

High Temp Fusion Furnace Module

SKU: AVM-HTF-1000 · Dual-Tilt 1,000 kg Induction Furnace System

2x1,000 kg CAPACITY	700 kW RECTIFIER	1,700 °C MAX TEMP	~24–32 t/day OUTPUT
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PRODUCT OVERVIEW

The AVM-HTF-1000 is a compact, transportable smelting system with dual 1,000 kg tilting induction furnaces, a 700 kW medium-frequency rectifier, closed-loop cooling tower, PLC control room, and casting mold track. Built on standardized container modules for rapid deployment. Processes precious metals, copper alloys, PGMs, slag, and concentrate up to 1,700°C.

MODULE OVERVIEW

Crucible Capacity	1,000 kg × 2 furnaces
Rectifier Power	700 kW
Max Temperature	1,700 °C
Melt Cycle	60–90 minutes typical
Daily Throughput	~24–32 tonnes/day
Power Supply	480V or 600V 3-phase, 1,000A service
Cooling Water	Demineralized, < 30°C, < 50 µS/cm
Lead Time	120–150 days from PO

EQUIPMENT SPECIFICATION

SKU	Machine	Capacity / Power
AVM-HTF-1000-IF	Dual-Tilt Induction Furnace	2 × 1,000 kg / up to 1,700°C
AVM-HTF-1000-RC	Medium-Frequency Rectifier	700 kW · 500–2,500 Hz
AVM-HTF-1000-CT	Closed-Loop Cooling Tower	50–100 m³/h · 18 kW
AVM-HTF-1000-TG	Tilt Gearbox & Hydraulic Unit	Full tilt ≤ 90 s · 5.5 HPU
AVM-HTF-1000-CR	Control Room (PLC + HMI)	8 cabinets + HVAC
AVM-HTF-1000-MT	Casting Mold Track	10–20 molds · 4 drive motors

COMMERCIAL TERMS

Lead Time	120–150 days from PO — FAT-tested before shipment
Warranty	12 mo workmanship · 24 mo rectifier IGBT/PLC · first-fill + spare crucible lining
Included	Engineering, FAT, refractory sintering supervision, operator training, O&M manuals
Certifications	UL, CE, ETL, ISO 9001 · IEC 60146 rectifier · UL 508A panels
Payment Terms	30% on PO · 60% on shipment · 10% on commissioning sign-off