

Plasma Cutting Robot System

Challenges in plasma cutting automation

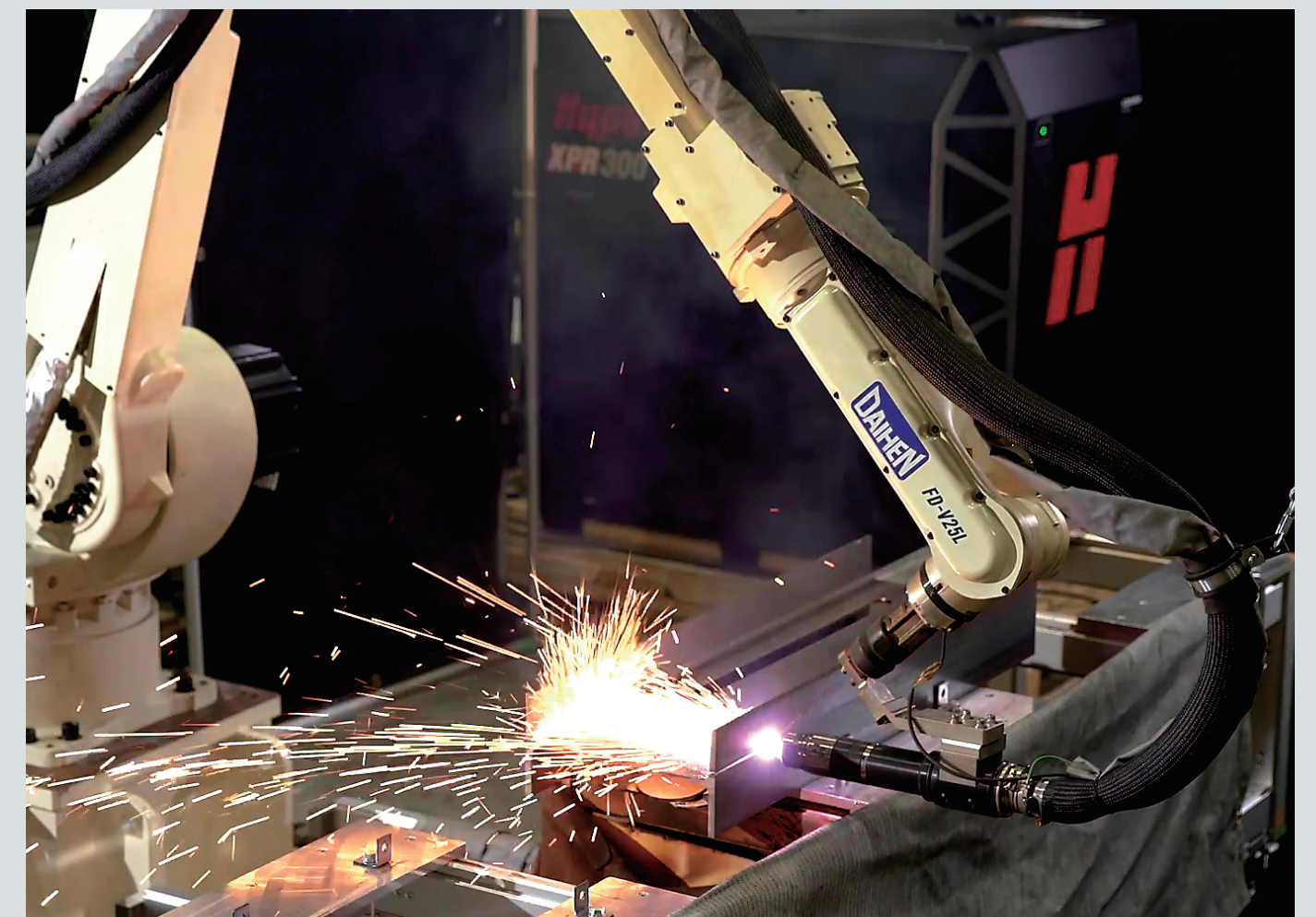
- High cost of dedicated equipment with low versatility
- Cumbersome cutting condition setup and teaching of cutting start operations
- Workpiece-torch distance is not constant, resulting in unstable quality

Long-reach robot with unlimited movement

- A single robot system performs bevel processing and marking on various 3D shapes, such as H-beams and head plates.

Equipped with dedicated plasma cutting commands

- Automatic teaching of processing conditions/starting operations
- Automatically controls torch height according to workpiece position deviation and thermal distortion during cutting



Specialized Commands for Plasma Cutting

① Automatic teaching of cutting conditions

- Standard equipped with a cutting condition database, automatically instructs cutting conditions for each processing method, material, and plate thickness

② Maximizes consumable life

- Automatically generates the sequence from touch sensing to cutting start to prevent consumable damage and reduce minor stoppages

③ Achieves high-quality cutting

- Height control automatically adjusts torch height to maintain a constant distance from the workpiece during cutting. to maintain a constant distance between the torch and the workpiece during cutting. This achieves a straight cut surface without defects or bevel formation.
- Supports bevel cutting and cutting using external axes

