Pamphlet U4802

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.

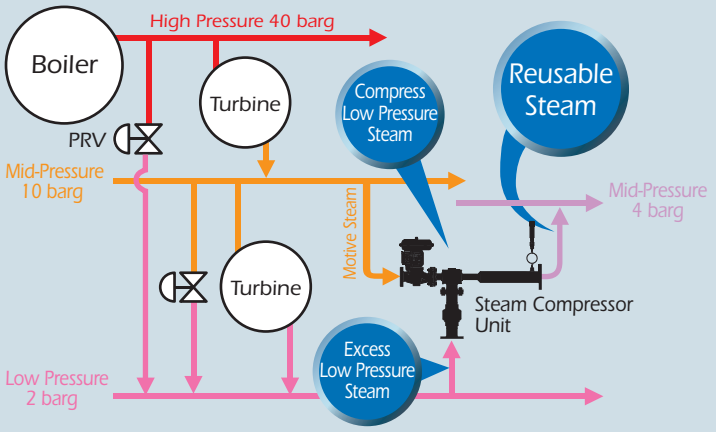
Explosion-Proof*

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

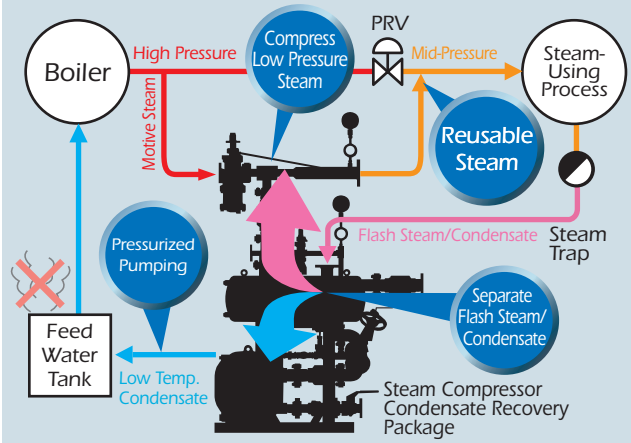
Most Effective to...

- 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

Reuse Excess Low Pressure Steam

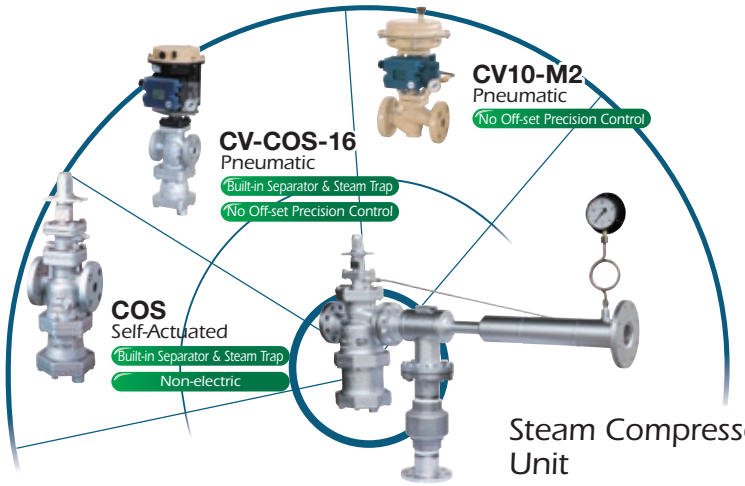


Utilize Unrecovered Condensate



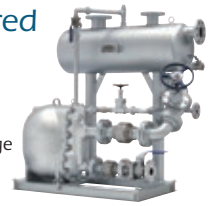
Product Combinations and Features

Choose from three Control Valve options to suit your application requirements



Utilize Unrecovered Condensate

Non-electric Condensate Recovery Pump System Package



Create Custom Combinations


Flash Tank


Condensate Recovery Pump

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 (PN 25/40)	Motive Inlet	DN 25			DN 50			DN 80		DN 100	DN 150	DN 200
	Discharge Outlet	DN 80			DN 100			DN 150		DN 200	DN 250	DN 300
	Suction Inlet	DN 80						DN 100		DN 150	DN 200	DN 250
Body Material		Control Valve: Ductile Cast Iron (COS), Cast Steel (CV-COS-16/CV10-M2) Ejector: Carbon Steel / Check Valve: Cast Stainless Steel								Ejector: Carbon Steel		
Max. Operating Pressure (barg) PMO		16		20	16	10	20	16	20	20		
Motive Steam Pressure Range (barg)		6 to 16		6 to 20	6 to 16	6 to 10	6 to 20	6 to 16	6 to 20	6 to 20		
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 above may be able to be supplied depending on conditions ** Supplied as Ejector only
*** At the following conditions: 8 barg motive steam pressure; 0.5 barg suction steam pressure; 2 barg discharge steam pressure.
1 bar = 0.1MPa

PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS):
Maximum Allowable Pressure (barg) PMA: Steam Compressor Unit: 16 (COS), 20 (CV-COS-16/CV10-M2); High-capacity Steam Compressor: 20
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.

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Manufacturer
TLV CO., LTD.
Kakogawa, Japan
is approved by LRQA Ltd. to ISO 9001/14001
ISO 9001
ISO 14001

Pamphlet U4802 Rev. 3/2025
Specifications subject to change without notice.