TLV. Steam Compressor Unit / System

SC Series

Maximize Steam Utilization

Recover and Reuse Low Pressure Steam at a Higher Pressure

Condensate Recovery Package (Actual product design may differ from that shown)

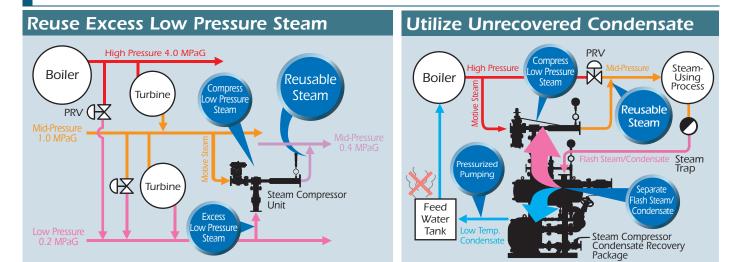
10% Intake Increase

New, independently-designed high-efficiency ejector, and control valve with built-in cyclone separator and steam trap for high-efficiency performance.

Explosion-Proof*

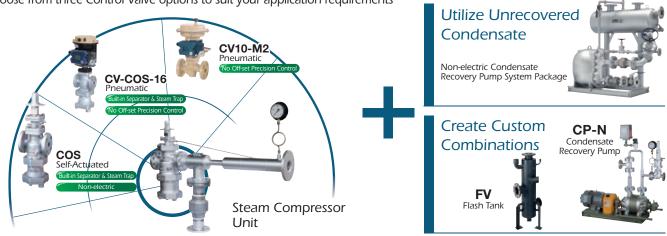
Self-adjusting non-electric control valve adopted for use in explosion-proof areas. *With COS Control Valve Most Effective to...

- Reuse Excess Low Pressure Steam Produced by Power Generation
- Utilize Post-Process Low Pressure Steam Instead of Venting
 Eliminate Boiling Feed Water; Reuse Energy from Flash Steam



Product Combinations and Features

Choose from three Control Valve options to suit your application requirements



Actual available products may differ from those shown. Contact TLV for details.

Model*			Steam Compressor Unit								High-capacity Steam Compressor**		
			SC1-1	SC1-2	SC1-3	SC2-1	SC2-2	SC2-3	SC7-1	SC7-3	SC14	SC21	SC31
Pressure Control Valve			COS	CV-COS-16	CV10-M2	COS	CV-COS-16	CV10-M2	COS	CV10-M2	—		
Connection (ASME Class)	Motive Inlet (300 RF)		25 mm			50 mm			80 mm		100 mm	150 mm	200 mm
	Discharge Outlet (150 RF)		80 mm			100 mm			150 mm		200 mm	250 mm	300 mm
	Suction Inlet	(150 RF)	80 mm						100 mm		150 mm	200 mm	250 mm
Body Material			Control Valve: Cast Iron (COS), Cast Steel (CV-COS-16/CV10-M2) Ejector: Carbon Steel / Check Valve: Cast Stainless Steel								Ejector: Carbon Steel		
Max. Operating Pressure (MPaG) PMO			1.6 2.0		2.0	1.6	1.0	2.0	1.6	2.0		2.0	
Motive Steam Pressure Range (MPaG)			0.6 t	0.6 to 1.6 0.6 to		0.6 to 1.6	0.6 to 1.0	0.6 to 2.0	0.6 to 1.6	0.6 to 2.0		0.6 to 2.0	
Max. Operating Temperature (°C) TMO			220										
Max. Steam Suction Capacity*** (kg/h)			100			360			770		1400	2170	3110
Discharge Steam Pressure (Attainable Pressure)			Varies depending on relevant conditions such as Motive Steam Pressure/Volume, Steam Suction Pressure/Volume, etc. Contact TLV for assistance.										
Applicable Fluid			Saturated Steam										
* Products exceeding specifications shown above may be able to be supplied depending on conditions. ** Supplied as Elector only 1 MPa = 10.197 kg/cm ²													

* Products exceeding specifications shown above may be able to be supplied depending on conditions. ** Supplied as Ejector only 1 MPa = 10.197 kg/cm² *** At the following conditions: 0.8 MPaG motive steam pressure; 0.05 MPaG suction steam pressure; 0.2 MPaG discharge steam pressure. PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS):

Maximum Allowable Pressure (MPaG) PMA: Steam Compressor Unit: 1.6 (COS), 2.0 (CV-COS-16/CV10-M2); High-capacity Steam Compressor: 2.0 Maximum Allowable Temperature (°C) TMA: 220

Details of SC Series products are included in the individual specification data sheets (SDS). Contact TLV for details of control valves and connecting equipment. Local regulations may restrict the use of these products to below the conditions quoted.

TLY. INTERNATIONAL, INC.

 881 Nagasuna, Noguchi, Kakogawa, Hyogo 675-8511, JAPAN

 Tel: [81]-(0)79-427-1818
 Fax: [81]-(0)79-425-1167

 E-mail: tlv-japan@tlv.co.jp
 https://www.tlv.com

Manufacturer ISO 9001 ISO 14001 ISO 14001

Pamphlet M4802 Rev. 3/2025 Specifications subject to change without notice.