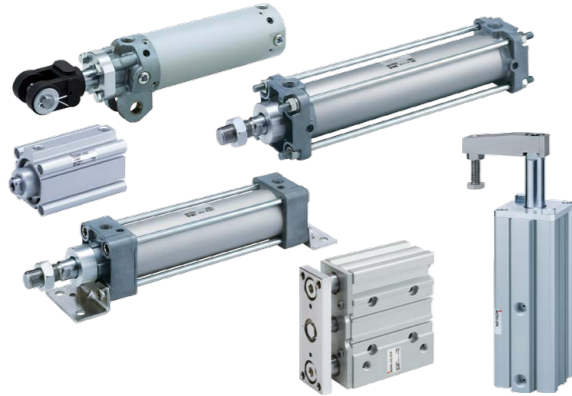


# Introduction of Arc Welding Process Equipment

## Spatter Resistant Cylinders for Arc Welding

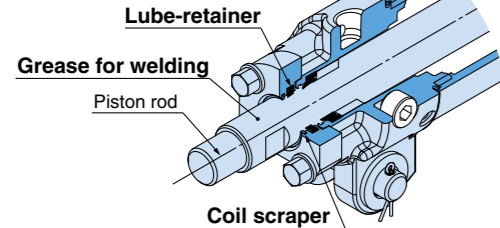


**XC88/XC89** CKG, CDQ2, CA2, MB, MGPM, MK2T-XC88/XC89  
p. 5

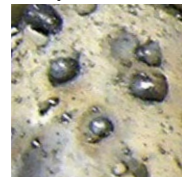
### Long Service Life

Spatter Resistant Cylinders for Arc Welding

- Achieves long service life by the use of the three roles of the coil scraper, Lube-retainer and grease for welding in one unit for a cylinder.
- Reduces spatter adhesion.

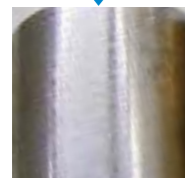


Spatter adhesion condition on piston rod (compared with coil scraper type (-XC35))

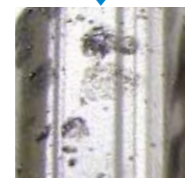


Spatter adhesion condition

After 1 operation



Spatter resistant cylinder for arc welding

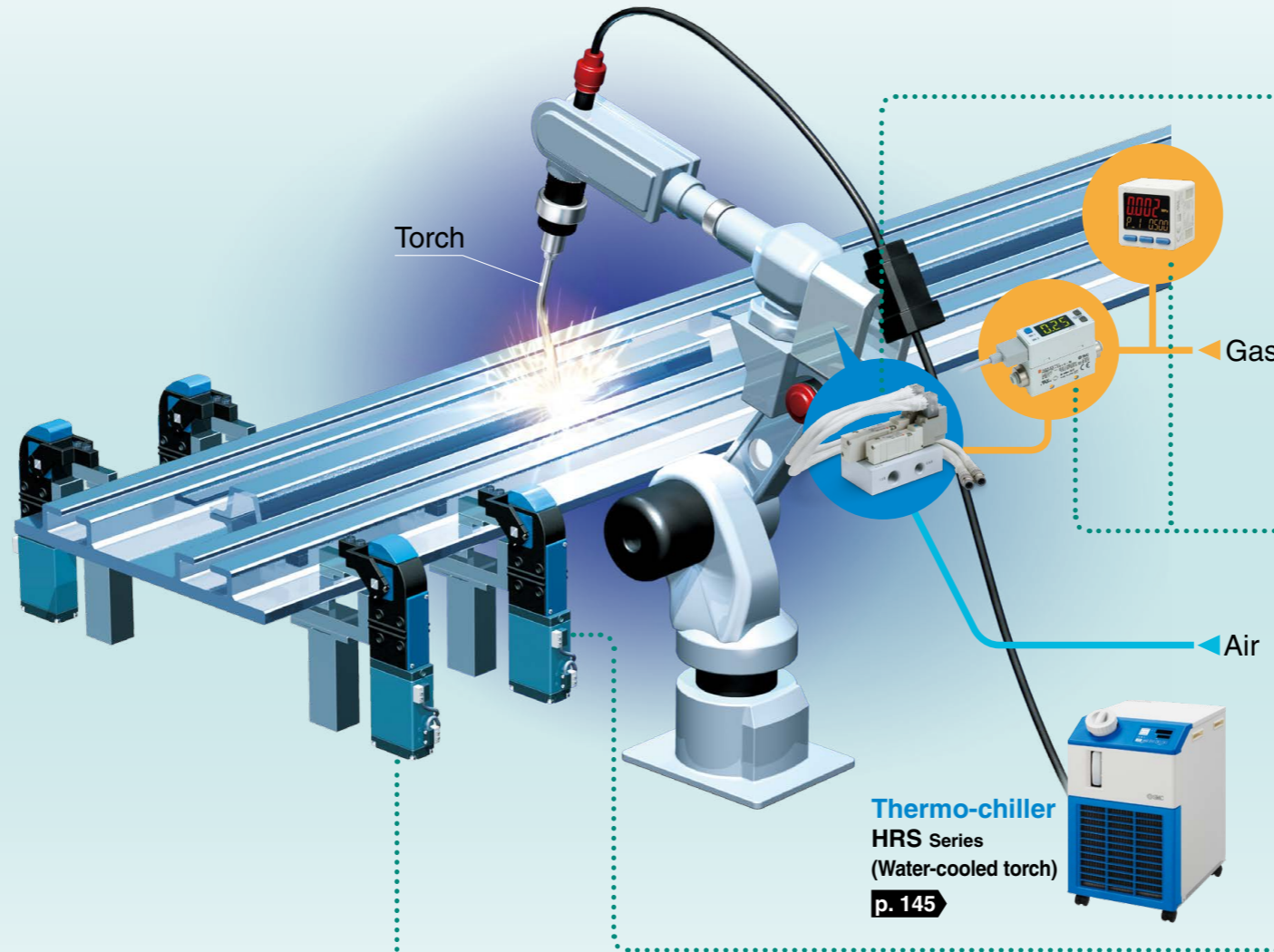


With coil scraper (-XC35)

**XC91**

**CKG, CDQ2, CA2, MB, MGPM, MK2T-XC91**  
p. 6

- Improves spatter resistance by coil scraper and grease for welding (compared with coil scraper type)
- Dimensions are the same as with coil scraper type (-XC35) and mounting is interchangeable. Possible to replace cylinders in existing equipment.

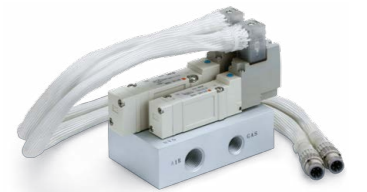


## Gas/Air Switching Valve

**SS5Y7-X424-Q p. 123**

Improved nozzle service life, reduction of the number of replacements and the tip costs

- Tip service life can be extended by blowing the air after arc welding.
- Shield gas valve and air blow valve are integrated.



## Detection Switches

**Digital Flow Switch p. 125**

**PFM7 Series**

- Allows flow rate control and value management of shielding gas.
- Compatible with the mixed gas (Ar + CO<sub>2</sub>)



**High-Precision Digital Pressure Switch p. 134**

**ISE20B Series**

- Allows pressure control and value management of shielding gas.

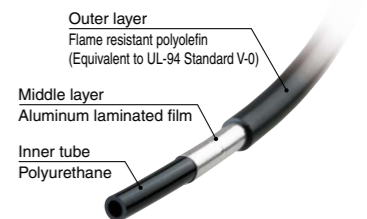


## Tubing/Fittings/Flow Control Equipment

**FR Three-layer Polyurethane Tubing p. 139**

**TRTU Series**

- Spatter resistance is improved by installing an aluminum layer between the outer layer and inner tube.



**Metal One-touch Fittings p. 141**

**KQB2 Series**

- All metal except seal parts



**Speed Controller p. 143, 144**

**AS-X737**

**AS Series**

- All metal except seal parts



**Spatter Cover p. 143**

**KQB2-X1124**

- Prevents adhesion and entry of welding spatters.
- Silicone rubber



## Specialty Actuators

**Pin Shift Cylinder for High Precision Positioning p. 84**

**CKQG-X2370**

- Rod end deflection:  $\pm 0.1$  mm or less



**Offset Pin Shift Cylinder p. 91**

**CDQ2B-X2839**

- With plate extended: Deflection of  $\pm 0.1$  mm or less



**Slim-line Power Clamp Cylinder p. 97**

**CKZ2N-X2346**

- A high clamping force is obtained through the toggle mechanism.



**Frame Clamp Cylinder p. 105**

**WRF100**

- High output 20000 N at max.



**Compact Clamp Unit p. 112**

**CDQ2B20-DCT1710T  
CDQ2B32-DCR0859R**

- Compact clamp unit based on the compact cylinder



**Center Lock Unit p. 117**

**MA331-X441**

- Can switch from center lock (for locating) to free (for releasing workpiece)

