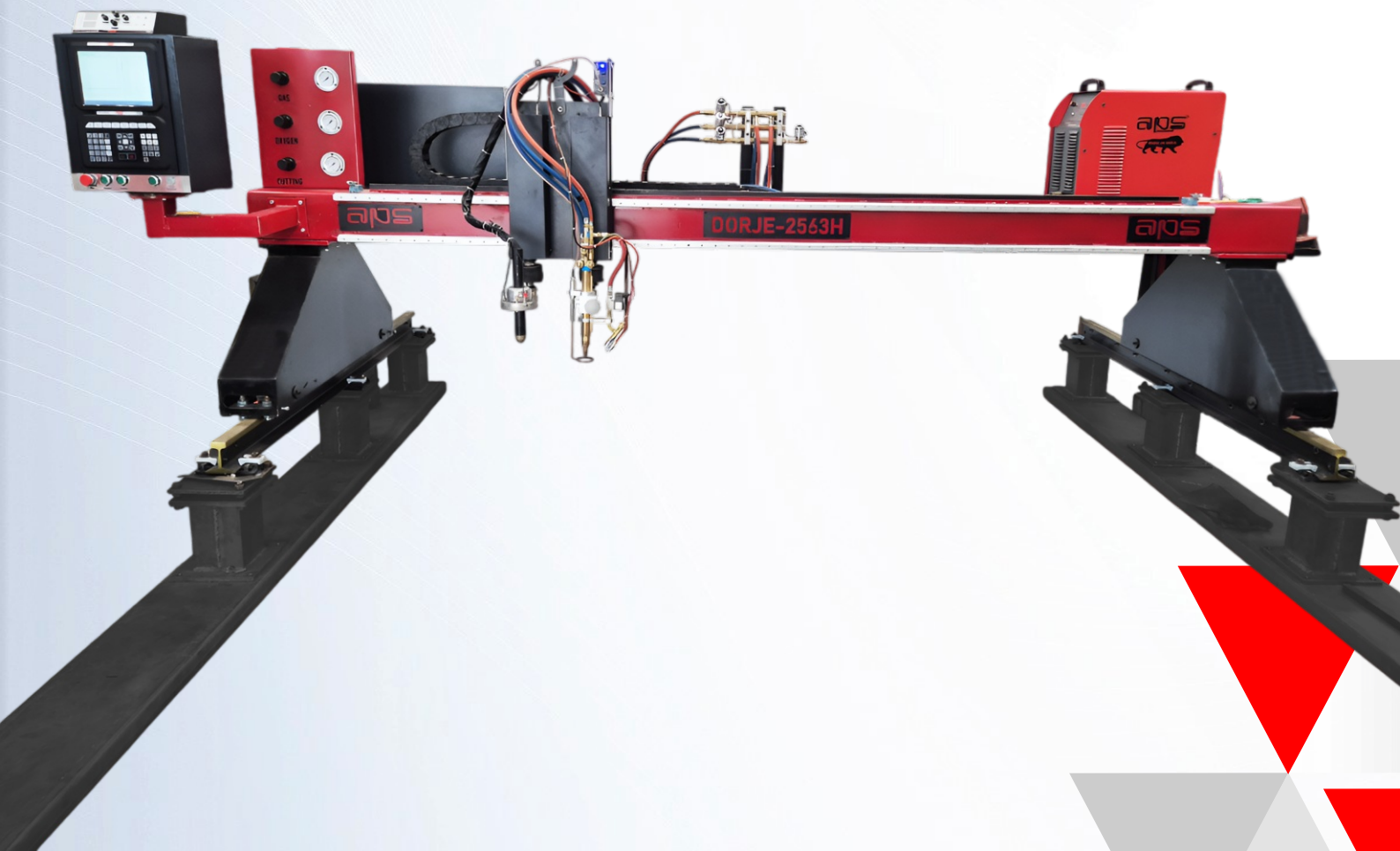


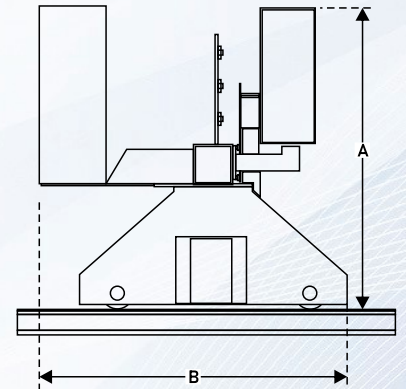
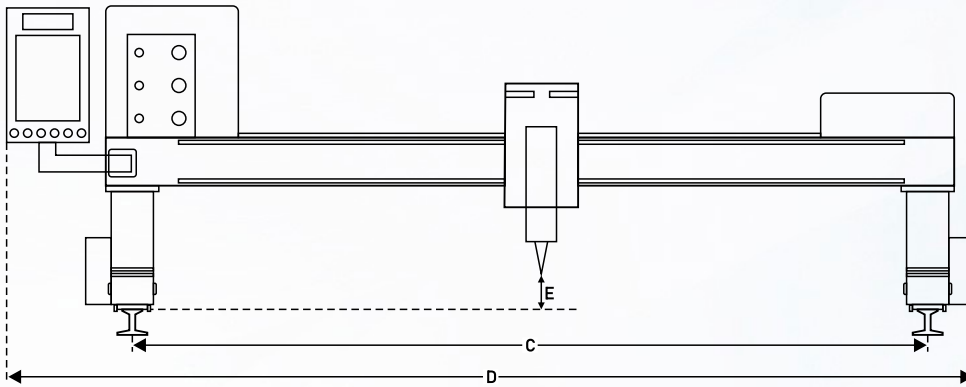
DORJE Series CNC Gantry Cutting Systems



ADVANCED POWER SOURCES LIMITED

Survey no 172/1, Paikee 2, Old GIDC Gundlav, Valsad, Gujarat - 396035. INDIA.

Ph: 9601444111 / 9118337711. email: sales@apswelding.com. Web: www.apswelding.com



Mechanical Dimensions

| Model No. | Dimensions (mm) | | | | | Rail Length in (mm) | Cutting Area in (mm) |
|--------------|-----------------|------|------|------|-----|------------------------|-------------------------|
| | A | B | C | D | E | | |
| DORJE-1530H | 1250 | 1150 | 2350 | 3100 | 50 | 4000 | 1500 x 3000 |
| DORJE-1563H | 1250 | 1150 | 2350 | 3100 | 50 | 8000 | 1500 x 6300 |
| DORJE-2063H | 1250 | 1150 | 2850 | 3600 | 50 | 8000 | 2000 x 6300 |
| DORJE-2563H | 1350 | 1400 | 3550 | 4520 | 100 | 8000 | 2500 x 6300 |
| DORJE-25120H | 1350 | 1400 | 3550 | 4520 | 100 | 14000 | 2500 x 12000 |
| DORJE-3063H | 1350 | 1400 | 4050 | 4820 | 100 | 8000 | 3000 x 6300 |
| DORJE-30120H | 1350 | 1400 | 4050 | 4820 | 100 | 14000 | 3000 x 12000 |

Other Specifications

| | |
|--------------------------|--|
| Torch Type and Quantity: | Oxyfuel Torch - 1nos (PNME Torch, Material:Ms) Plasma Torch - 1nos (Material MS / SS, as per power source and torch selection). Torch quantity can be customized as per requirement. |
| Cutting Thickness Range: | Oxyfuel Flame Cutting - 5 to 200mm by oxy-flame cutting (Piercing 80mm). Plasma Cutting - 1 to 35mm as per plasma power source capacity. |
| Drive Mode: | Servo Motor based Dual Drive in Y-Axis and Single Drive in X-Axis. |

Technical Specifications

| | |
|---|---------------------------------------|
| Maximum freewheeling velocity: | 12000 mm/min |
| Flame cutting velocity range: | 50 to 700 mm/min |
| Flame cutting thickness range: | 5 to 200mm |
| Position accuracy: | ±0.5 mm/meter |
| Repeatability: | ±0.5 mm/meter |
| Shape Accuracy: | ±0.5 mm/meter |
| Kerf compensation: | ±15mm in 0.1mm increment |
| Adjustment range flame/plasma cutting torch height: | ≤150mm |
| Operating voltage (CNC): | 240VAC ±5% 50Hz (Stabilizer required) |
| Operating temperature: | 5-45 degC, relative humidity ≤95% |

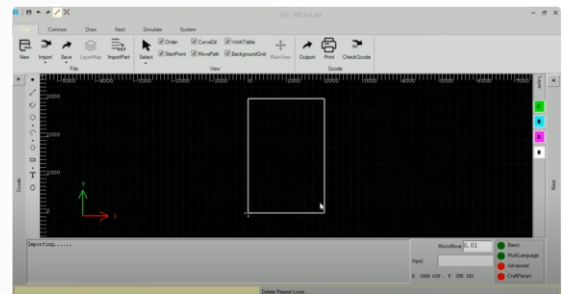
CNC-Controller: F2300B



- ✓ **Display:** 10.4 inch high resolution LCD color display.
- ✓ **CPU:** Industrial ARM9.
- ✓ **Program Space:** 256M electronic hard disk.
- ✓ **USB:** USB 1.1 interface with 16GB disk compatible.
- ✓ **Keyboard:** Electronic PCB foil keyboard.
- ✓ **Chassis:** Full steel structure completely shielded for EMI.
- ✓ **Pre-loaded Shapes:** 49 categories of preloaded graphics.
- ✓ **Code support:** Supports EIA code (G -Code) with suffix such as TXT, CNC, NC, MPG, B3.
- ✓ **Operations:** Proportion/Zoom/Rotate/Mirror/Array/Angle.
- ✓ **Power off memory:** Automatically store last location.
- ✓ **THC:** Plasma Torch height controller
- ✓ **CHC:** Capacitive Height controller for Flame cutting.

Software Utilities: FLCAM Nesting software

- ✓ FLCNC part generating and **nesting software** for automatic programming on a separate PC.
- ✓ **Integrated post processors** for path programming.
- ✓ NC graphic verification with interactive array creation.
- ✓ **Import DXF/PLT/CAM** and various G-code formats.
- ✓ **Simulation** facility available for testing cutting path.



AC Servo Drive and Motor system



- ✓ **Servo motors** with precision planetary gearbox.
- ✓ **Servo Drives** Panasonic/Fuji for precise control and positioning.
- ✓ **Rack gears** in Y axis and X axis with precision pinion gears.
- ✓ **Backlash free system** using spring loaded gear engagement.
- ✓ **Dual motor** for Y axis, 1 motor on each side of the gantry system.

Torch Lifter system

- ✓ **Motorised height** adjustment system.
- ✓ **High Accuracy** using precision parts, Tolerance: 0.01-0.005mm.
- ✓ **DC Motor drive** with PWM control for positional accuracy.
- ✓ **Ball Screw mechanism** for backlash and vibration free movement.
- ✓ Dust protected casing.
- ✓ **Speed:** 15 m/sec and LIFT: 150mm/200mm



Other parts

- ✓ **Machined Rail Tracks** for precision movement. heavy duty 24kg/mtr.
- ✓ Rack & Pinion machined gears.
- ✓ **High quality electrical** panel parts.
- ✓ **Anti collision** block units.



Scope of Supply:

APS Scope of supply:

- 24Kg machined rail structure for Yaxis with rail pad assembly as per required length.
- Main body gantry type with machining and fitted with all peripherals.
- Cable Drag chain and support tray for all Y axis and X axis.
- Machine electrical panel with I/O board and wiring.
- CNC controller unit with THC and CHC (optional).
- Servo drive and motor system. Y axis 750W-2nos and X axis 400W-1nos, fitted with planetary gearbox and spur gear.
- Arc voltage height sensor and THC system.
- Torch lifter unit with 24VDC motor assembly for plasma and flame system as per selected model and choice of operation capability.
- Anti collision system torch holder with proximity switches and isolated torch holder.
- Flame cutting system PNME type with flashback arrester installed with ISI grade pipes.

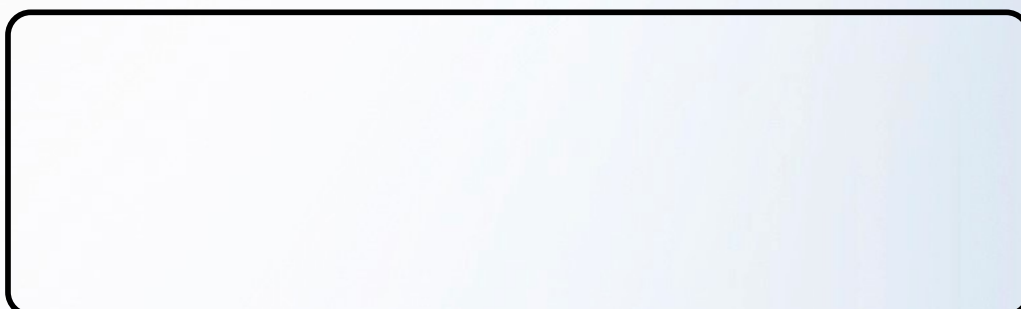
Customer Scope of supply:

- Electrical connection box with main switches and fuses.
- Provision of overhead crane or Hydro crane and operators during installation.
- Provision of welder with welding machine for rail installation.
- Provision of steel plates, power, gas and tools (a welding machine, a hand drilling machine, levelling instrument) for installation & commissioning.
- Cutting table. Note: We can provide drawing for the same.
- Civil foundation with H Beams. Note: We can provide drawing for the same.
- Compressor (5HP to 10HP) with air drier (40CFM) for plasma cutting operation.

Other terms and conditions:

- Warranty: The warranty will be 12 months from the date of installation or 13 months from the date of dispatch, whichever is earlier and is applicable in respect of any defects or failure of the equipment supplied or for any loss, injury or damage is limited to being made good by repair defects or replacement which under proper use appear therein or arise solely from faulty materials and workmanship. Any production loss incurred due to non performance of the machine is not liability of Advanced Power Sources Limited.
- Inspection: The Inspection, if any will be carried out at our works before dispatch of the machine. The inspection charges will be nil. However, if any Third party inspection is to be carried out, the charges to be borne by you.
- Force Majeure: The deliveries indicated by us are subjected to delay beyond our control such as strike or labor unrest at our / Associates, sub – contractors workshops. ACT of God or political unrest, shortage of materials or strike by distribution agency or restrictions imposed by Government from time to time, disruption of rail / road transport on account of strike or Labour unrest by rail / road transport.
- Installation commissioning and training: Installation, commissioning and training of 3 days is included free of cost. Additional man days will be on chargeable basis.

Authorised Dealer

A large, empty rectangular box with a black border, intended for the signature of the authorised dealer.