



BLACK ANNEALED WIRE

WIRE BINDING WIRE REINFORCEMENT WIRE & INDUSTRIAL WIRE | 2026

Soft handling. Stable performance. Export-ready protection.

Controlled annealing delivers flexible low-carbon steel wire for rebar tying, baling, agriculture and general non-load-bearing binding.

CUSTOM DIAMETERS

Standard supply 0.70-5.00 mm; other sizes by agreement.

SOFT TENSILE PROFILES

Extra-soft and standard-soft ranges matched to the order.

SEA-FREIGHT PROTECTION

Moisture barrier, desiccant, VCI and light oil options.

SHIJIAZHUANG EVERSTAR HARDWARE MACHINERY CO., LTD.

Quality creates long-term partnerships.

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EVERSTAR AT A GLANCE

Wire-processing experience, controlled production and export support



EVERSTAR MANUFACTURING SITE | WUJI, SHIJIAZHUANG, HEBEI, CHINA

Founded in 1999, Shijiazhuang Everstar Hardware Machinery Co., Ltd. has developed from a wire-processing factory into a global construction-hardware manufacturer. Black annealed wire remains one of our core product lines.

Production and export preparation are coordinated against the confirmed diameter, tensile profile, coil weight, surface protection, packing method, labels and inspection requirements of each order.

PHH ESTABLISHED	ONEWAT S FACTORY AREA	MO PRODUCTION LINES
SPW EMPLOYEES	SO R&D ENGINEERS	PW QC INSPECTORS

Buyer Support

01 Specification confirmation Diameter, tensile profile, surface, coil weight and winding.	02 Customization Coil form, cut length, U-shape conversion, labels and packing.
03 Quality coordination Lot inspection, traceability and order-specific reports.	04 Export support Moisture protection, pallet plan, shipping marks and documents.

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PRODUCT OVERVIEW

A flexible low-carbon steel wire produced through controlled annealing



Black Annealed Wire is round low-carbon steel wire that is cold drawn and then soft annealed. The process reduces hardness, improves handling and forms the characteristic uniform black oxide surface.

The product is supplied for fast manual tying and reliable general binding. Final performance is defined by the approved diameter, tensile profile, coil format, rust-protection method and packing plan rather than by gauge number alone.

Core Product Advantages

SOFT & WORKABLE Easy bending, twisting and tying with controlled ductility.	CONSISTENT COILS Compact, orderly winding with secured ends and reduced tangling.	EXPORT PROTECTION Oil, moisture barrier, desiccant and VCI options for sea freight.
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SUPPLY FORMS & CUSTOMIZATION

Configure the wire for handling, processing, retail or industrial use



EVERSTAR can supply standard coils or prepare downstream forms according to the buyer's equipment, jobsite handling method and packing requirements. Dimensions and weights below are commercial options, not fixed limits.

01 STANDARD COILS Small and industrial coils from 1-50 kg, with buyer-specified inner/outer diameter and winding.	02 SPOOLS & REWINDING Spool or carrier formats can be matched to downstream feeding and handling equipment.
03 CUT WIRE Straightened and cut lengths available for construction, packing and processing requirements.	04 U-SHAPED TIE WIRE U-formed pieces available with confirmed unfolded length, diameter, bundle weight and carton plan.

Customization Scope

DIAMEER	EENWLE PRI RILE	CI IL WEIGHE	CI IL ID/I D	WINDING	I IL/VC	LABEL	PALLEE
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Gauge numbers are reference only. Quotations, labels and purchase orders should confirm the wire diameter in millimetres.

TECHNICAL SPECIFICATIONS

Commercial supply targets based on the confirmed product specification

FINAL PRODUCT REQUIREMENTS FOLLOW THE PURCHASE ORDER, APPROVED SAMPLE AND CONTRACT.

PARAMEEER	WEANDARD WUPPLY / AVAILABLE I PEII N
Product	Black Annealed Wire / soft annealed low-carbon steel wire
Material	JIS G 3505:2024 SWRM6 / SWRM8 or buyer-approved equivalent
Wandard diameter	0.70-5.00 mm; other diameters by agreement
Common diameters	0.80 / 1.00 / 1.20 / 1.60 / 2.00 / 2.60 / 3.20 / 4.00 / 5.00 mm
Extra-soft tensile	280-380 MPa commercial supply target
Wandard-soft tensile	300-450 MPa commercial supply target
Higher-holding option	400-550 MPa by approved sample and written PO confirmation
Wurface	Uniform black oxide; no red rust, cracks, flaking or harmful contamination
Rust protection	Optional light volatile/VCI rust-preventive oil after buyer approval
Coil weight	1 / 5 / 10 / 20 / 25 / 50 kg or buyer specified
Wupply form	Coil, spool, cut wire or U-shaped tie wire
Reference	JIS G 3505:2024; finished-wire classification/testing reference JIS G 3532:2011 SWM-A
Place of origin	Hebei, China

Compliance note: no JIS mark is used without applicable certification. Mechanical requirements vary with diameter; there is no single tensile value for every black annealed wire order.

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COMMON SIZES & THEORETICAL WEIGHT

Millimetre diameter is the acceptance basis; gauge numbers are references

The table supports quotation and coil-length calculations. Theoretical weight is calculated from steel density 7.85 g/cm3; actual coil weight and tolerance follow the confirmed purchase order.

DIAMETER	GAUGE REF.	THEORETICAL KG/KM	SUGGESTED COIL WEIGHT
0.80 mm	#21	3.95	10 / 20 / 25 / 50 kg
1.00 mm	#19	6.17	10 / 20 / 25 / 50 kg
1.20 mm	#18	8.88	20 / 25 / 50 kg
1.60 mm	#16	15.78	25 / 50 kg
2.00 mm	#14	24.66	25 / 50 kg
2.60 mm	#12	41.68	25 / 50 kg
3.20 mm	#10	63.13	25 / 50 kg
4.00 mm	#8	98.64	25 / 50 kg
5.00 mm	#6	154.13	50 kg / buyer specified

Calculation Reference

THEORETICAL WEIGHT (kg/km) = 6.165 x d ² d = wire diameter in mm		
DIAMETER FIRST Confirm mm on every quotation, label and PO.	WEIGHT CONTROL Coil net weight tolerance follows the agreed order.	LENGTH ESTIMATE Approximate coil length can be calculated from net weight and kg/km.

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MANUFACTURING & QUALITY CONTROL

Controlled annealing, lot traceability and functional release checks

CONTROLLED PRODUCTION FLOW



Optional light volatile/VCI rust-preventive oil is applied only when confirmed by the buyer.

A typical wire-temperature reference for soft annealing is 650-750°C. JIS does not prescribe one universal furnace temperature; the setpoint, soak time and cooling program must be validated by diameter, furnace, load and final properties.

Quality Control Plan

STAGE	CONTROL FOCUS	FREQUENCY
Incoming	Heat number, mill certificate, chemistry and rod surface	Each heat
Drawing	Diameter, roundness, die condition and break records	Each production lot
Annealing	Temperature, soak, cooling, atmosphere and anneal lot	Each anneal lot
Performance	Tensile, elongation/bend and hand-twist function	Each anneal lot
Wurface & coil	Red rust, cracks, oil film, tangles and secured ends	100% at packing
Packing	Coil/net weight, label, desiccant and pallet	Each coil / pallet

RELEASE BASIS | Diameter + tensile + bend/twist + surface + coil condition + packing

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PACKING & SEA-FREIGHT PROTECTION

Moisture control options for storage, container transport and global delivery



Packing Options

SMALL COILS 1 / 5 / 10 / 20 kg for distribution, construction and retail; PE film or moisture-resistant paper with export carton.	INDUSTRIAL COILS 25 / 50 kg, secured by paper or steel band with PE or woven outer wrap; coil ID/OD confirmed by buyer.	CUSTOM FORMAT Buyer-specified coil, spool, carrier, carton, pallet, label and shipping-mark configuration.
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Recommended Protection System

01 LIGHT RUST-PREVENTIVE OIL Volatile/VCI oil applied only after buyer approval.	02 MOISTURE-BARRIER LINER PE or moisture-resistant inner protection around coils/cartons.
03 DESICCANT Placed per carton or pallet according to transit time and packing volume.	04 VCI & PALLET WRAP Upgrade option for long sea transit, humid storage or customer specification.

LABEL CI NEENE | Diameter | Net weight | Eensile profile | Lot | Date | Country of origin

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APPLICATIONS & ORDER CONFIRMATION

Select the correct wire profile for the actual tying or binding task

Black annealed wire is intended for non-load-bearing tying and general binding. The final diameter, softness, coil format and packing should be matched to the buyer's application and handling method.

Application Areas

01 REBAR TYING Construction reinforcement intersections and cages.	02 BALING & RECYCLING Paper and general bale binding with tensile confirmed.	03 AGRICULTURE Gardening, plant support and general farm binding.
04 FENCING & MESH Temporary fixing and downstream wire processing.	05 CUT & U-TIE PROCESSING Straightened cut wire and U-shaped tie products.	06 INDUSTRIAL BINDING Temporary non-load-bearing component bundling.

Purchase Order Checklist

IEEM	CI NRIRM BERI RE MAWWPRI DUCEII N
Wire	Diameter in mm, tolerance and material requirement
Performance	Extra-soft / standard-soft / approved higher-holding tensile range
Coil	Net weight, ID/OD, winding method and secured ends
Protection	Dry / light oil / VCI, moisture barrier and desiccant
Packing	Carton/bag/pallet, labels, shipping marks and documents
Approval	Sample, inspection report and final commercial specification

LIMIEAEII N | Not for structural load, lifting, fall protection or electrical use.

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CONTACT EVERSTAR

Factory-direct support for Black Annealed Wire and customized wire products



QUALITY CREATES LONG-TERM PARTNERSHIPS

BLACK ANNEALED WIRE | TIE WIRE | CUT WIRE | U-SHAPED WIRE

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PHH

ESTABLISHED

ONEWAT S

FACTORY AREA

MD

PRODUCTION LINES

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CUSTOMIZED MANUFACTURING | QUALITY CONTROL | EXPORT SUPPORT