

Reliable Hollow Anchor System



High Load
Capacity

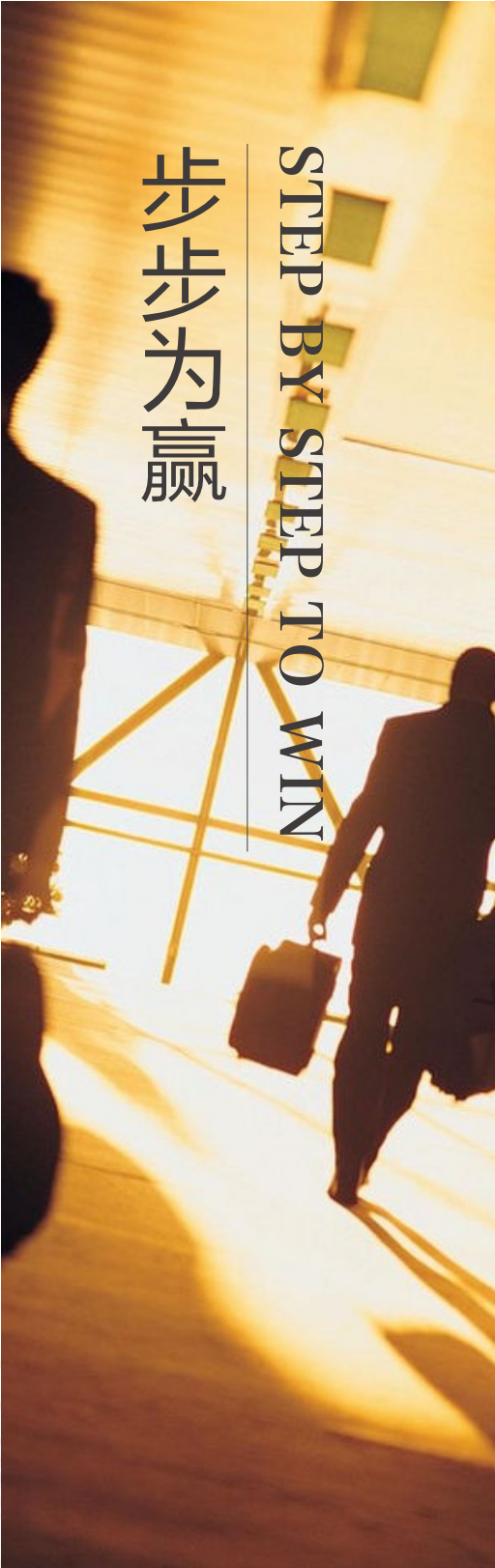


ISO 10208
Thread



Anti-Corrosion
Options





步步为赢

STEP BY STEP TO WIN

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Xinhong® Factory Profile

Wuxi Oriental Xinhong Environmental Protection Technology Co., Ltd.(Abbr. Xinhong® SDA) is an ISO-certified professional manufacturer of self-drilling anchor bolt, DTH drilling and All accessories. Located in Hi-Tech Zone, Huishan District, Wuxi city, Jiangsu Province—adjacent to Shanghai-Nanjing Expressway, railway and the Grand Canal—our plant guarantees 3-hour access to Shanghai port for fast global shipment.

With 20+ years R&D on SDA system technology, we produce self-drilling hollow bar R25–R51, T30–T130, options for anti-corrosion with hot-dip galvanized/epoxy/duplex coat, meeting EN 14490 & ASTM standards. Our SDA Rock Bolts system solutions are widely used for tunneling, slope stabilization, foundation pit support and underground mining, delivering reliable Ultimate Tensile Load, yield load and longer design life.

We offer OEM/ODM services, 48-hour pricing quotation, 7-day delivery and on-site installation guidance. Long-term supplier to China Railway, Sino-hydro and contractors in 120+ countries across Asia, Africa, middle east, Europe and Americans.

As a professional factory for hollow rock bolts in China, Xinhong® welcomes overseas clients work with us in the long term relationship.



Company History and Development

2003 – Company Founded

- Founded in 2003, formerly known as “Yidong metal”
- Initial business: High-quality Steel Pipes manufacturing
- Main product: Steel pipes for SDA rock bolt applications

2006 – R&D Breakthrough

- Independently developed hollow rock bolts
- First applied in Huishan Tunnel project on Wuxi City Inner Ring Road

2008 – Certified Major Project Supplier

- Products applied in Daguanqian Expressway project
- Qualified supplier certified by China Railway Tunnel Group

2009 – Major Tunnel Project Win

- Won the bid for Yinping Mountain Tunnel in Guangdong
- Project highlight: The largest mountain tunnel in Guangdong at that time

2013 – Global Expansion Started

- Officially enter into the international market
- First overseas client comes from Japan

2014 – Worldwide Business Coverage

- Products start exporting to Asia, Europe, America and Africa
- Expand global market footprint

2015 – Production Capacity Expansion

- New factory branch established
- Monthly production capacity: up to 2000 metric tons

Nowadays – Sustained Stable Growth

- Maintain an annual growth rate of 10%
- Slightly temporarily impact during COVID-19 period
- Current annual sales exceed 100 million USD

Factory Overview

Xinhong® is a premium hollow anchor bolt manufacturer from China with 8,000 m²+ areas - high precision auto lines, CNC thread rollers etc to support clients regular and custom requirements. What we are making now: R-thread & T-thread hollow rock bolts, DTH drill bits and accessories for slope stabilization, civil engineering, mining and tunneling. In-house heat treatment, galvanizing & 500-ton pull testing.



Pipe Penetrating



Pipe rolling



Pipe Straightening



Inspection



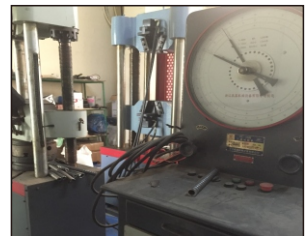
Rock Bolt Rolling



Bolt Adjustment



Surface treatment



Mechanical Test



Cutting



Chamfer



pack



store

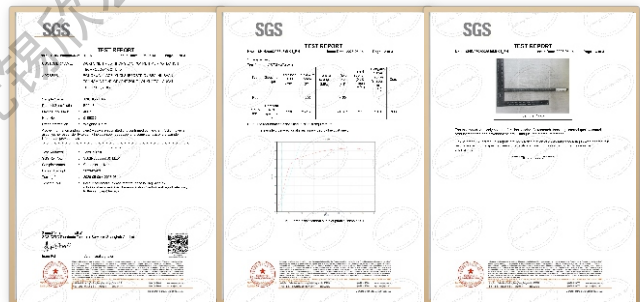
Certificates

Trusted hollow self-drilling anchor bolt manufacturer and exporter. ISO 9001:2015 certified quality management, regular third-party audits, and full traceability. Exceeding industry standards since 2003.

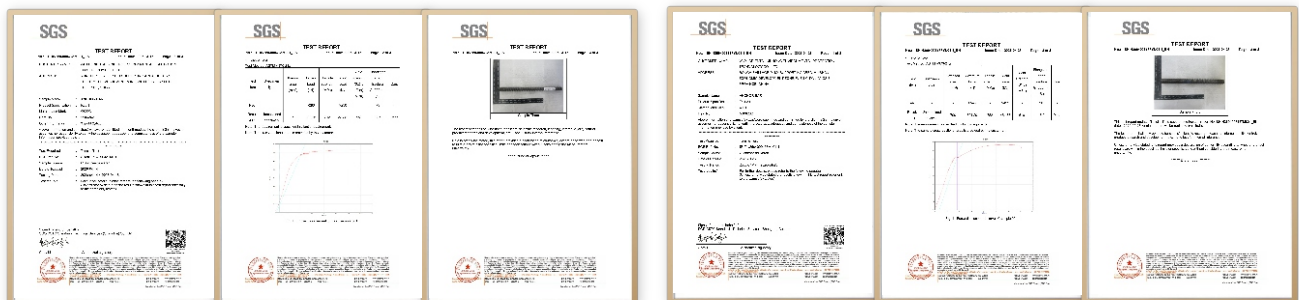


Quality Assurance

Our SGS Test Reports for product safety, quality assurance, and regulatory compliance. SGS is a world-leading inspection, verification, testing, and certification company. Our globally recognized SGS test reports help businesses build trust and meet

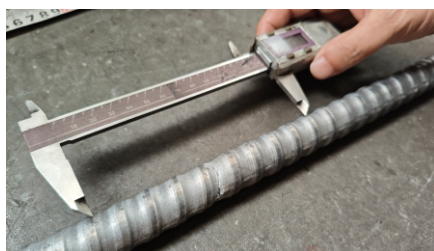


We also provide other third-party inspection report upon overseas clients' request.



QC Inspection in our factory

Every SDA anchor bar and accessory from Xinhong undergoes rigorous factory QC inspection.



Why Choose Xinhong[®] SDA Core Bolts as Your Long-Term Partner?

1. Authentic Quality 2. Consistent Stability.

When clients choose right supplier, what aspects will they evaluate?



Quality at Xinhong[®] is systematic, not sporadic.

| Certification | What It Means for You |

| ISO 9001:2015 | Documented processes from raw material inspection to EN 10204 3.1 mill test certificates |

| Regular Third-Party SGS Audits | External validation that our systems work |

Our certifications are the framework that ensures the bolt you ordered in 2026 performs

exactly like the bolt you reorder in 2028, 2030 and the future long term sourcing.

Manufacturing QC Control = Supply Stability

- Automated production lines with CNC thread rollers
- In-house heat treatment and surface finishing—no subcontractor delays
- Friction welding capability for sectional bolt extensions
- Thread protectors and export bundling as standard

We do not outsource critical processes. This means predictable lead times, consistent pricing, and no surprises

when your project schedule demands exceeding 10,000 meters, faster delivery.

Additional Value: Custom lengths, alternative drill bit configurations, and project-specific coating specifications available on request.

Partnership Beyond the Purchase Order

Long-term partnership means we understand your operational reality:

- “Reasonable Price” Cost-effective and higher precision option for different clients choice
- “Technical documentation” for tender submissions and engineering approvals
- “Third-party witnessing” EU American certificates arranged as per project requirements
- “Flexible logistics” containerized bulk shipment
- “International Trade rule” More Flexible in handling documents
- “Post-installation support” including mechanical property procedure guidance and grouting recommendations

What Our Partners Say

"We have sourced Xinhong® SDA bolts for three consecutive tunnel projects in Southeast Asia. The dimensional consistency reduced our installation time by approximately 12%, and their documentation package streamlined our client approvals."

- Geotechnical Contractor, Vietnam Ms. Ruan

"We are working with Xinhong for several years, a wonderful sourcing experience, no worries about their quality and after-sales." - China Railway, Mr. Han

Anchor Rods



Specification	O.D(mm)	I.D(mm)	Wall Thickness (mm)	Ultimate Tensile Load(kN)	Yield load (kN)	Weight per m (kg/m)
R25N	25	14	5.5	200	150	2.3
R32L	32	21	5	280	230	2.7
R32N	32	19	6	320	260	2.9
R32S	32	17	7.5	360	280	4
R38/22	38	22	8	500	400	4.7
R38/19	38	19	9.5	500	400	5.8
R51L/34	51	34	8.5	580	460	7.5
R51N/31	51	31	9.5	800	630	8.8
T30/14	30	14	8	260	220	2.8
T30/11	30	11	9.5	320	260	3.3
T40/20	40	20	9.5	540	430	5.8
T40/16	40	16	12	660	525	7.2
T52/26	52	26	13	929	730	10.0
T73/53	73	53	10	1160	970	13.2
T73/45	73	45	14	1500	1210	17.8
T76N/51	76	51	12.5	1600	1200	16.8
T76S/45	76	45	15.5	1750	1410	19.6
T103/78	103	78	12.5	2280	1800	25.3
T103/51	103	51	26	3660	2670	44.6
T130/60	130	60	35	6800	5250	78.0

Customized production is supported

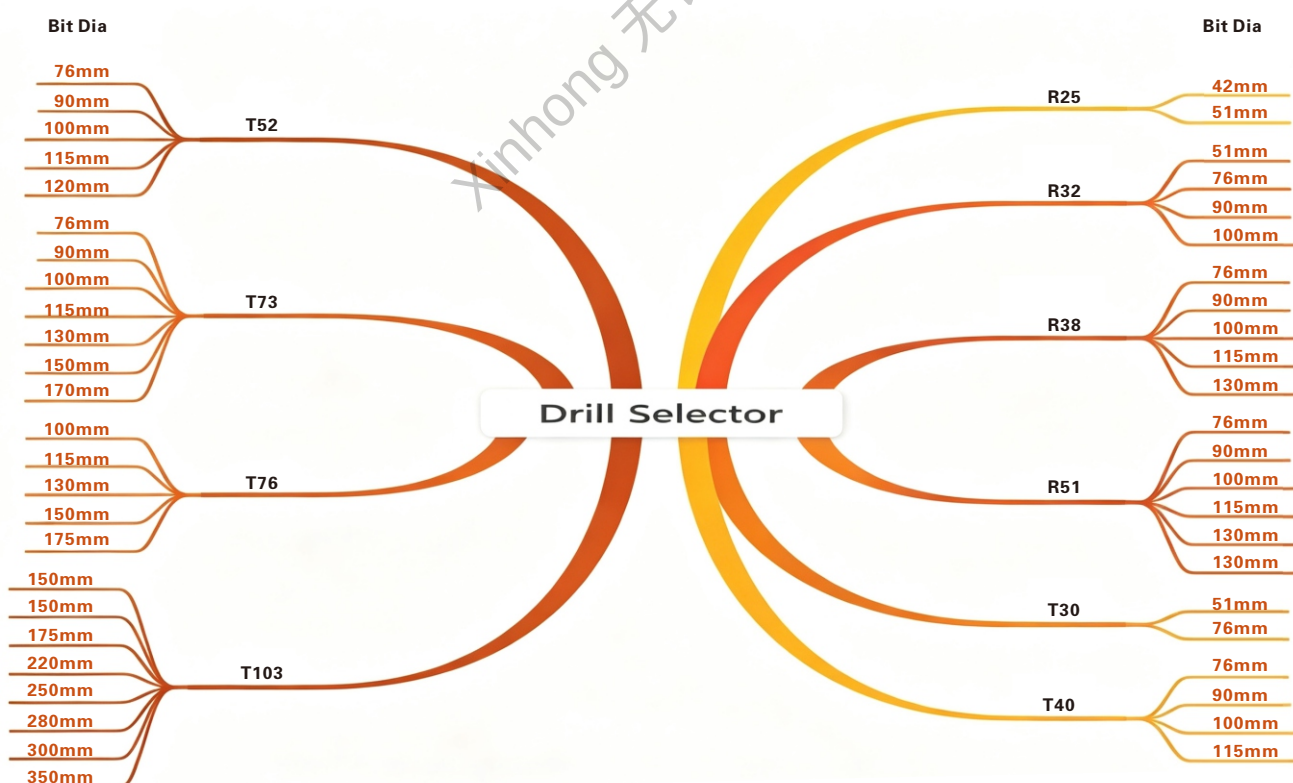
Thread Direction Left/Right Elongation Rate Agt. $\geq 5\%$

Thread Standard ISO 10208/ISO 1720 Options of Anti-Corrosion: Hot-dipped Galvanization

Epoxy Coating/Duplex Coat

Drill bit

EX	EXX	ES	ESS	EC	ECC	EY	EYY	EW
								
Bit Type		Application Scenarios						
EX	Hardened Cross Bit for Soft-Medium Rock							
EXX	TC cross bit -Type Bit for Soft-Medium Rock							
ES	Hardened button bit for unconsolidated rock with boulders							
ESS	Button bit with TC inserts for medium rock for formations							
EC	Hardened drill bit with optimized geometry for unconsolidated soil with small boulders							
ECC	TC drill bit with optimized geometry for soft to medium rock formations							
EY	Hardened drop centre bit for loose to medium dense ground conditions							
EYY	TC drop center bit for soft to medium rock formations							
EW	Casting clay bit with optimized geometry for very soft to soft clay							



SDA Coupler

Coupler item	O.D(mm)	Length (mm)	Thread Direction	Tensile Load	Weight(kg)
R25	36	150	L	200	0.66
R32	42	145	L	210	0.8
R32	43	160	L	280	0.1
R32	43	190	L	360	1
R38	51	180	L	500	1.35
R38	51	200	L	500	1.5
R38	51	220	L	500	1.7
R51	63	140	L	500	1.32
R51	63	170	L	550	1.63
R51	63	200	L	800	1.9
R51	70	180	L	800	2.75
T30	38	105	L	320	0.42
T40	54	140	L/R	660	1.18
T40	57	140	L/R	660	1.44
T73	95	200	L/R	1900	42
T76	95	220	L/R	1900	4.7

Steel Type: 40Cr or to be tailored.

Thread International Standard: ISO10208/ISO1720

Hardness: HRC 20-30

Options of Anti-corrosion: Hot-dipped Galvanization

Epoxy Coating/Duplex Coat



SDA NUT

NUT Item	SW	Length (mm)	Thread Direction	Tensile Load	Weight(kg)
Hex Nut					
R25	41	35	L	200	0.27
R32	46	45	L	280	0.35
R32	46	65	L	360	0.55
R38	50	60	L	500	0.47
R51	75	70	L	550	1.58
R51	75	80	L	800	1.84
T40	65	50	L/XR	660	0.95
T76	100	80	L/XR	1900	2.70
Spherical Nut					
R25	41	40.5	L	200	0.31
R32	46	45	L	280	0.4
R38	53	60	L	500	0.7
R51	75	70	L	550	1.6
Spherical Shoulder Nut					
T40	65	50	L/R	540	0.95
T52	80	70	L/R	930	2.3

Steel Type: C45 or to be specified.

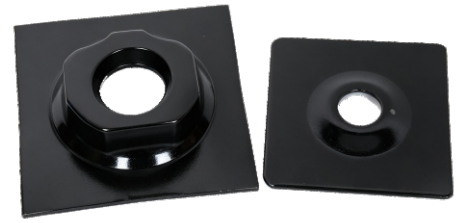
Thread International Standard: ISO10208/ISO1720

Hardness: HRC 20-30

Options of Anti-corrosion: Hot-dipped Galvanization

Epoxy Coating/Duplex Coat





SDA Plate

Plate Item	Length (mm)	Thickness (mm)	Steel Type	D(mm)	Weight(kg)
Dome Plate					
R25	150	8	Q235	30	1.4
R25	200	10	Q235	32	3.2
R32	150	8	Q235	35	1.3
R32	150	5	Q235	35	0.85
R32	150	6	Q235	35	1
R32	200	8	Q235	35	2.6
R32	150	10	Q235	36	1.7
R32	175	8	Q235	35	1.9
R32	200	12	Q235	35	3.7
R38	200	12	Q235	41	3.8
R38	150	8	Q235	41	1.38
Flat plate					
T52	145	27	Q345	65	3.6
T52	220	35	Q345	65	13.1
T52	200	30	Q345	65	8.5
T73	175	34	Q345	80	6.85
T73	250	40	Q345	80	18
T76	250	60	Q345	80	27
T76	250	40	Q345	80	18

SDA Centralizer

Centralizer Item	OD(mm)	Length (mm)	Weight (kg)
R32	72	30	0.27
R38	78	30	0.3
R51	91	30	0.32
T30	70	35	0.21
	88	35	0.27
T40	88	40	0.37
T52	112	35	0.41
T73	130	65	1.08
T76	130	45	0.89
T103	165	80	2.94
T111	170	50	1.80
T127	200	80	3.50
T130	220	80	3.60



SDA Expansion Shell/Swellex

Specification	OD(mm)	Ultimate tensile Force(kN)	Prestressed Force(kN)	Anchor Hole Diameter
Φ25	Φ25/5	180	80	Φ42
Φ28	Φ28/5	200	100	Φ46
Φ32	Φ32/6	280	120	Φ51
Φ38	Φ38/7	350	200	Φ75
Φ51	Φ51/8	500	300	Φ85



Elongation $\geq 6\%$ Thread Direction: Left Pitch 12.7 Other Specifications: $\phi 42$ $\phi 51$ $\phi 60$ $\phi 76$ $\phi 89$
 Steep Type C45#

Special Accessories

1. Wedge Disc

Wedge disc hollow bar anchors provide superior ground support for civil engineering projects. Central grouting, immediate load-bearing & easy installation.

2. Gouting Stopper

Grouting stoppers for hollow bar anchors. Rubber expansion & mechanical seals for precise grout control in ground support projects.

3. Bit Adapter

Self-drilling hollow bar bit adapters for tunneling & mining. Quick-connect drill rod couplings with full-bore grout passage. Compatible with SDA rock bolt systems.

4. Adaptor Coupling

Equal & reducing adaptor couplings for hollow bar anchors. Connect core rods with precision-machined threads.

Alloy steel, corrosion-resistant. For rock bolts, soil nails & micropiles.

5. Shank Rod

Shank rod is applied in tunneling & mining. Connect drill rigs to Hollow bar core rods with impact-resistant alloy steel couplings. Extension & standard lengths available

Anti-Corrosion Rock Anchor System

Hot-dipped Galvanization(HDG)

Hot-dipped galvanized hollow bar anchors for corrosion-resistant ground support. Sacrificial zinc coating protects core rods, couples, nuts, centralizers & plates in tunnels, marine & chemical environments. Thickness 50-200µm options, ISO 1461.

Epoxy Coating(EC)

Epoxy corrosion-resistant coating for self-drilling rods, couples, nuts, centralizers & plates. Full electrical isolation, abrasion-resistant. Thickness [As per request]µm options. Bending Standard: ISO 1519, Impact Standard: ASTM D 2794, Adhesion Standard: ISO 2409

Duplex Coat

HDG+EC

Duplex-coated hollow bar anchors combining hot-dipped galvanization & epoxy coating for 60-100 year corrosion protection. SDA core rods for marine, nuclear & permanent ground support. ISO 12944 C5-M grade.



Key Test Indicators

CHARPY IMPACT TEST

DESCRIPTION: One (1) – T40/20 Threaded hollow bar.
 SPECIMEN TYPE: Charpy V-Notch (ASTM A370-24a) TEST SPECIFICATION: ASTM A370-24a
 SPECIMEN SIZE: 5.0 mm x 10 mm x 55 mm (1/2 size) MATERIAL SPECIFICATION: Grade 40Cr

SPECIMEN IDENTIFICATION	TEST TEMPERATURE (°C)	IMPACT ENERGY (J)
T40/20	-20	31
	-20	29
	-20	56
Average	-20	39
Specification Requirements: Client's	-20	**

- Technical Safety BC Certificate of Recognition Registration No. CR-5
- Instrument calibrated annually to N.E.S.T. and ASTM E23.
- Specimens will be disposed of after 30 days unless alternate provisions are made.

Reported by:

Shawn Xiong, Technician

Reviewed by:

Jim Coulman, ASCT

Take Our T40/20 threaded hollow anchor bar as a sample, which has passed independent Charpy V-Notch impact test certified by Acuren Group in accordance with ASTM A370-24a standard. Specimens were tested at -20°C ambient temperature, with individual impact energy reading 31J, 29J and 56J, reaching an average absorbed impact energy of 39J. Outstanding low-temperature toughness effectively guards against brittle fracture under underground rock burst, blasting vibration and dynamic loads, delivering dependable structural safety for mining and geotechnical anchoring projects.



Elongation



If you need specific elongation requirements for a particular SDA application (e.g., cross-passage tunnels in squeezing ground, or slope stabilization in weathered rock), let us know.

Why SDA Systems Particularly Need High Elongation

SDA Feature	Why It Matters	Why Elongation Becomes Critical
Simultaneous drilling and grouting	Works in collapsing, water-bearing, or loose ground	Ground is already unstable and will move
No pre-drilling required	Ideal for raveling ground, fault zones, karst	No casing protection means anchor must deform with the ground
Single-pass installation	Fast, efficient in difficult access	Less time for ground support, more reliance on anchor ductility

SDA rock bolts are used precisely where ground is worst. If the ground were stable, you'd use cheaper conventional bolts. The worse the ground, the more elongation you need.

Why Elongation is Non-Negotiable for SDA system

Factor	Consequence of Insufficient Elongation
Ground moves	Brittle fracture, catastrophic failure
Installation bending	Cracks, delayed failure under load
Dynamic events (blast, seismic)	Instantaneous rupture, no energy absorption
Long-term creep	Stress corrosion cracking initiation
Quality assurance	False sense of security (high strength but dangerous)

The SDA principle: You don't use SDA in good ground. You use it where ground is problematic. Problematic ground moves. Moving ground requires anchors that can move with it. That's elongation.



Product specifications are subject to continuous improvement and may change without notice. Please confirm latest technical parameters before purchase.



www.cnxhanchor.com



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