



# DURAJET HV 3000

High Velocity Oxy-Fuel (HVOF) System



# DURAJET HV3000 HVOF SYSTEM INFORMATION

The DuraJet HV3000 Metalizing system melts metal powder by heat generated through combustion of fuel gas and oxygen. Metal powder is fed to a flame-spraying torch at a regulated speed which can be hand-held or motion-controlled to apply powder sprayed coatings to a clean grit-blasted surface. A continuous flow of compressed air surrounds the flame, atomizes the molten metal and disperses it over the surface of the object to be coated. The spraying torch may be guided by hand for spraying large or intricate pieces; for production work the torch may be mounted to a programmable equipment, such as an x-y manipulator or robotic arm. The company also has an in-house testing and training facility that offers guidance and parameters for clients to ensure maximum spray yield and top-quality coatings.

## KEY FEATURES

### HV 3000 SPRAY TORCH

The DuraJet HV3000 Spray Torch is simple to operate, rugged and lightweight. It is able to produce supersonic spray velocities which results in high quality coating and adhesion. The hand switch located at the side of the torch is easily operated during ignition and full spraying mode. There is also a powder feed On/Off switch located at the torch handle for manual spray operation. In addition, the handle can be removed to be mounted onto a robotic arm if automation is desired.



### HV 3000 CONSOLE PANEL

The HV-3000 Console Panel is used to adjust and monitor the gas flows. The Console uses flowmeters, pressure regulators and gauges for the different gasses and fuels which allows the user to have full control of the system. All internal plumbing is stainless steel tubing. Hoses for the torch and gas supplies are furnished, each with a different connector to prevent any confusion. For smooth and continuous operation of HVOF system, Dura-Metal built in a Gas Vaporizer unit for using LPG as a fuel gas as there is a continuous occurrence of liquid in the gas flame due to high pressure and flow in the HVOF spraying. Thus necessitates the use of gas vaporizer for a smooth trouble-free operation.





## DM 1200-PF POWDER FEEDER

The Powder Feeder (DM 1200-PF) is a controlled, pressurized unit that produces accurate, repeatable feed rates. The powder feeder is specially designed for High Velocity Oxygen Fuel (HVOF) gas torch. It's a robust and portable powder feeder, which is convenient for onsite work. The feeder operates on a volumetric feed principle where slots in a powder wheel at the base of the 90 PSI maximum pressurized canister fill with powder. As the powder wheel rotates past the exit port, the powder is metered into the powder hose and carried to the spray torch in the gas stream. The speed of the powder wheel governs the rate at which powder is delivered with high feed accuracy to the torch.

The feeder has its own regulator, flow meter, pressure gauge and digital RPM controller built in. It is 115/230 VAC, 50/60 Hz and remote control capable.

## HV-JET HYBRID ASSEMBLY

The DURAJET HV3000 HVOF System also comes with an optional add-on, water cooled jacket (HV-JET HYBRID Assembly). This module will replace the original Air Cap, located at the torch's head, from air-cooled to water-cooled.


Although the HV-JET HYBRID itself is water-cooled, the combustion chamber behind the Air Cap is still air-cooled. Thus, this significantly minimizes the amount of water needed for cooling and increases the torch's thermal efficiency and also powder deposition efficiency. Applicators typically opt for this add-on when production hours are long.



### GENERAL

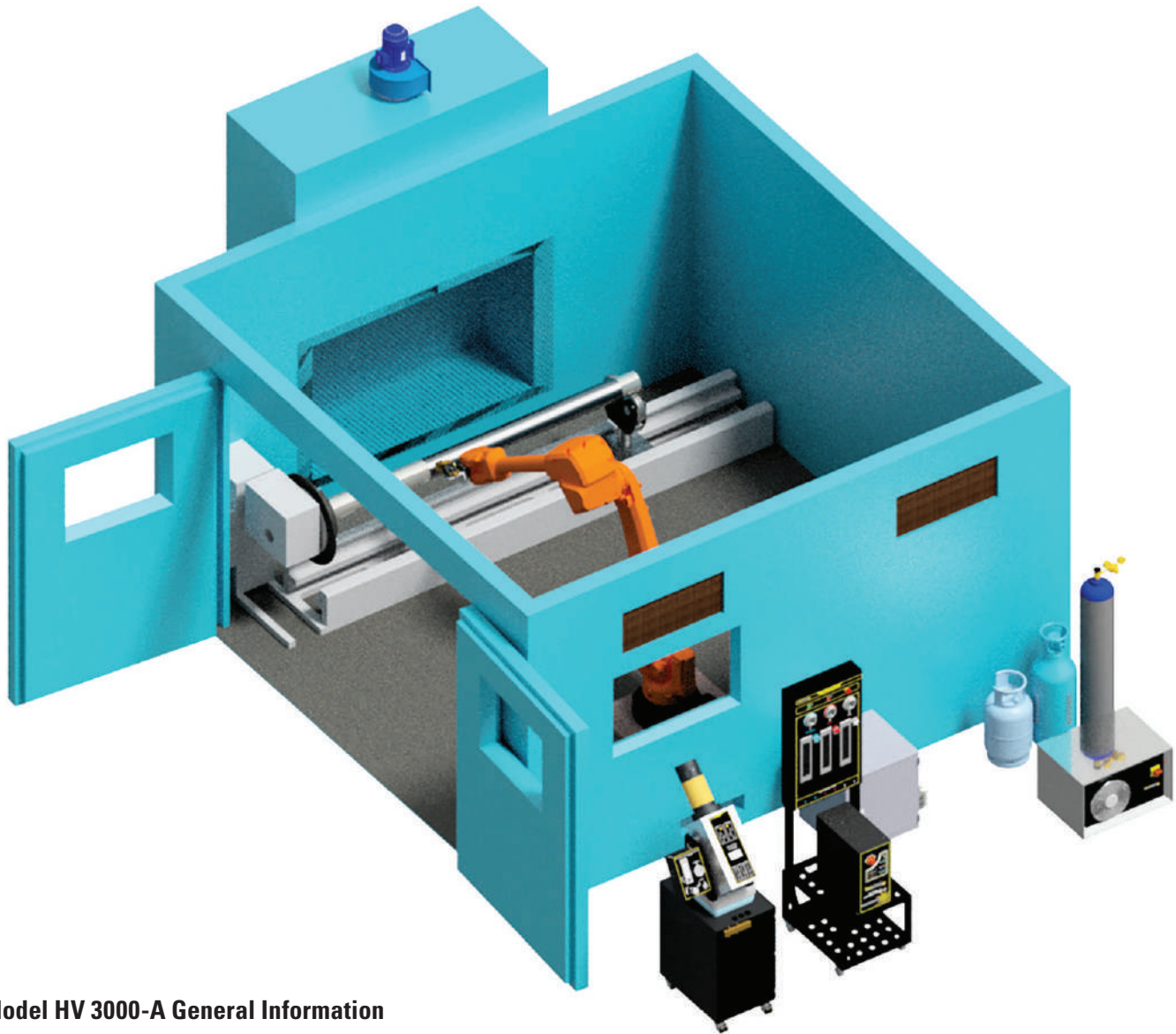
<b>WARRANTY</b>	1 year warranty
<b>BACK UP UNIT AVAILABILITY</b>	Yes
<b>TRAINING</b>	Yes
<b>TECHNICAL SUPPORT</b>	Yes
<b>APPLICATION DEVELOPMENT</b>	Free consultation





## HV 3000-A HVOF TURNKEY AUTOMATION SYSTEM IS DESIGNED & CUSTOM-BUILT FOR DIFFERENT APPLICATIONS

Dura-Metal's range of thermal spray equipment is well-known in the market for its reliability and quality. We have designed and manufactured a wide range of semi-automated and fully automated equipment & fixtures for thermal spray application. Our experienced mechatronics design engineers/technicians are trained to assist customers in their productivity and quality enhancement through innovative design and implementation.



### Model HV 3000-A General Information

- Able to start and ignite the gun automatically
- PLC based system
- With I/O signals or commands for integration
- Built-in Purge/Pressurizing Controller (Safety Device)
- Auto-Volt Supply in (100 ~ 240 VAC)

*For application specific guidance on proper spraying procedures and parameters, please contact us at [tech.support@durametal-alloy.com](mailto:tech.support@durametal-alloy.com)*

Dura-Metal North America Corporation ■ Dura-Metal (S) Pte Ltd ■ Dura-Metal (Shanghai) Co Ltd ■ Dura-Metal (Australia) Pty Ltd ■ PT Dura Metal Indonesia

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