General-purpose Plasma Cutting Robot That Can Handle Various Three-Dimensional Workpieces

Plasma Cutting System

Challenges in Automated Plasma Cutting

- Low versatility with expensive special-purpose machine
- Setting of cutting conditions and teaching of cutting start operation are complicated
- Work-torch distance is not constant and cut quality is not stable

Automated with plasma cutting system

- H steel, head plates, beveling, etc.
  Cutting various three-dimensional shapes with a single robot system

Equipped with plasma cutting instruction only

- Simple teaching of machining conditions/start operation
- Automatic torch height control for workpiece misalignment and thermal distortion during cutting

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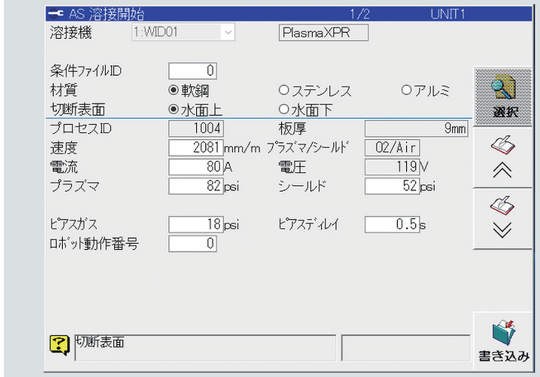
Dedicated Instructions for Plasma Cutting

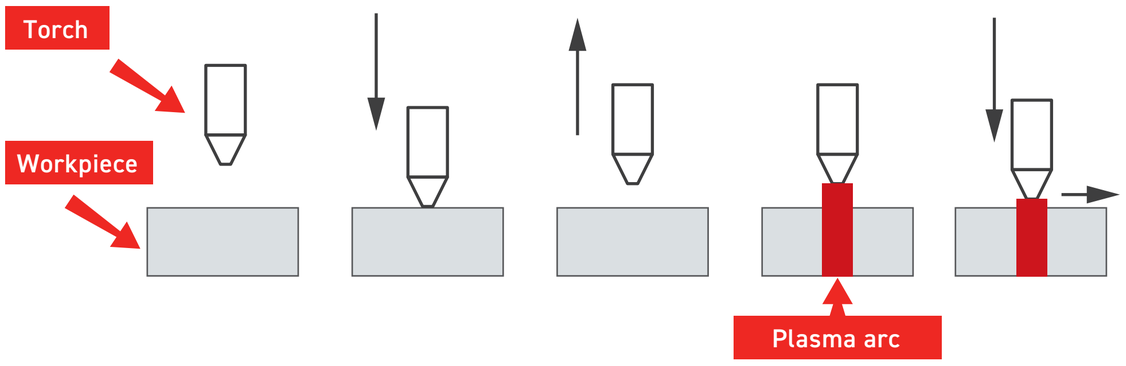
① Automatic teaching of cutting conditions

- Equipped with a standard cutting condition database to automatically teach cutting conditions for each material and thickness



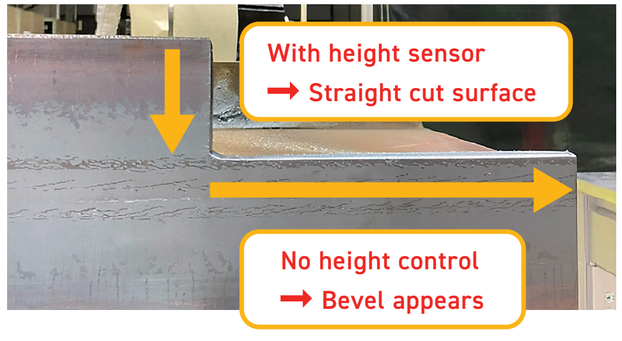
② Maximize consumable life

- Automatic generation of operations from touch to cutting start to prevent damage to consumables and reduce choke stoppages



③ Realizes high-quality cutting

- Height control automatically controls the height of the torch to maintain a constant distance between the torch and the workpiece during cutting to achieve a straight cut surface free from cutting failures and bevels.



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The Extra-long Reach Medium Class Robot FD-V25L

Overwhelming reach of 3m

- Automation of a wide range of tasks without a slider

High-speed operation

- Contributes to shorter tact time with the highest operating speed in the same class

Various applications

- Cutting and handling tooling can be mounted with a payload 25kg