Plasma Cutting Machines

Plasma-Jet AirPro Compact 1530

SKU : 144047

The machines in the Plasma-Jet AirPro compact series offer good cutting quality with minimal operating costs. These economical cutting systems for air plasma sources were developed as a cost-effective solution for custom and small-series manufacturing; their compact design and low footprint makes them the perfect choice for workshops. The machines in this series are easy to operate and extremely reliable.

- Compact design, fast setup
- For air plasma sources by Hypertherm or Kjellberg (optional)
- EtherCAT technology for best CNC performance
- Professional Nesting Software solution included
- With vacuum table, also optional water cutting table

TECHNICAL SPECS

WORKING AREA

Cutting Width	61 in
Cutting length	120 in
Distance from torch to support table	7.87 in
Table height	20 in
Table load capacity	164 lbs/ft²
Rapid feed	591 in/min
Positioning accuracy	0.00197 in

MEASURES AND WEIGHTS

Weight	3410 lbs
Overall dimensions (length x width x height)	89 in x 164 in

© 2023 KNUTH Werkzeugmaschinen GmbH. All rights reserved
Published on: 03/24/2024

Shown with options

PRODUCT DETAILS

Construction

- The one-piece design with guides built into the table frame allows the system to be transported while assembled and guarantees fast and easy start-up
- The cutting table is configured initially with a vacuum exhaust, or systems can also optionally be equipped with a water cutting table
- For highest efficiency of the optional vacuum and filter system, the work area is vacuumed in segments, mechanically switched by the moving machine bridge
- The material support grid consists of exchangeable arched flat steel elements

Guideways and Drives

- The selection of components used guarantees high cutting functionality and process safety
- The machine bridge is driven synchronously from both sides and travels with high dynamics and no oscillation torque
- Powerful Panasonic AC servomotors guarantee precision contours, with no-maintenance, no-play planetary gears and precise helical gear drives
- The high-quality linear guides on all axes are robust and accurate, easy to maintain and long-lived

The cutting systems can be equipped with plasma sources from the Hypertherm Powermax or Kjellberg CutFire series. (see options)

Cutting capacity

- Kjellberg CutFire 100i: cutting up to 40mm, grooving up to 20 mm
- Hypertherm Powermax 105 Sync: Cutting up to 38 mm, grooving up to 22 mm
- Hypertherm Powermax 125: cutting up to 44 mm , grooving up to 25 mm

Cutting head

- The distance between plasma cutting nozzle and plate surface is determined by the Z axis height setting, which is controlled by an electric arc
- A built-in sensor-controlled collision guard prevents damage to machine and workpiece
- A magnetic coupling facilitates plasma burner setup and maintenance work

CONTROLS & SOFTWARE

PULSER 3 CNC unit

© 2023 KNUTH Werkzeugmaschinen GmbH. All rights reserved
Published on: 03/24/2024

- The PULSER 3 CNC control with 15” touchscreen is designed for modern cutting applications and easy to operate.
- EtherCAT fieldbus, the modern industrial Ethernet technology, makes cutting systems faster and more reliable. As the central element in the control architecture, it plays a decisive role in the performance and durability of the entire system.
- Depending on the optional plasma source selected, ProNest LT Essentials or the IBE cncCut Nest Software is included as standard equipment.

STANDARD EQUIPMENT

PULSER 3 CNC unit
15'' HMI with touchscreen
ProNest LT Essentials
Table is prepared for filter system (mechan. closure control)
Automatic torch height control with THC sensor
Cutter torch with magnetic coupling and crash sensor
INVT Servomotoren und Antriebe
Laser pointer
Operator instructions

OPTIONAL EQUIPMENT

- Plasma-Jet filter vacuum, 141 ft3/h, SKU : 253397
- Powermax 125 plasma source, SKU : 253715
- Powermax 105 Sync plasma source, SKU : 253888
- Software option ProNest LT (not included in price), SKU : 254125
- Water table for plasma cutting systems, SKU : 253403
- Engraving and Marker add-on for PowerMax and MaxPro, SKU : 253815
- CutFire 100i plasma source, SKU : 253391
- Maxpro 200 plasma source, SKU : 253406

© 2023 KNUTH Werkzeugmaschinen GmbH. All rights reserved
Published on: 03/24/2024