

Metal-Asia

COMMERCIAL PROPOSAL

OM-2000D Automatic Construction Mesh Welding Machine — 2,000 mm Width, Wire dia. 2.5–5 mm

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

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Segment: Industrial Equipment for Construction Mesh, B2B

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

Introduction

Welded construction mesh is widely used in monolithic construction for reinforcing walls, floors, foundations, and industrial surfaces. The automatic OM-2000D machine produces mesh up to 2,000 mm wide from wire with diameters of 2.5–5 mm, with cell pitches from 30 to 300 mm. With 40 welding points and speeds up to 55 rows per minute, the equipment ensures high productivity with minimal staffing. The PLC-based control system with HMI touchscreen enables rapid parameter changes for different mesh types. Longitudinal wire is fed directly from coils through a straightening unit, eliminating pre-cutting. Transverse wire is fed automatically by a stepper-driven hopper. This model is the optimal solution for manufacturers focused on masonry, road, and construction mesh production at volumes up to 40 tons per month.



Technical scope guide for construction mesh welding equipment

Customer Pain Points & Our Solutions

Customer Challenge	Business Impact	Our Solution
Unclear factory specifications	Equipment mismatch, project delays	Engineering audit and spec verification
Risk of defective equipment	Financial losses, disputes	Pre-shipment inspection with photo/video report

Customer Challenge	Business Impact	Our Solution
Customs clearance complexity	Delays, penalties, extra costs	Customs & logistics full management
No local service support	Downtime, parts shortages	Local spare parts, remote diagnostics, field engineer
Incomplete shipments	Startup blocked	Pre-shipment completeness check
Language barrier	Miscommunication errors	Multilingual project management
Payment security concerns	Full prepayment loss risk	Escrow payment protection

Equipment Overview

Purpose

Automatic resistance welding machine for construction mesh up to 2,000 mm wide from longitudinal and transverse wire diameters 2.5–5 mm. Designed for manufacturing masonry, road, and construction mesh.

Applications of Finished Product

- Masonry mesh for wall construction
- Road mesh for concrete pavements
- Floor screed and industrial surface reinforcement
- Underfloor heating mesh
- Fencing and barrier panels

Technical Specifications

Main Parameters — OM-2000D

No.	Parameter	Value	Notes
1	Welding wire diameter	2.5–5 mm	
2	Welding width	2,000 mm	Adjustable
3	Maximum welding length	3,000 mm	Adjustable
4	Longitudinal wire pitch	50–200 mm	Fixed or adjustable
5	Transverse wire pitch	30–300 mm	CNC adjustable
6	Number of welding points	40	
7	Welding speed	15–55 rows/min	
8	Welding method	Electric spring compression	Simultaneous / sequential
9	Welding transformer power	60 kVA x 7 units	Total 420 kVA

No.	Parameter	Value	Notes
10	Supply voltage	380 V, 50 Hz, $\pm 10\%$	Requires >120 kW
11	Power cable	Copper 120 mm ² x 3+1	
12	Compressed air pressure	≤ 0.8 MPa	
13	Cooling	Water-cooled	
14	Control system	PLC + HMI touchscreen	Programmable control
15	Equipment color	Grey, dark blue	
16	Dimensions (L x W x H)	30,000 x 5,000 x 1,900 mm	
17	Weight (approximate)	12,000–18,000 kg	
18	Manufacturing lead time	60 days	

Control & Automation Systems

No.	Component	Description
1	PLC controller	Programmable control, parameter input
2	HMI touchscreen	Color display, intuitive interface
3	Microcomputer weld control	Precise weld process management
4	Hopper stepper motor	Accurate transverse wire feeding

Welding System

No.	Component	Description
1	Welding transformers	60 kVA x 7, epoxy-filled, water-cooled
2	Welding electrodes	Water-cooled, wear-resistant
3	Pneumatic drive system	Adjustable compression force

Feeding & Pulling Mechanisms

No.	Component	Description
1	Transverse wire hopper	Stepper motor, rotary disc feeding
2	Straightening unit	Longitudinal wire feeding from coils
3	Servo pulling mechanism	Servo motor with planetary gearbox
4	Pneumatic hook mechanism	Stability and mesh dimensional accuracy

Supply Scope

Main Configuration

No.	Item	Qty	Unit
1	Main welding machine OM-2000D	1	pcs
2	Servo mesh pulling mechanism	1	pcs
3	CNC control cabinet	1	pcs
4	Mesh cutting machine	1	pcs
5	Longitudinal wire straightening unit	1	set
6	Spare parts toolbox	1	pcs
7	Wire coil holders	40	sets

Optional Equipment

No.	Item	Qty	Unit
1	High-speed wire straightening & cutting machine 3.0–6.0 mm	1	pcs
2	Standard wire straightening & cutting machine 3.0–6.0 mm	2	pcs

Operational Consumables

No.	Material	Purpose
1	Longitudinal wire 2.5–5 mm	From coils via straightening unit
2	Transverse wire 2.5–5 mm	Pre-cut blanks
3	Welding electrodes (spare)	Replacement
4	Cooling water	Closed-loop
5	Compressed air	Up to 0.8 MPa
6	Electrical power 380 V	>120 kW

Facility Requirements

Parameter	Requirement
Production floor space	Minimum 30 x 5 m (150 m ²)
Ceiling height	Minimum 3 m
Temperature	+5°C to +40°C
Humidity	≤80%
Electrical supply	380 V, 50 Hz, >120 kW

Parameter	Requirement
Power cable	Copper, min. 120 mm ² x 3+1
Cooling system	Closed-loop with cooling tower
Compressed air	Compressor, receivers, dryer
Foundation	Industrial concrete floor
Ventilation	Exhaust
Lighting	Min. 200 lux

Services Included

Full-Scope Procurement Services

[Metal-Asia.pw](#) provides comprehensive equipment sourcing from China:

Engineering Audit — Technical parameter verification, manufacturer specification alignment, bilingual technical specification preparation.

China Sourcing Services — Full cycle from manufacturer to your facility: negotiation, production monitoring, inspection, shipping, and customs clearance.

Customs & Logistics — Full-cycle customs clearance, declaration preparation, certification, and permit acquisition.

Comprehensive Procurement — Optimal equipment configuration for your tasks and budget.

Integrated Engineering Systems — Turnkey production line design and equipment supply.

Tender Support — [Government procurement](#) bid preparation with complete documentation.

Quality Control — Factory inspection with NDT methods, chemical composition verification, pre-shipment testing.

Metal-Asia.pw vs. Direct Chinese Suppliers

Criterion	Direct from China	Metal-Asia.pw
Language	Communication issues	English-speaking manager
Factory verification	Not possible remotely	On-site audit with report
Documentation	Chinese only	Translated, standards-adapted
Quality control	None	Pre-shipment inspection
Customs	Self-managed	Full management
Warranty claims	Lengthy, ship back	Local resolution
Payment	High risk direct transfer	Escrow protection

Criterion	Direct from China	Metal-Asia.pw
Commissioning	Hard to organize	Comprehensive with training
Spare parts	Long delivery	Local inventory
Legal protection	Hard to enforce	International law contract

Customs Information

HS Code

Parameter	Value
HS Code	8462.90.80
Description	Other machine tools for working metal
Import duty	Per current customs tariff

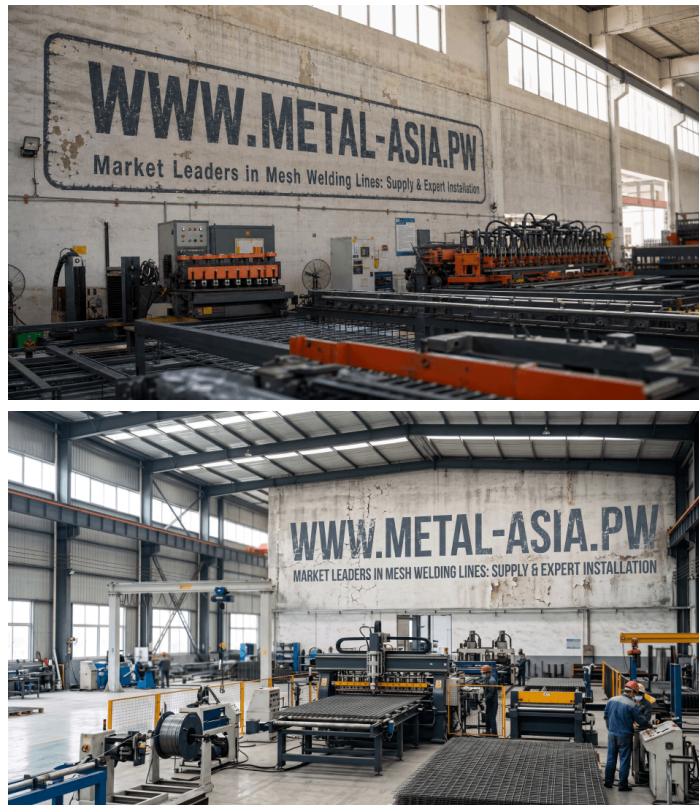
Customs Clearance

[Metal-Asia.pw](#) provides full customs clearance. Documentation includes commercial contract, invoice, packing list, certificate of origin, technical documentation, and conformity declaration to Machinery Safety Directive. All permits obtained before delivery.

Delivery Terms

Parameter	Terms
Incoterms	Per agreement (CIP/DDP/FCA)
Transport	Road, sea, rail
Manufacturing lead time	60 days after advance payment
Transit time	15–45 days
Packaging	Wooden crates
Number of packages	6–10
Volume	~30–40 m ³
Gross weight	~12,000–18,000 kg
Warranty	12 months from startup

Equipment Gallery



Automatic construction mesh welding line and industrial mesh welder

Frequently Asked Questions (FAQ)

Q1: What is the production capacity per shift?

At standard 50x50 mm mesh from 3 mm wire, the machine produces up to 35 rows per minute. Over an 8-hour shift at 80% utilization, output is 800–1,200 m² of mesh, or 15–25 tons of finished product per month on a single-shift schedule.

Q2: Can different cell pitches be produced?

Yes. Transverse pitch is CNC-adjustable from 30–300 mm. Longitudinal pitch is set at 50–200 mm. Changeover takes 10–15 minutes via touchscreen. Up to 100 different mesh programs can be stored in PLC memory.

Q3: What staffing is required?

One operator per shift is sufficient. For 24/7 operation in 3 shifts: 3 operators + 1 lead technician across all shifts. Total personnel for a 4-machine complex: 14–15 people per shift.

Q4: What is the difference between OM-2000D and OM-2500Q?

OM-2000D handles wire 2.5–5 mm, width 2,000 mm, 40 welding points, 420 kVA. OM-2500Q handles wire 6–10 mm, width 2,500 mm, 24 points, 2,160 kVA. OM-2000D is optimal for construction/masonry mesh; OM-2500Q for heavy reinforcement mesh.

Q5: How is longitudinal wire fed?

Longitudinal wire is fed continuously from coils through a straightening unit, eliminating pre-cutting and increasing productivity. Coils are mounted on racks; wire passes through roller straighteners into the

welding zone.

Q6: What payback period can be expected?

At average mesh price of USD 1.5–2.0/m² and production cost of USD 0.8–1.1/m² (including materials, power, and labor), margin is 40–50%. At 1,000 m² per shift, payback is 8–14 months.

Q7: What documents are required for commissioning?

A declaration of conformity to Machinery Safety Directive is required. We arrange all permits prior to delivery. Operating manual in English is included.

Q8: Is commissioning included in the equipment price?

Commissioning is priced separately at USD 100–200/day plus travel and accommodation. For this machine, 7–10 engineer-days are required. Fixed-price packages are available.

Contact Information

For detailed service information, visit Metal-Asia.pw.

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Comprehensive supply of construction mesh welding equipment from China