO 9227 (ASTM B117),
evaluated according to ISO 10289.

CONVERSION TABLE

for units of measurement - weighth/presure

lb / pound	×	0.453	=	kilogram / kg
ksi / pound-force / inch ²	×	6.896	=	Mpa = N / mm ²



VALUE-ADDED SERVICES

Longwei offers a number of additional services to ensure your business gets exactly what you need. Our experts will discuss your project's requirements and recommend the best services to save you time and money.

Turning
Boring
Honing
Grinding
Drilling
Counter Boring

Plating
Heat Treating
Cutting & Deburring
Charpy Impact Testing
Tapping
Skiving

PHYSICAL AND CHEMICAL TESTING

wuxi longwei has been a leading supplier of carbon & alloy mechanical tubing across the world since its founding in 2010. We've building our company around our customers to ensure we're providing the best products, services, and support.

As a member of the Construction machinery association, wuxi longwei maintains a massive inventory and sources quality materials around the world. This means customers can trust that we'll meet the customer's delivery time. Quality raw materials are guaranteed.

Contact one of our experienced sales representatives to explore how wuxi longwei can help accelerate your supply chain with the right supply, right on time.

