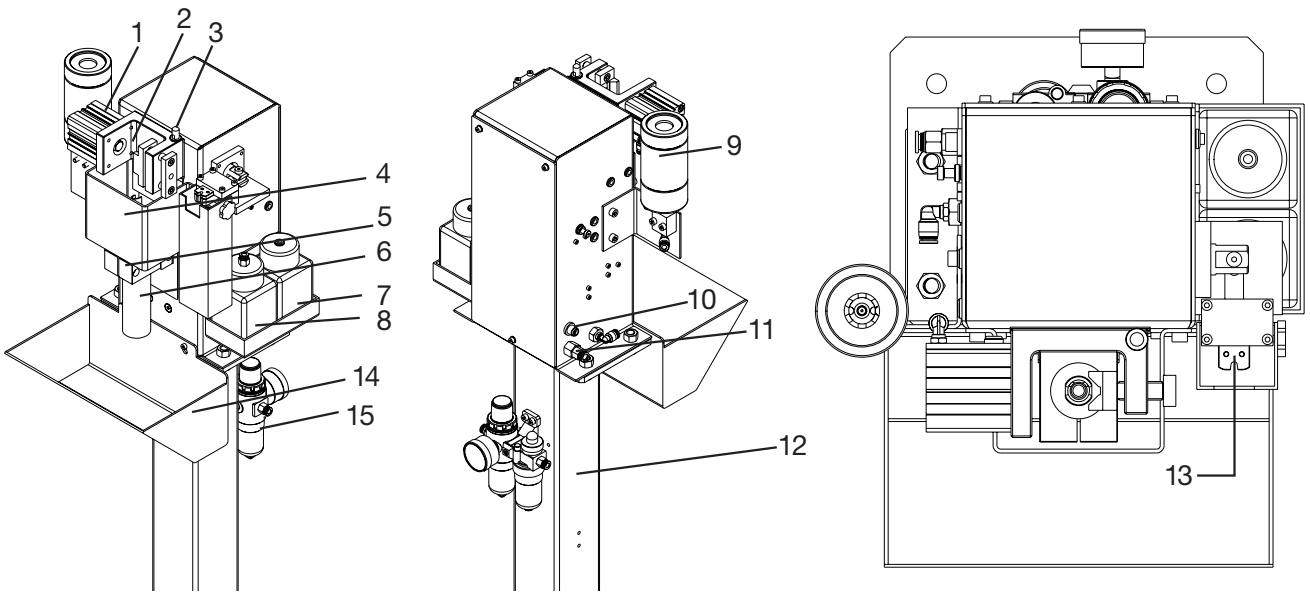
Reaming Station

SC220A

PARTS & COMPONENTS



Item	Part Name	Description
1	Nozzle Clamping Cylinder	Extends to hold nozzle while reaming
2	Locating block	Holds nozzle while reaming
3	TCP reference pin	Reference point for programming
4	Reamer protective cover	Protects the user
5	Motor mounting base	Adjusts height of pneumatic motor
6	Pneumatic motor	Drives reaming blade while cleaning
7	Waste anti-spatter bottle	Collects residual anti-spatter
8	Clean Strike™ anti-spatter supply	Supplies Clean Strike™ anti-spatter
9	Anti-spatter nozzle	Sprays Clean Strike™ anti-spatter onto nozzle
10	8-pin Aviation plug	Robot control interface
11	Air inlet port (8mm)	Connects air supply line
12	Reaming station stand (optional)	Supports and elevates reaming station
13	Wire cutter	Snips excess welding wire
14	Slag collection box	Collects slag and snipped welding wire
15	Inlet air filter/regulator	Provides dry and regulated air

See back for Technical Specifications & Reaming station wiring connections

TECHNICAL SPECIFICATIONS / SC220A Reaming Station

Inlet air pressure	87-116 psi
Operating ambient temperature range	23˚-122˚ F
Air consumption	13.3 scfm
Pneumatic motor	~650 rpm; 79 lbf-in
Control voltage	24V DC
Control current	Imax=0.15A
Anti-spatter bottle capacity	8.4 oz / 250ml
Wire cutting capacity - solid wire	.0625” MAX
Wire cutting capacity - flux-core	.126” MAX
Wire cutting time	Approx. 0.5s
Signal output (clamping cylinder)	U=24 VDC, Imax=0.1A
Compressed air source	Clean and lubricated compressed air, 5.5-8bar
Required air volume	Approximately 10L/S
Voltage and current	U = 24V D C, Im ax=0.15A
Anti-splash agent spray volume	adjustable
Cutting time	approximately 0.5 seconds

REAMING STATION WIRING CONNECTIONS

- The clamping device can accommodate nozzles with a maximum diameter of 32mm, no need to replace the positioning V-block.
- High-precision, high-rigidity pneumatic motor, large torque, can remove stubborn splashes, not afraid of overload long lifetime.
- The nozzle clamping cylinder return delay design, the reamer will return only after being separated from the welding gun nozzle, effectively avoiding the welding gun damage caused by the clamping cylinder returning in advance.
- The anti-splash device is placed in the shell, effectively avoiding accidental damage.
- Dedicated filter elements can effectively filter oil, water and impurities in the gas path, which improved the equipment lifetime.
- Confined oil injection space, waste oil can be collected and recycled, high-precision and high-rigidity cylinders are equipped with high-efficiency and environmental protection.

REAMING STATION WIRING CONNECTIONS

Pin	Color	Description	Type
#1	White	Nozzle clamp signal to robot	Output†
#2	Brown	Reamer (ground)	0 VDC*
#3	Green	Wire cutter (ground)	0 VDC*
#4	Yellow	Wire cutter	24 VDC
#5	Grey	Clean Strike™ anti-spatter (ground)	0 VDC
#6	Pink	Clean Strike™ anti-spatter	24 VDC
#7	Blue	Nozzle clamp from robot	24 VDC†
#8	Red	Reamer	24 VDC

* Connect Brown, Green, and Grey together to one terminal.
† Normally open circuit. Closes when nozzle clamp is activated.

Warning: To be performed by qualified technicians. Damage to equipment will occur if connections are incorrect.