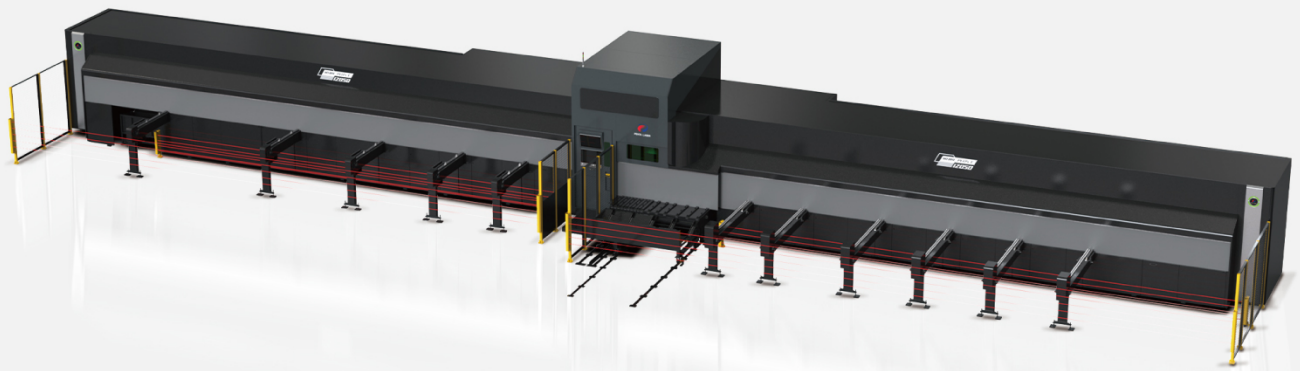
Profile Cutting Solutions

WPC Series Heavy-duty Three-chuck Laser Tube Cutting Machine (CE)

Penta Laser WPC Series Heavy-duty Three-chuck Laser Tube Cutting Machine is designed for processing heavy-walled tubes and structural profiles, including round, rectangular, square, and oval sections. Equipped with a semi-automatic loading system and long-material conveyor chain, it shortens load/unload time and reduces machine idle periods, significantly improving productivity. The machine incorporates multiple safety mechanisms and complies with Directive 2006/42/EC(CE standards).

CE



Characteristics

- Full safety: enclosure, light curtains, guardrails, door locks, safety PLC.
- Side-mounted bed with servo supports at loading and servo-tilt at unloading.
- Precision chucks with high sealing and strong clamping force.
- Three-chuck design enables zero-point cutting and zoned unloading.
- Semi-automatic loading system and conveyor chain for continuous operation.
- During the processing cycle, the residual waste is automatically conveyed out by the equipment without manual intervention.
- The short material conveyor adopts a multi-row chain tandem design, featuring a long service life and low maintenance frequency.

Optional Configurations

Bevel Module	Gapless Loading	No-stop Loading & Unloading
SPD (with chains)	Welding Line Detection	UL Standards Compliance

Technical Parameters

Model	WPC 12036/9036/6036	WPC 12050/9050
Laser Power (kW)	6 - 12	12 - 20
Maximum Loading Length(m)	12.5 / 9.5 / 6.5	12.5 / 9.5
Linear Axis Repeated Positioning Accuracy(mm)	±0.03	±0.03
Linear Axis Maximum Speed(m/min)	72	45
Rotational Axis Maximum Speed(rpm)	75	45
Rotational Axis Repeated Positioning Accuracy(Arc minutes)	±8	±8
Profile Range(mm)	Φ30 - 350 □30 × 30-350 × 350	Φ60 - 500 □60 × 60-350 × 350
Maximum Bearing Capacity of Tube(kg/m)	100	200
Chuck Control Type	Pneumatic Square Chuck	Precision Round Chuck
Unloading Length(m)	12.5 / 9.5 / 6.5	12.5 / 9.5
Support Type	Loading Floating Support / Unloading Flipping Device	

Applications


Mining Machinery


Petroleum Pipelines


Drilling Platforms


Shipbuilding