

# THERMAL SPRAY COMPONENTS

## HV 80 HVOF Control Module

The AMT type HV 80 control module is designed to control liquid fuel HVOF thermal spray processes running with kerosene as a fuel together with oxygen (O<sub>2</sub>).

All components of the rigidly designed HV 80 controller are operator friendly and require low maintenance interventions. The HVOF thermal spray process media, the kerosene fuel as well as the oxygen gas, are controlled manually with industrially proved flow tube meters.

The HV 80 controller can utilize different stand-alone HVOF version powder feeders, including any HVOF type powder feeders already owned by the customer. The powder feed on/off command is controlled by the HV 80 control module.

The type HV 80 spray controller can be integrated with further existing components from the customer such as heat exchangers, handling equipment, exhaust filter systems.

All the safety devices such as backfire valves are mounted in the control module. It also includes the high voltage ignition unit for the spray gun. The HVOF spray gun is directly connected to the HV 80 control module.

Further HV 80 control module features are:

- A full and extended safety diagnostic system with integration of external safety features. Cooling water temperatures and flow are safeguarded.
- Pre-flow buttons to set the required oxygen gas and kerosene fuel flows.
- Monitoring of gas and fuel supply pressures and providing alarms in the event of low incoming pressures.
- PLC controlled (industrial standard type) providing maximum system stability and reliability.
- Full overview of all parameters at one glance, including system status and settings, cooling water temperature, operation hours and ignition counter.
- Nitrogen (N<sub>2</sub>) is used as a purge gas in the case of flame out

### Integration of Auxiliary Components

The HV 80 will control the following external components:

- Dust collector on/off (manual + automatic)
- Heat exchanger on/off (automatic)
- Powder on/off (manual + automatic)
- E-stop circuit



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