

PISTOL CONTROL CONSOLE (PCC)



**HMI Touch
Screen Control**

**Control
Box**

Metallisation are able to offer mass flow control systems that can operate Metallisation pistols, powder feeders and power supply (for the Plasma systems) as well as other commonly used industrial components. Metallisation PCC (Pistol Control Console) is divided into three options

1. HVOF - Gas fuel control system, for pistols such as Diamond Jet, Jetkote etc.
2. HVOF - Liquid fuel control system, for pistols such as JP5000, Wokajet etc.
3. PLASMA – 50 or 80 Kw operation, for pistols such as SG100, 9MB, F4, F1 etc.

A Metallisation PCC system can allow a mixture of systems to be linked through one Touch screen HMI display; for example an HVOF system operating a JP5000 can also have a Plasma system linked to it operating a 9MB or SG100 pistol.

Powder feeders such as the 9MP-DJ or 1264 can also be incorporated allowing existing equipment to be used with a new control system.

Some existing power supplies may also be used in the Plasma configuration, others may be limited in their integration.

Metallisation

Thermal spray equipment and consumables



Benefits

- ✦ Mass flow control of gases and powder carrier flow = repeatability.
- ✦ Easy to use, intuitive operator interface.
- ✦ PC control with industrial touch screen operator interface.
- ✦ Optional keyboard control and mouse or USB operator interface unit.
- ✦ Can be integrated with a barcode system for traceability and simplicity.
- ✦ Unlimited recipes and parameter recording through a simple Excel table.
- ✦ Data logging for process control and traceability.
- ✦ Possibility of multiple pistol choices on one screen.
- ✦ Manual or fully sequenced start-up, operation and shut-down, ideal for development or production.
- ✦ Internal safety interlocks to prevent running without coolant and gases.
- ✦ System control of the gas sequencing for safe operation of the system.
- ✦ Preset limits to inhibit system operation, for safety and quality: coolant pressure, temperature & flow; gas pressure & flow; carrier gas pressure & flow and kerosene flow with liquid HVOF.
- ✦ E-stop circuit with external interface to integrate into the safety circuit of the spray booth. Signals from the booth door, extraction system, robot, etc can all be linked into the system.
- ✦ Interface to allow Robot or Manipulator communication
- ✦ Meets safety requirements for separation of gases and electrical supplies.
- ✦ Compact inverter power supply for the plasma system.
- ✦ System Diagnostic screen for easy faultfinding.
- ✦ Ethernet connection for system diagnostics.
- ✦ Fault indication strobe.
- ✦ Fixing points to floor or wall mount.
- ✦ Windows operating system for easy programming and integration.

LAYOUT SCHEMATIC

