



CATALOGUE

Electrical Arc Metallization Equipment



- 2021 -

130 A Push

electric spraying equipment – for Zinc and Aluminum wires



- perfectly balanced **light pistol**, connected to the generator by 3.5 m cables and hoses. The wires are pushed to the arc by a power supply placed on the generator. "Closed" nozzles system to reduce the spray cone and avoid zinc waste. The wire diameter is 1.6 mm.

Technical data of the gun applied to a powerful compressed air motor: 900-1.000 liters / minute with "closed" nozzles.

The pistol is connected to a set of 3.5 m of insulated cables and hoses for compressed air.

- **three-phase generator** protected by a silicon stabilizer. Voltmeter and ammeter are placed on the front of the generator. The selector and vernier can be adjusted according to operational needs. The compressed air is regulated by a switch. The current can vary from 25 Amp to 130 Amp by acting on the potentiometer. The generator is internally ventilated to ensure ample protection against short circuits caused by dust accumulation. it is Wheeled and equipped with brakes.

- on the back of the generator there is an **additional filter** that holds any micro-impurities present in the compressed air circuit.

- The **reel unwinder** is placed on the generator.

Technical data of the generator:

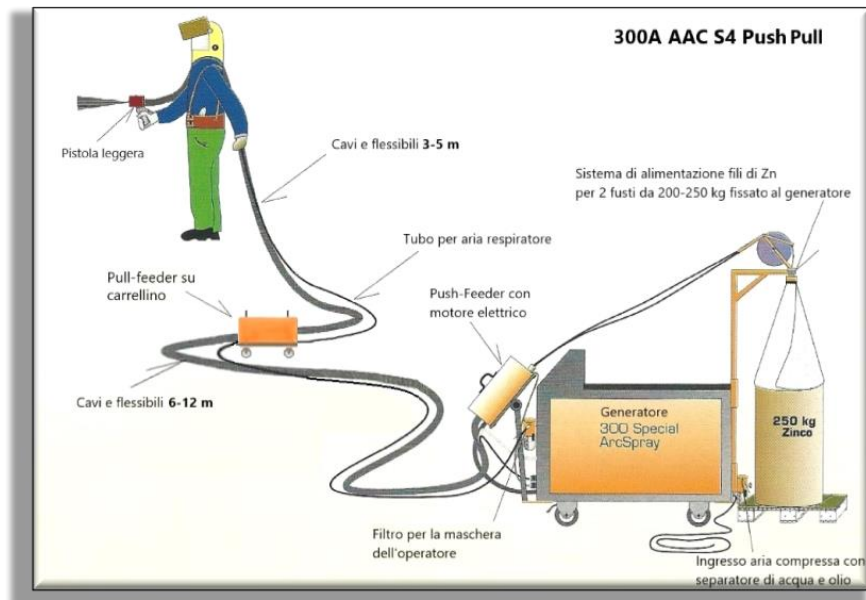
Voltage	three phase 50-60Hz, 400 V
Hourly capacity	8 kVA (13 kg/h Zn or 4,2 kg/h Al)
Compressed air	0,9 m ³ /min a 5,5 bar
Running	Voltage 28-32 Volts current 25-130 A
Dimensions	420 x 800 mm - h 400 mm

130 A Push electric spraying equipment



300 A AAC S4 – Push-Pull

electric spraying equipment for Zn and Zn/Al wires

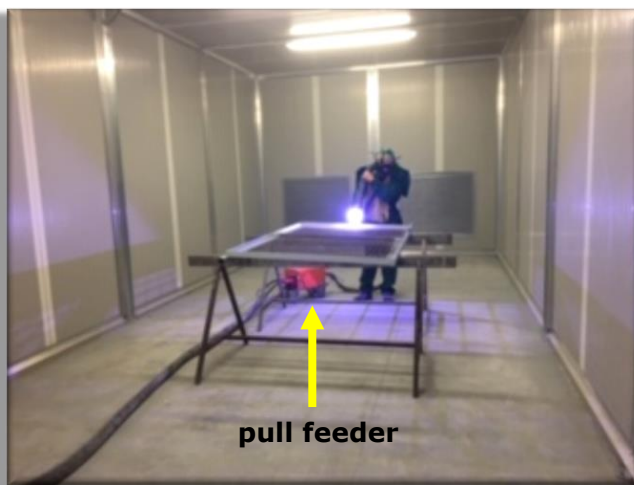


- The **generator** is connected to 380-440 volts AC with a 4-terminal cable, three-phase connection. The rectifier is intrinsically ventilated and heat dissipation occurs by convection.
- The **gun**, very light with a weight of about 900 gr, is equipped with an open nozzle system with copper nozzles, or with a closed nozzle system under tension with a diameter of 2 - 2.31 - 2.5 mm and an air atomization system designed specifically for spraying zinc. The gun is connected to the mobile pull-feeder (on a trolley) by a 3 m extension composed of 2 cables, an air atomizer flexible hose and a control cable.
- The **pull-feeder** is mounted on a trolley that can be easily moved by the operator according to his own working needs. The push-pull system ensures a radius of action of 6 m so the generator and the power supply can be placed in a place sheltered from dust. The two drive motors operate in sync and the push feeder motor (overhead) is slaved to the pull feeder motor (on the trolley).
- The 250 Kg **wire feeder** is composed of two forks with return pulleys isolated from each other that slide the two wires into the guides directly to the push-feeder in front of the feeder.

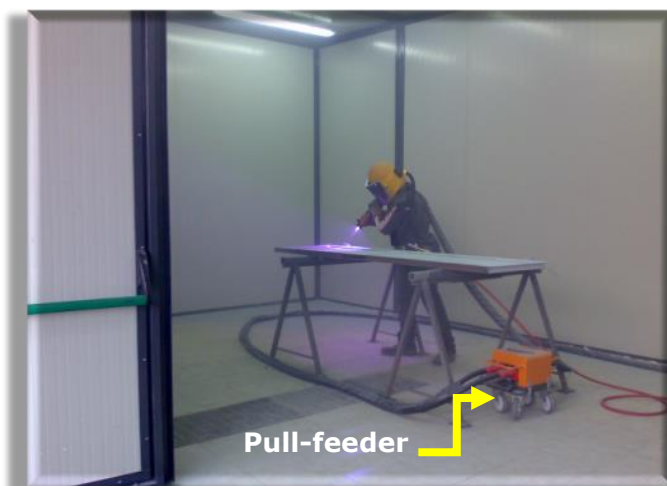
Main technical characteristics:

Continuous maximum current:	17 Ampere
Continuous maximum output:	10,6 KVA (100% ED)
Voltage:	17-36 Volt (n.20 intermediate adjustments)
Max:	36 Volt
100% power-on time:	300 AMP / 28 volt
Consumption of compressed air:	1.200 l/min
Spraying capacity:	30 kg/h of Zinc

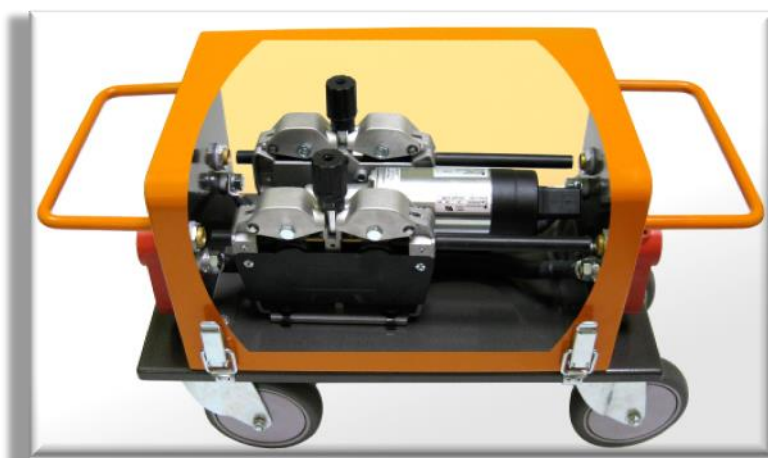
300 A AAC S4 electric spraying equipment



Generator and push-feeder outside the cabin – Pull feeder inside the cabin

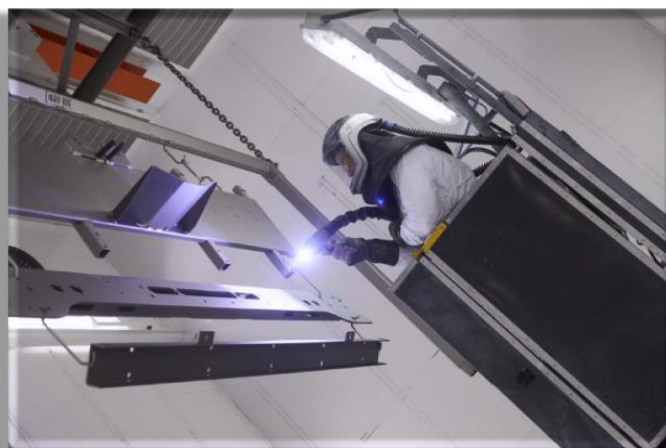


Lightweight gun AAC



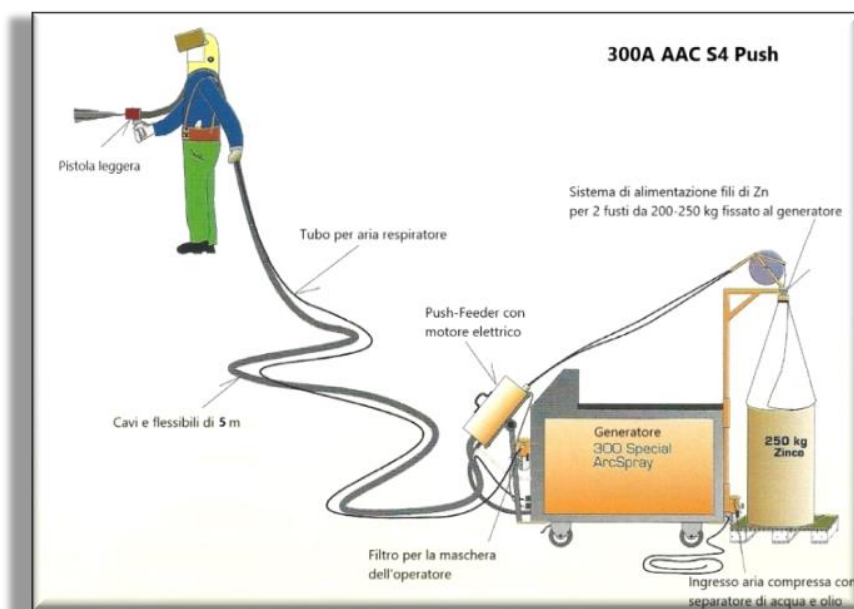
Pull-feeder S4 on a trolley

300 A AAC S4 electric spraying equipment

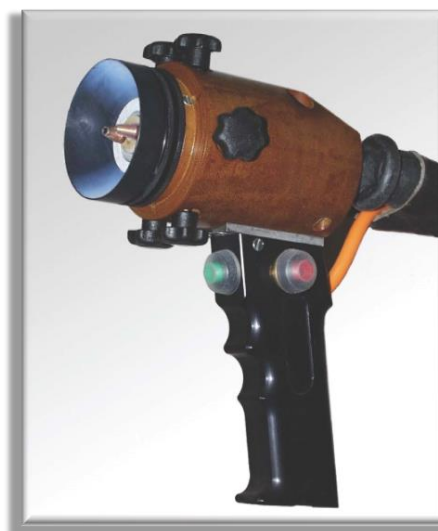


300 A AAC S4 Push for Zn and Zn/Al wire

Flow sheet:



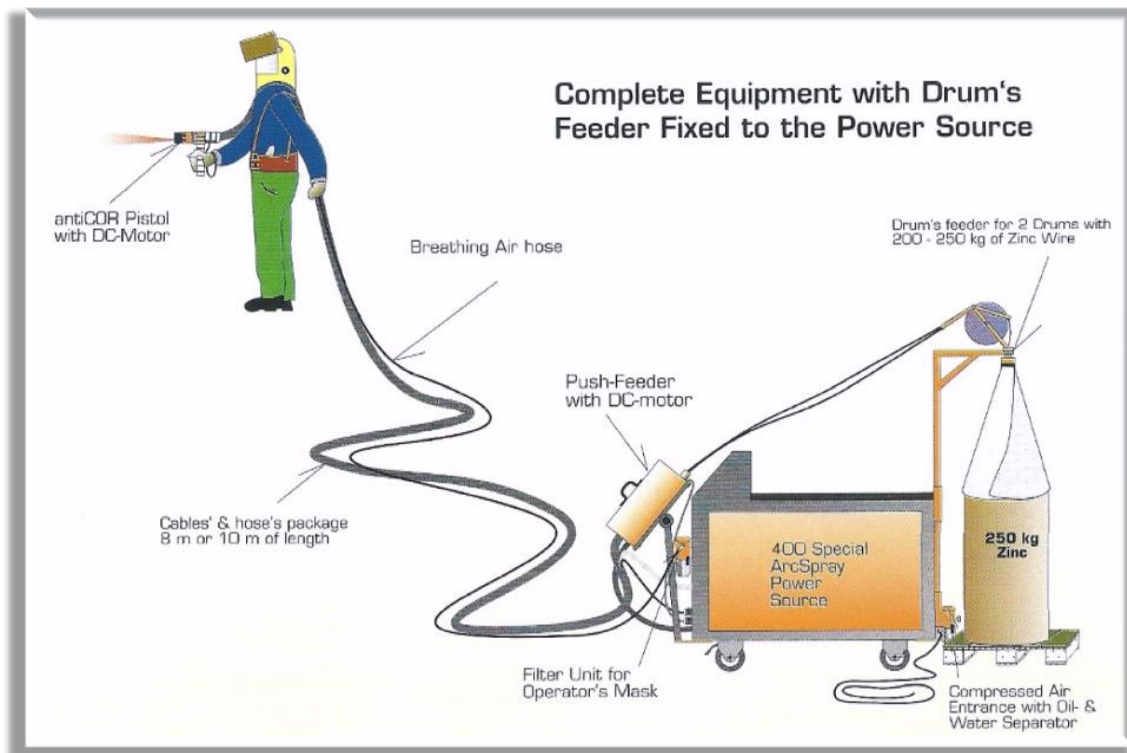
This system has the same technical characteristics as the 300 A AAC S4 Push-Pull configuration, but is not equipped with a pull-feeder on a trolley and has 5 m of cables between the Push-feeder and the gun.



Lightweight gun AAC

400 A AntiCOR

electric spraying equipment



- The **generator** is connected to 380-440 volts AC with a 4-phase three-phase connection cable. The rectifier is intrinsically ventilated and heat dissipation occurs by convection.

- The **pistol** (weighing approx. 2,5 kg) is equipped with a system of closed or open nozzles under tension with a diameter of 2.3 mm and an air atomization system specifically designed to spray zinc. The pistol is connected to the push-feeder placed on the console of the generator by a set of 8/10 m of cables and flexible: 2 cables, air atomizer flexible hose and control cable.

The pistol has a DC motor built into the safety system knob.

It can spray both zinc and aluminum and their alloys wires.

- The 250 Kg **drum feeder** (located on the back of the generator) consists of two forks with return pulleys, isolated from each other, which slide the two wires into the guides directly to the push-feeder in front supply

Main technical characteristics:

Continuous maximum current: 7 Ampere

Continuous maximum output: 10,6 KVA (100% ED)

Voltage: 16-35 Volt (n.20 intermediate adjustments) - Max 35 Volt

Consumption of compressed air: 1.200 l/min = 1,27 m³/min a 5,5 bar

Spraying capacity: **40 kg/h of Zinc** at 100 micron cover ca. 37 m²/h

10 kg/h of Aluminum at 100 micron cover ca. 28 m²/h

400 A AntiCOR electric spraying equipment



300 A LD/U-2 Push

electric spraying equipment for all metallic wires



- The **generator**, mounted on wheels, is connected at 380-440 volts with a cable with 4 terminals three-phase connection. The rectifier is intrinsically ventilated and heat dissipation occurs by convection.

Technical data: primary current: 17 Ampere - Capacity: kVA 11 - Volt: 16-35 V (20 steps) - Max Volt: 36V - Gear: 300 A at 28 Volt

Dimensions: width 603 mm - prof. 887 mm - height 1.420 mm - weight 244 kg

- The compact **pistol** has in its handle the air motor that allows a high torque and a safe supply of wires. It is completely isolated, this prevents any contact of the wires in the pistol caused by dragging, abrasion and poor metal. All the parts can be easily removed and replaced by the operator.

The pistol can be equipped with a closed nozzle system to concentrate the jet.

- **Tubes and hoses:** length up to **12 m** (without push-feeder: 3,5 m).

- **Wire feeders** from reels and drums.

- Additional activated **carbon filters** to purified air for the operator.

Diameter of the wires to be sprayed: from 1,6 mm to 2,5 mm.

Compressed air consumption: closed system 1,27 lit/min = 1,27 m³/min

Wires	Spraying capacity kg/h	Covering at 100 μ m m ² /h
Zn	30	26,10
Al	9,2	26,06
Cr	15	14,58
Al/Br9Mn	11,5	21,78
NiCr	16	18,56

600 A

electric spraying equipment



- The **generator** is trailerable and easily movable. All electrical components are well protected against dust. The cooling is by convection and prevents the suction of dust, minimizing the possibility of short circuits due to metal powders. All spray control instruments are placed on the upper front of the generator and are easily visible even from a distance. The connections of the electric cables and air hoses, located on the front of the generator, are easily accessible. The generator is protected against current overloads, overheating and compressed air pressure drops.

- The **pistol**, safe and manageable, requires little maintenance. It is equipped with a system of "open" nozzles or a system of "closed" nozzles which concentrates the jet and reduces the over-spray by about 20%.

The closed system allows to obtain:

- a) very fine and homogeneous coatings;
- b) greater coating / support bond;
- c) less porosity of the coating.

- Drum wire feeders.

Technical data:

Current:	600 A (max)
Voltage:	23-35 V
Weight of the generator:	ca. 310 kg
Dimensions:	1.140 x 600 x 970 mm
Consumption of air compressed:	1,30 m ³ /min - 1.500 l/min at 5,5 bar
Push-pull wire feed:	electric motor
Cables and hoses:	max length 8 m
Diameter of the wires:	2-2,5 mm

Spray rates a 100 µm

		Consumption Kg/m ²	Covered area m ² /h
Zn	60 kg/h	1,00 kg/mq	59 mq/h
Zn-Al	53 kg/h	0,78 kg/mq	68 mq/h
Al	18 kg/h	0,39 kg/mq	46 mq/h
Al-Mg	16 kg/h	0,37 kg/mq	43 mq/h

300 A LD/U-2 EM

arc spray equipment for covering longitudinal pipe lines welding

The **automatic spraying system** consists of:

- **Pistol** arranged for integration on existing production lines or to be adapted on robots. The pistol is sturdy to withstand even heavy operations. The complete isolation of both electrodes makes it impossible to make any contact in the pistol body caused by dragging, wire abrasion or metal dust. All parts can be easily replaced in a few minutes by the operator.

A powerful DC motor guarantees high torque and a constant and safe supply of wires in a wide spraying range from 35 to 300 A.

According to the user's requests, the pistol can be equipped with standard "open" or "closed" nozzles.

Diameter of wires: 1,60 mm.

Technical data of the pistol

Dimensions: length 283 mm - width 115 mm - height ca. 162 mm

Weight: 3,600 gr without cables

Color: orange

Air consumption: open system ca. 1.100 lit/min at 5,5 b

closed system ca. 1.500 lit/min at 5,5 b

Spray capacity at 300 A: ca. **30 kg/h of Zn** or **9,5 Kg/h of Al**

- The pistol is connected to the generator by a **Set of cables and tubes** composed of: air-cooled flexible cables (with the same atomizing air), a cable for the electrical supply of the DC motor, a control cable, 2 tubes insulators with TEFLON core and relative connections to the gun. Standard length of cables and tubes: 3.5 m.

- Drum wire feeders.

- 300A three-phase **generator** with silicon rectifier and valve specifically designed to spray Zn, Al, Cu and steel. The ammeter and the voltmeter are clearly visible on the console; special light switches indicate correct operation. The air flow to the pistol can be changed continuously by acting on the flow regulator thus determining the fineness of the coating. The current can be changed continuously from 35 to 300 A using the potentiometer. In case of overload or insufficient load, the system stops automatically and instantaneously. The generator is internally cooled by convection to protect against short circuits created by metal powders. A compressed air filter is placed on the back of the generator to retain any oils or moisture.

Technical data of the generator

Generator: three phase 50-60Hz 380-400V

Compressed air: ca. 1,20 m³/min at 5,5 bar

Voltage: Volt 18-35

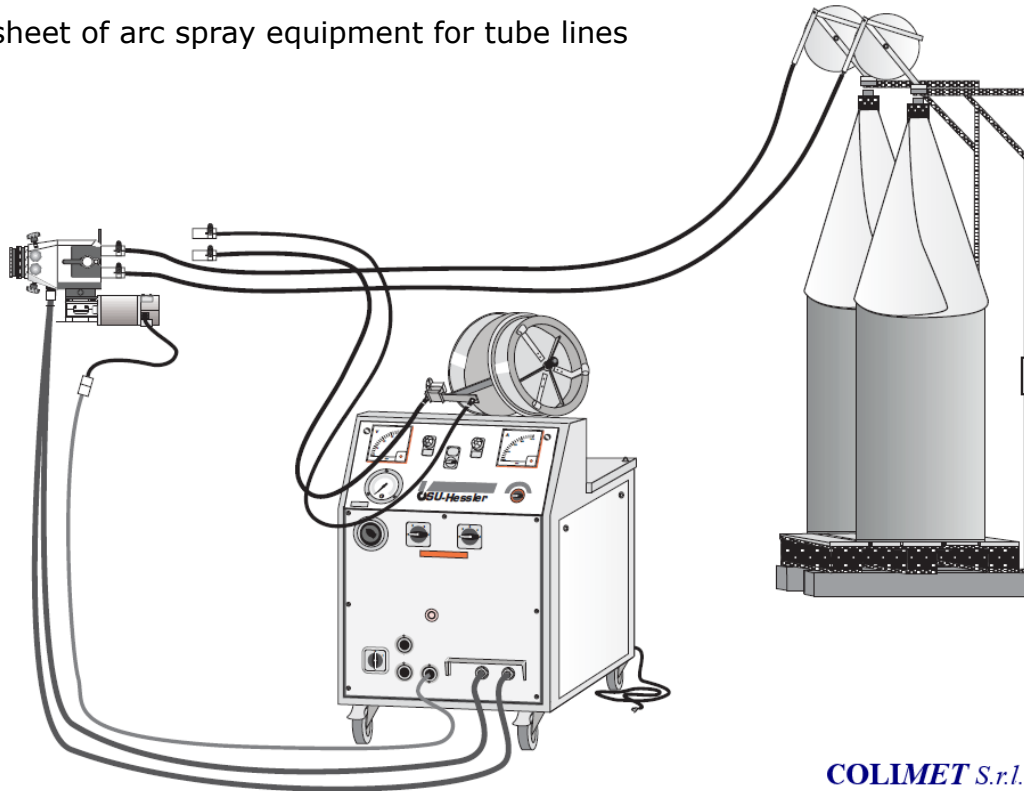
Current: 30-300 A – (average current: 17 A Cap. 1.050 VA)

Dimensions: length 600 mm - width 887 mm - height 1.360 mm

Weight: ca. 230 kg

300 A LD/U-2 EM arc spray equipment

Flow sheet of arc spray equipment for tube lines

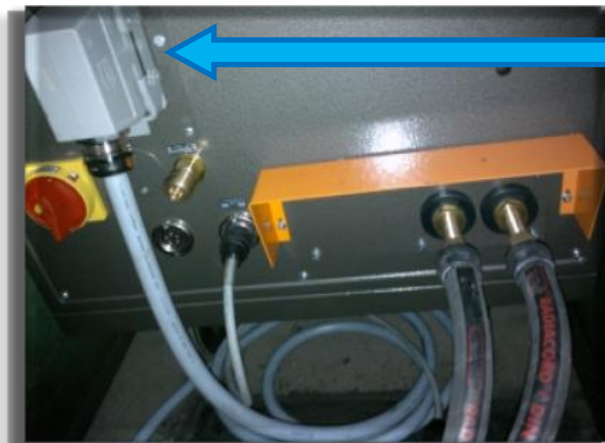


COLIMET S.r.l.



Generator with drums during the processing phase

300 A LD/U-2 EM arc spray equipment



Interface with tube line

LD/U-2 EMD Pistol without extension



LD/U-2 EMD Pistol with extension



300 A LD/U-2 EM arc spray equipment

Examples of pistol with extension before installing the spray booth



AC 2000

gas pistol – for Zinc and Aluminum wires



Flame spraying: **20-24 kg/h of Zn** or **6-8 kg/h of Al**

Suitable for spraying zinc wire and aluminum from 2.5 mm to 3.16 mm.

- The perfectly balanced **pistol** reduces operator fatigue and, although light, is extremely robust to withstand heavy working conditions. Equipped with a high capacity acetylene oxygen system and standard nozzles. The wire is pulled by a compressed air motor. The roller that carries the wire is placed directly on the main shaft of the air motor and this guarantees a high torque and a high number of revolutions. The wire gripping mechanism is completed by a ball pivot whose knurled head presses the wire onto the feed roller. The pressure on the rollers can be modified, depending on the diameter and the quality of the wire used, with the use of a normal screwdriver. The lid can be easily removed to feed the wires.

Technical data

Dimensions of the pistol: 220 mm x 78 mm x h 255 mm (including the engine)

Weight: Kg 1,980 including the engine, excluding flexibles

Consumption of air: 700 lit/min

Color: black

The pistol is connected to the gas pressure reducer of the cylinders and to the air control system.

- **Set of hoses and cables:** they consist of compressed air hoses to feed the motor and atomizer, flexible hoses for acetylene and oxygen for a length of 5 m (longer lengths on customer request).

- **Tripod** with a wire alignment mechanism.

- **Air regulation and control system.** With a filter of 50 cbm/h, with an air pressure regulator for atomization, injector for compressed air, socket to connect the operator's mask. The air regulator fixed between the legs of the coil feeder.

If required, the entire station can be placed on the wall with special equipment.