Portfolio of Compression
Single stage compressor: single shaft design for industrial applications
STC-SO - API standard

Fields of application:
- Recycle Gas
- Methanol,
- CTL, CTC Recycle
- Synthetic Natural Gas
- Ethylene Oxide, Oxo Alcohol, NDA

Performance data:
- Capacity: 1,500 – 200,000 m³/h
- Pressure ratio up: 3.5
- Pressure: \( \leq 60 \text{ bar} \)
- Speed: \( \leq 40,000 \text{ rpm} \)
- Stages: 1
- Shaft sealing: dry gas seals, carbon rings

Single stage centrifugal compressor for process gas compression.
Single stage compressor: single shaft design for industrial applications
STC-SOF - manufacturer standard

Fields of application:
- Sulfuric acid
- Phthalic acid
- Evaporation
- CTL, CTC Recycle
- Carbon Capture and Storage

Performance data:
- Capacity: 1,500 – 600,000 m³/h
- Pressure ratio up: 3.5
- Speed: ≤ 20,000 rpm
- Stages: 1
- Shaft sealing: labyrinth seal (floating rings), dry gas seals

Single stage centrifugal compressor with open form, overhung impeller
Single stage compressor: single shaft design for industrial applications
STC-SOL - manufacturer standard

Fields of application:
Coke gas

Performance data:
Capacity: 15,000 – 450,000 m³/h
Pressure ratio up: 1.6 (with coke gas)
Speed: ≤ 15,000 rpm
Stages: 1
shaft sealing: combined carbon ring and labyrinth

Single stage centrifugal compressor with open form impeller, between bearings rotor design
Single stage compressor: single shaft design for industrial applications
STC-SOR - manufacturer standard

Fields of application:
- Chemicals
- Formaldehyde
- Sulfuric acid
- Sulfur recovery
- Fertilizer
- Chlorine

Performance data:
- Capacity: 600 – 360,000 m³/h
- Pressure: ≤ 60 bar
- Speed: ≤ 8,000 rpm
- Stages: 1
- Shaft sealing: labyrinth seal (floating rings), dry gas seals

Single stage centrifugal turboblower with closed impeller
Single stage compressor: Single Shaft, turbine driven
STC-STO

Fields of application:
- Oxo alcohol
- Ethylene oxide/ethylene glycol
- Synthetic Natural Gas
- Copper smelting
- Sulfur recovery
- Sulfuric acid
- Acrylic acid
- Phthalic acid

Performance data:
- Capacity: 1,500 – 150,000 m³/h
- Pressure ratio up: 3.5
- Pressure: ≤ 40 bar
- Speed: ≤ 30,000 rpm
- Stages: 1
- shaft sealing: labyrinth seal (floating rings), dry gas seals, carbon rings

Integral turbo compressor/steam turbine unit with compact single shaft design, impeller and turbine wheel supported on a single rotor stand.
Single stage compressor
STC-GO - manufacturer standard

Fields of application:
- Chemicals
- Converter: copper, zinc, lead
- Maleic anhydride & Phthalic acid
- Sulfur recovery
- Evaporation and steam compression
- Fluid bed combustion

Performance data:
- Capacity: 1,500 – 300,000 m³/h
- Pressure ratio up: 3.5
- Speed: ≤ 50,000 rpm
- Stages: 1
- Shaft sealing: labyrinth seal (floating rings), dry gas seals

Integrally geared, horizontal shaft, vertical split
Single stage compressor
STC-GO - API related

Fields of application:
Petrochemical & Refinery – Residue Fluid Catalytic Cracking (RFCC), div.
General Chemicals – VCM, VAM, AA, AAL, Oxo alcohol, div. HC, PSA, div.
Metallurgy – Direct reduction, direct smelting
Power Plants – Fuel gas booster (GT)

Performance data:
Capacity: 1.500 – 200.000 m³/h
Pressure: ≤ 60 bar
Speed: ≤ 50.000 rpm
Stages: ≤ 1
shaft sealing: dry gas seals, carbon rings

Integrally geared, vertical, single stage
Single stage compressor
STC-GO Aeration – waste water treatment

Fields of application:
- Waste water treatment
- Flue gas desulfurization (FGD)
- Fermentation & Biofuel
- Marine air lubrication
- Mineral Extraction (by bacterial means)

Performance data:
- Capacity: 2,000 – 130,000 m³/h
- Pressure: \( \leq 3.25 \) bar
- Speed: \( \leq 32,000 \) rpm
- Stages: 1

Available in fully customized or pre-engineered plug & play compact version; featuring dual-point control (TM) via inlet and diffuser vanes
Single stage compressor
STC-DO – direct drive – waste water treatment

Fields of application:
- Waste water treatment
- Fermentation & Biofuel

Performance data:
- Capacity: 1,200 – 8,500 m³/h
- Pressure: ≤ 1.1 bar
- Speed: ≤ 42,000 rpm
- Stages: 1

Direct drive centrifugal single stage compressor with airfoil bearings for oil free operation; fully plug & play; featuring dual-point control (TM) via diffuser vanes and variable frequency drive.
Customized geared compressors
STC-GV Integrally Geared Compressor

Fields of application:
- Petrochemicals & Refineries
- Hydrocarbons
- Sour Gas
- Instrument Air
- Metallurgy - Direct Reduction
- Power Plants - Fuel Gas (GT)

Performance data:
- Capacity: 1500 – 200,000 m³/h
- Pressure: ≤ 60 bar
- Speed: ≤ 45,000 rpm
- Stages: ≤ 6
- Shaft sealing: dry gas seals, carbon rings

Integrally geared, vertical
Customized geared compressors
STC-GVT (compact)

Fields of application:
Chemical
Metallurgy - Direct Reduction
Recycle Gas

Performance data:
Capacity: 1500 – 200,000 m³/h
Pressure: ≤ 40 bar
Speed: ≤ 45,000 rpm
Stages: ≤ 2
shaft sealing: dry gas seals, carbon rings

Integrally geared, vertical,
**Single shaft horizontal split compressor**

**STC-SH**

**Fields of application:**
- Chemical – dry chlorine
- – hydrogen chloride

**Performance data:**
- Capacity: 1,500 – 25,000 m³/h
- Pressure: ≤ 13,5 bar
- Speed: ≤ 12,000 rpm
- Stages: ≤ 4
- shaft sealing: labyrinths, carbon rings

Single Shaft, horizontally split casing
Thank you very much for your attention.

If you have any questions please contact us:

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