

# Metal-Asia

## COMMERCIAL PROPOSAL

### LZ6/560 Straight-Line Wire Drawing Machine — Wire Rod dia. 6 mm to Wire dia. 2.5 mm

**Supplier:** [Metal-Asia.pw](#) — Global Industrial Procurement & Supply Chain Solutions

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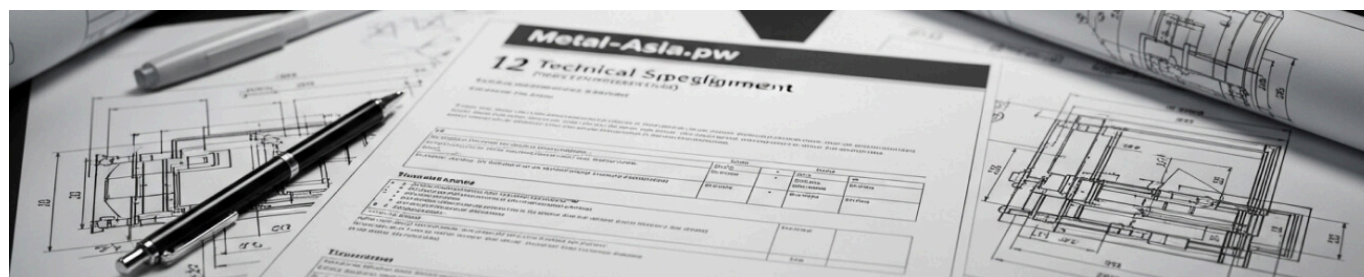
**Date:** May 2026

**Segment:** Industrial Wire Drawing, B2B

**Target Markets:** Europe, North America, Middle East, Africa, Southeast Asia, Latin America

## Introduction

The LZ6/560 straight-line wire drawing machine is a modern automated line for converting 6.0 mm steel wire rod into 2.5 mm finished wire (working range: 2.0–5.7 mm output). The line includes a vertical pay-off stand, enclosed motorless descaling unit, 9-drum drawing machine with high-pressure water cooling, built-in tension device, and a coiler with pneumatic clamp on a 1-ton capacity basket. The Siemens PLC-based control system with variable frequency drive speed regulation and color HMI touchscreen ensures precise process control. The machine can bypass individual drums, enabling flexible routing for various finished product diameters. Production capacity reaches 1.3 tons per hour with consistent surface quality and minimal wire breaks. Each unit undergoes minimum 72 hours of factory testing before shipment.



*Technical documentation for LZ6/560 straight-line wire drawing machine*

## Customer Pain Points & Our Solutions

Challenge	Impact	Solution
Unclear Chinese specs	Equipment mismatch	<a href="#">Engineering audit</a> and spec verification
Defective equipment risk	Financial losses	Pre-shipment inspection with report
Customs complexity	Delays, penalties	<a href="#">Customs &amp; logistics</a> turnkey
No local support	Downtime	Local spare parts, remote diagnostics
Incomplete shipments	Blocked startup	Pre-shipment completeness check

Challenge	Impact	Solution
Language barrier	Specification errors	Multilingual support
Payment security	Loss risk	Escrow protection

## Equipment Overview

### Purpose

Automated rough wire drawing line. Input: 6.0 mm wire rod. Output: 2.0–5.7 mm (optimal: 2.5 mm). Produces high-strength wire for reinforcement mesh, fasteners, and hardware.

### Applications

- Wire for construction mesh welding
- High-strength fasteners and hardware
- Wire ropes and cables
- Spring wire after additional heat treatment

## Technical Specifications

### Main Line Parameters

No.	Parameter	Value
1	Input wire diameter	6 mm
2	Output diameter	2.0–5.7 mm (optimal: 2.5 mm)
3	Input material strength	≤600 MPa
4	Average reduction ratio	≤23.04%
5	Production capacity	1.3 t/hour
6	Main drive power	22 kW (1 unit)
7	Auxiliary drive power	18.5 kW (5 units)
8	Coiler power	15 kW (1 unit)
9	Total installed power	127 kW (7 motors)
10	Drawing drum diameter	560 mm (9 drums)
11	Wear-resistant drum layer	≥8 mm, HRC ≥60
12	Guaranteed drum life	22,000 hours / 3 years
13	Noise level	≤82 dB
14	Wire entry temperature	≤65°C

No.	Parameter	Value
15	Wire exit temperature	$\leq 160^{\circ}\text{C}$
16	Control system	Siemens PLC + HMI
17	Dimensions (approx.)	12,000 x 2,500 x 2,000 mm
18	Weight (approx.)	15,000–22,000 kg

## Supply Scope

No.	Item	Qty
1	Vertical pay-off stand + descaling unit	1 set
2	Straight-line drawing machine LZ6/560	1 set
3	Coiler with 1T basket	1 pcs
4	Siemens PLC control cabinet	1 set
5	HMI touchscreen panel	1 set
6	Hardened gear reducers	1 set

## Optional Equipment

No.	Item	Purpose
1	Butt welding machine	Wire end welding upon breakage
2	Wire pointing machine	Pointing wire ends for die threading

## Key Unit Specifications

### Drawing Drums & Cooling

Parameter	Value
Quantity	9 (No. 1–No. 9)
Diameter	560 mm
Drum bypass capability	Yes, process-dependent
Surface coating	Special spray, height 120 mm
Wear layer	$\geq 8$ mm
Roughness	$\leq \text{Ra}0.8$
Hardness	HRC $\geq 60$
Cooling	Internal high-pressure water

Parameter	Value
Service life	≥22,000 hours / 3 years

## Die Holder

Parameter	Value
Construction	Welded
Chambers	2 (cooling + lubrication)
Cooling type	Direct immersion
Principle	Low pressure, high flow
Liquid lubrication option	Available upon request

## Drive System

Parameter	Value
Gearboxes	Hardened helical gears
Transmission	Narrow V-belts
Noise	≤82 dB
Bearings	High-quality industrial

## Coiler

Parameter	Value
Basket material	Steel Q355
Coil diameter	≥800 mm
Load capacity	≥1 t
Clamping	Pneumatic
Length accuracy	≤0.1%

## Consumables

No.	Material	Purpose
1	Wire rod 6 mm (≤600 MPa)	Feedstock
2	Drawing dies	Working tool
3	Drawing powder / lubricant	Drawing lubrication
4	Gearbox oil	Reducer lubrication

No.	Material	Purpose
5	Hydraulic oil	Hydraulic system
6	Electrical power 380 V	127 kW installed
7	Cooling water	Closed-loop
8	Compressed air	Pneumatic systems

## Facility Requirements

Parameter	Requirement
Floor space	Minimum 25 x 6 m (150 m <sup>2</sup> )
Ceiling height	Minimum 3.5 m
Temperature	+5°C to +40°C
Humidity	≤80%
Electrical supply	380 V, 50 Hz, 127 kW
Cooling	Closed-loop with cooling tower
Compressed air	Compressor, receiver
Foundation	<b>Special foundation NOT required</b>
Floor	Industrial concrete
Ventilation	Exhaust

## Services

**Engineering Audit** — Spec verification and manufacturer alignment.

**China Sourcing** — Full procurement cycle.

**Customs & Logistics** — Full customs clearance.

**Comprehensive Procurement** — Optimal configuration.

**Integrated Systems** — Turnkey lines.

**Tender Support** — [Government procurement](#) bids.

**Quality Control** — NDT, ultrasonic testing, chemical verification.

## Customs

Parameter	Value
HS Code	8463.30.00
Description	Wire drawing machines
Duty	Per tariff

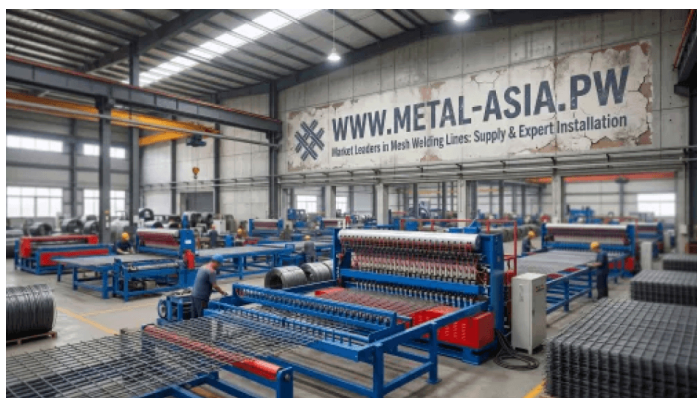
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## Delivery

Parameter	Terms
Incoterms	Per agreement
Lead time	60 days
Packaging	Wooden crates
Packages	6-10
Volume	~35-50 m <sup>3</sup>
Weight	~15,000-22,000 kg
Warranty	12 months

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## Gallery



*CNC wire drawing machine and industrial production equipment*

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## FAQ

**Q1: Can wire smaller than 2.5 mm be produced?**

Minimum output diameter is 2.0 mm. However, for stable operation the recommended range is 2.5–5.7 mm. For wire below 2.0 mm, a medium or fine drawing line with smaller drum diameter is required.

**Q2: How often does drum coating need replacement?**

Under normal operation, guaranteed drum life is 22,000 hours (approximately 3 years of continuous operation). Coating regeneration is performed at specialized facilities. We provide contacts for drum reconditioning services.

**Q3: Is a special foundation required for LZ6/560?**

No. The machine bed is a welded box-frame with post-weld heat treatment, providing high rigidity without additional foundation. A level industrial floor is sufficient.

**Q4: How does automatic speed control work?**

The Siemens PLC system with variable frequency drives ensures synchronized operation of all 9 drums. Each drum speed is set individually or synchronized with the line. Emergency stop ( $\leq 5$  sec) does not cause wire breakage.

**Q5: What cooling water flow is required?**

The cooling system operates in a closed loop with a cooling tower. Water flow is 20–40 m<sup>3</sup>/hour depending on tower configuration. Inlet water temperature must not exceed +30°C.

**Q6: What staffing is required?**

One operator-technician per shift. For 24/7 operation: 3 shifts of 1–2 persons. Operator manages loading, parameter monitoring, coil changes, and routine maintenance.

**Q7: Can this line integrate with existing mesh production?**

Yes. The LZ6/560 operates as a standalone unit or integrated with downstream mesh welding on OM-2000D/OM-2500Q machines. Finished wire is coiled and fed to the welding machine input.

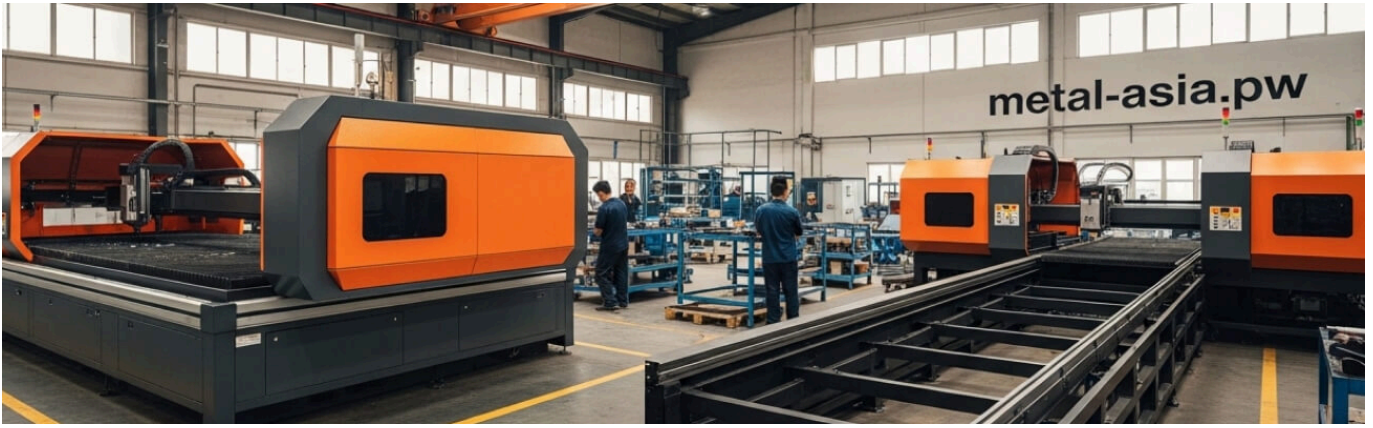
**Q8: Is commissioning included?**

Commissioning is priced separately at USD 100–200/day plus travel and accommodation. For this line, 10–14 engineer-days are required. Fixed-price packages available.

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## Contact

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*Turnkey supply of LZ6/560 straight-line wire drawing machine with global commissioning*