

# A-Flame

## AP5-II



## Powder Flame Spray System

### GENERAL DESCRIPTION

The AP5-II gun is designed for hand-held, manual operation, and it has a powder canister mounted on the gun. The gun is supplied with a tool post, for machine mounting.

The system includes a dual gas flow meter, for precise control of the fuel gas, and oxygen flows. The system also includes an air control unit, for the proper filtration and regulation of shop air, for cooling.

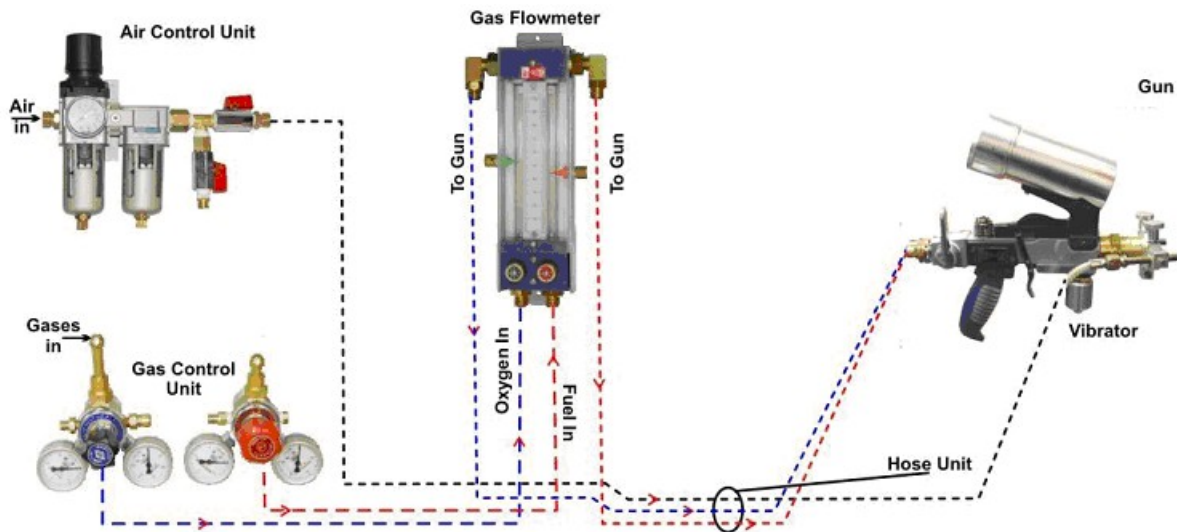
### Description of Items Furnished

#### IN THE BOX:

- AP5-II - Gun (includes): Cleaning Kit; Screw Driver; Spark Lighter; 2mm Allen key, and a tool post for machine mounting.
- AP5-ACU - Air Control Regulator with Double Filter & Auto Drain
- AP5-IIGFM - Gas Flow Meter Assembly
- AP5-G3 - Gas Control Meter Set (2) for both Oxygen & Fuel Gas
- H-50 - High Pressure Hose (Oxy, Fuel & Air)
- AP5-IIV - Vibrator Unit with Transformer Assembly

	REFERENCE PARAMETERS	
Gas	Operating Pressure	Consumption
Oxygen	2.2 Bar	2.7 Cu. m. / Hr
DA	1.0 Bar	1.7 Cu. m. / Hr
Powders	Spray Rates	Deposit Efficiency
Ceramics	0.9 Kg/Hr	25-75 %
Self Fluxing	9.1 Kg/Hr	85-95 %
Metallic	2.7 Kg/Hr	80 90 %

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## Typical Installation Diagram for AP5-II System

This gun was especially developed to take advantage of the economy, and uniform coating properties of the Thermal Spray Process. The powder in the canister, feeds by gravity through a metering valve, and is drawn, at reduced pressure, into an aspirator chamber. From the chamber, the powder propels through the flame, where it melts and is deposited on the work, in the form of a coating.

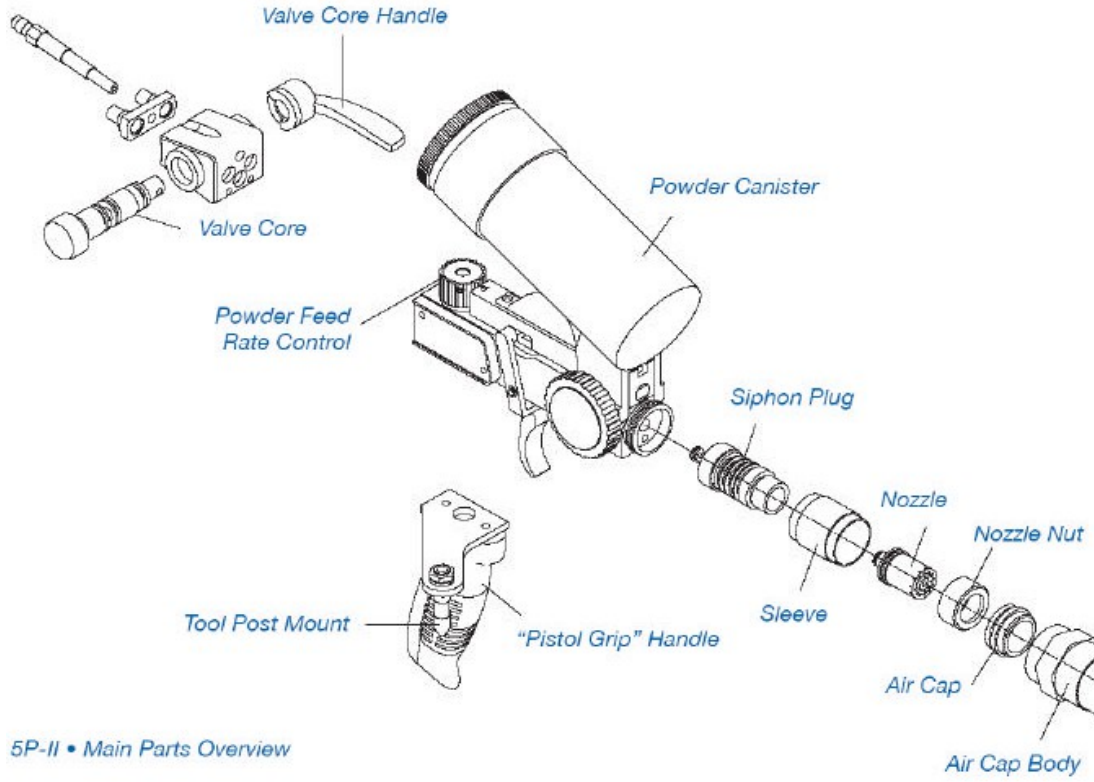
The gun will handle metal, ceramic, cermet and exothermic powders. It will produce coatings, with these powders, faster than any other comparable flame spray gun. The deposit efficiencies are very high.

Only a small amount of the powder is lost by being blown away, or vaporized. Another advantage is the density of the sprayed coatings, which permits better finishes, and less final finishing.

The type AP5-II will spray coatings, which are later fused, or coatings used "as-is", with high efficiency. Also, the gas head construction makes the gun resistant to backfire.

The AP5-II is designed primarily for hand-held operation, but it is suitable for production use also. A rugged tool post fixture is supplied with each gun, to permit mounting on a lathe, or other traversing mechanism.

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### Spray Rate of AP5II

Ni-Cr Self Fluxing Alloy	8 Kg/Hr	17.64 lbs/hr
Cobalt Based Self Fluxing Alloy	8 Kg/Hr	17.64 lbs/hr
Ni-Al Alloy	2.7 Kg/Hr	5.95 lbs/hr
Alumina-Titania	1.2 Kg/Hr	2.65 lbs/hr
Chromium Oxide	1.2 Kg/Hr	2.65 lbs/hr

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