





UMEKA SOLUTECH CO., LTD. บริษัท ยูเมก้า โซลูเทค จำกัด

www.umekasolutech.com





- EJECTORS
- SURFACE CONDENSERS
- LIQUID RING VACUUM PUMP
- PROCESS CONDENSERS

**COUNTRY OF ORIGIN: USA** 



#### **APPLICATIONS:**

- THERMAL COMPRESSORS
- CHEMICAL PROCESSING
- PLASTICS, RESINS AND FIBERS
- REFINERY
- POWER GENERATION EQUIPMENT
- PETROCHEMICAL PROCESSES



**HIGH VACUUM EJECTOR** WITH INLET DIFFUSER STREAM JACKET

5. Diverging outlet 6 Diffuser 4. Converging inlet diffuser diffuser throat chamber Motive 2. Converging/ fluid diverging chest nozzle 7 Secondary Flow

#### **Steam Jet Ejectors:**

Graham ejectors deliver simple, rugged, trouble-free vacuum performance using steam or organic vapors. Available in corrosion- and erosion-resistant materials, standard models have pre-engineered components, and custom sizes are also supported.

**PUMP PACKAGE** 



LIQUID RING VACUUM PUMP

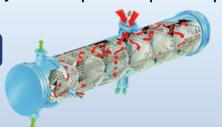
**Liquid Ring Vacuum Pump:** 

The Graham Liquid Ring Vacuum Pump delivers reliable performance under varying and harsh conditions, operating smoothly even with liquid in the suction or high inlet gas temperatures.

#### **GRAHAM VACUUM SYSTEMS:**

Can include both liquid ring vacuum pumps and steam jet ejectors. For a highly efficient vacuum system that optimizes capital and operating costs.

VACUUM CONDENSER



#### **Graham Condensers:**

Reclaim valuable product, minimize pressure drop, and lower costs and environmental impact.







- GAS COMPRESSOR
- RECIPROCATING COMPRESSOR
- HYDROGEN COMPRESSOR
- CNG COMPRESSOR
- PET COMPRESSOR
- SF6 RECOVERY SYSTEM
- SERVICE AND MAINTENANCE

**COUNTRY OF ORIGIN: JAPAN** 



#### **APPLICATIONS:**

- OIL FREE AND OIL LUBRICATED COMPRESSOR
- GAS HANDLED:

H2, O2, N2, CO, CO2, SICL4, SIHCL3, NH3, AR, HE, CH4, SF6, HCL, H2S, AIR.

#### Industries:

- Petroleum industry: Refining, Hydrogenation
- Petrochemical industry: Ethylene, PE/PP, Synthetic gas plant
- Coal industry: CTO/MTO plant, Fertilizer industry
- Electric power industry: Gas cylinder filling, Nuclear power station







HDB-400GH-OL



**YQ3-45L** 

No. of Stage

#### Compressor type:

- Vertical (VS, VD, VT)
- Inclined Y/W/X type
- Horizontal/Balanced-opposed type

#### **FRAME LINEUP:**

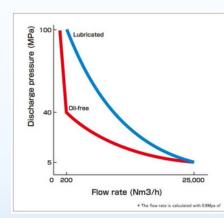


**HS TYPE** 



**HD TYPE** 

#### **PERFORMANCE RANGE:**



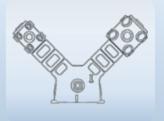
Capacity	Up to 25,000 Nm3/h
Suction Volume	Up to 5,000 m3/h
Disch. Pressure	
Lubricated	Up to 1100 bar
Non-lubricated	Up to 1100 bar
Power	1000 kW
Allowable rod load	200 kN
Cylinder Configuration	Vertical
	Inclined Y/W/X
	Horizontal
	Horizontal Balanced-opposed
Cylinder Action	Double Acting
	Single Acting
	Tandem







**VT TYPE** 





**YD TYPE** 

**WT TYPE** 





- RECIPROCATING COMPRESSOR
- AXIAL FLOW COMPRESSOR

**COUNTRY OF ORIGIN: JAPAN** 



#### **APPLICATIONS:**

- OIL-RELATED INDUSTRIES
- STEEL INDUSTRIES



#### RECIPROCATING COMPRESSOR





300 200 Not applicable 100 50 40 Total comp. ratio 30 25 20 Applicable range 10 30 40 50 Capacity Nm3/Hr

RECIPROCATING COMPRESSOR (TYPE: C457)

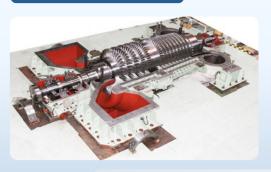
#### Capability:

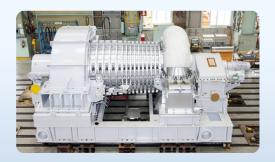
- Pressure range: Up to 600kg/cm2G
- Flow volume: 0.12 to 400m<sup>3</sup> /min. at suction
- Power range: 50kW to 18,000KW

#### **Main Features:**

- Opposite Type for easy maintenance with good weight balance
- Compliance with API standard
- Valves of Hoerbiger (Austria), leading manufacturer of compressor valve, are used as standard
- Selection of the most appropriate type out of wide variety (Large Small Size, at 40kW-24,800kW)

#### **AXIAL FLOW COMPRESSOR**







#### **Main Features:**

- Developed and manufactured by MES-M
- 50% are reaction type blade
- Single casing of horizontal split type is applied ensuring easy maintenance
- Wide range of maneuverability by using variable stationary blades
- Applicable to any mover whether such is steam turbine or synchronized motor





- INDUSTRIAL AIR COMPRESSORS
- ENGINEERED AIR COMPRESSORS

**COUNTRY OF ORIGIN: USA, CHINA** 

#### **INDUSTRIAL AIR COMPRESSORS**

#### **APPLICATIONS:**

- AIR SEPARATION
- CHEMICAL PROCESSING
- **ELECTRONICS**
- ELECTRIC CAR & BATTERY
- FOOD & BEVERAGE
- GLASS
- INDUSTRIAL MANUFACTURING
- LNG PRODUCTION & TRANSPORT
- MEDICAL & PHARMACEUTICAL
- OIL REFINING
- PETROCHEMICAL
- PLASTICS
- POWER GENERATION
- PULP & PAPER
- TEXTILES



Flow: 25 - 60 m3/min Power: 185 - 335 kW Pressure: 2.75 - 10.5 barg



Flow: 110 - 190 m3/min Power: 520 - 1,120 kW Pressure: 2.75 - 10.5 barg



Flow: 45 - 100 m3/min Power: 300 - 600 kW Pressure: 2.75 - 17.2 barg

P650



Flow: 25 - 60 m3/min Power: 185 - 335 kW Pressure: 2.75 - 10.5 barg



Flow: 70 - 130 m3/min Power: 450 - 750 kW Pressure: 2.75 - 10.5 barg



Flow: 280 - 560 m3/min Power: 1,120 - 2,150 kW **Pressure:** 2.1 – 3.5 barg

#### **ENGINEERED AIR COMPRESSORS**

#### PAP PLUS® S1



Flow: 25 - 60 m3/min Power: 120 - 375 kW Pressure: 2.75 - 12.1 barg

#### PAP PLUS® A1



Flow: 45 - 100 m3/min Power: 190 - 595 kW Pressure: 2.75 - 15.2 barg

#### PAP PLUS® BH



Flow: 100 - 200 m3/min Power: 400 - 1,165 kW Pressure: 2.75 - 14.9 barg

#### P700



Flow: 170 - 340 m3/min Power: 750 - 2,050 kW Pressure: 2.75 - 10.5 barg

#### PAP PLUS® CH



Flow: 155 - 340 m3/min Power: 650 - 2,000 kW Pressure: 2.75 - 14.3 barg

### PAP PLUS® DH



Flow: 285 - 525 m3/min Power: 835 - 4,100 kW Pressure: 2.75 - 31 barg



#### PAP PLUS® EH

Flow: 425 - 695 m3/min Power: 1,305 - 4,475 kW Pressure: 2.75 - 25.2 barg

#### COMPRESSOR CONTROL SYSTEMS

R1000



#### R2000



R3000





- ROTARY SCREW AIR COMPRESSORS
- RECIPROCATING AIR COMPRESSORS
- OIL-FREE COMPRESSORS
- VACUUM PUMPS
- ROTARY SCREW BLOWERS
- AIR TREATMENT AND ACCESSORIES

**COUNTRY OF ORIGIN: USA, TAIWAN, CHINA** 



#### **APPLICATIONS:**

- GENERAL MANUFACTURING
- PLASTICS
- MINING
- CEMENT
- PET BOTTLE-BLOWING
- FOOD & BEVERAGE
- AUTOMOTIVE



#### **FS-CURTIS:**

ONE OF AMERICA'S FIRST AIR COMPRESSOR **MANUFACTURERS, INNOVATING SINCE 1854** 











**ROTARY SCREW AIR COMPRESSORS** 







RECIPROCATING AIR COMPRESSORS



**VACUUM PUMPS** 

**OIL-FREE COMPRESSORS** 



ROTARY SCREW BLOWERS





AIR TREATMENT AND ACCESSORIES



AFTERMARKET SOLUTIONS





- COMPACT SCREEN FILTERS
- SINGLE SCREEN
- HIGH CAPACITY SINGLE SCREEN
- MULTI SCREEN

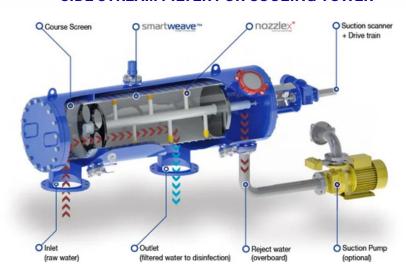
**COUNTRY OF ORIGIN: ISRAEL** 

#### **APPLICATIONS:**

- INDUSTRIAL FILTRATION
- HIGH-END AGRICULTURE SECTOR
- AQUACULTURE SECTOR
- MUNICIPAL WATER TREATMENT
- OTHER INDUSTRIAL NEEDS
- Flow Rate range 35 -5,000 m<sup>3</sup>/hr.
- 1.6 bar (23 psi) minimum operating pressure
- The largest single screen filter on the market
- Compact design with very low flush-flow rate
- Supply filters from 10 microns upwards
- 10 100 micron Filtration Degree
- Horizontal & Vertical configurations
- 100% Screen Cleaning
- Small footprint

#### **MULTI SCREEN**

#### SIDE STREAM FILTER FOR COOLING TOWER



#### **SINGLE SCREEN**

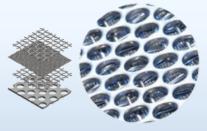






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#### **HIGH PERFORMANCE**

#### **FILTRATION SCREENS:**

- 1. MULTI-LAYERED SINTERED STRUCTURE
- 2. ENHANCED STRENGTH & DURABILITY
- 3. AVAILABLE IN 316L, 904L, SMO254





#### **SELF-CLEANING CYCLE FOR**

#### MAXIMUM REMOVAL EFFICIENCY:

- 1. SELF BALANCING CLEANING NOZZLE
- 2. HIGH EFFICIENCY CLEAN
- 3. ZERO SCREEN WEAR + REDUCED NOZZLE WEAR
- 4. LOW PRESSURE OPERATION



**EVER**CLEAR™

**AN UNPARALLELED AUTOMATIC FILTRATION** CYCLE.



# SiccaDania (

#### **PRODUCTS:**

- FANS & BLOWERS
- CYCLONES & FILTERS
- SCREW CONVEYORS & MIXERS

**COUNTRY OF ORIGIN: NETHERLANDS** 

#### **APPLICATIONS:**

- AIRFLOW AND PRESSURE FOR INDUSTRIAL GASES.
- CLEAN AIR AND DUST REDUCTION
- CONVEYING MATERIAL



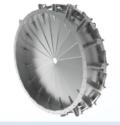
#### **CHECK OUT OUR FANS AND BLOWERS**



**INDUSTRIAL FANS & BLOWERS** 



**MULTI STAGE BLOWERS** 

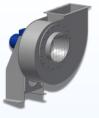


FLOW CONTROL AND MONITORING

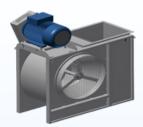


ANTI-SURGE CONTROL

#### **FANS & BLOWERS**



K-TYPE



E-TYPE



**INDUSTRIAL FANS & BLOWERS** 

#### Fans for low-flow, low-medium pressure applications:

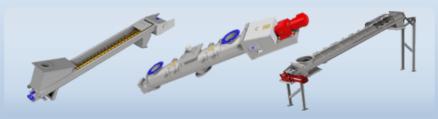
- Flow up to 15-100 m3/s
- Differential pressure up to 25,000 - 250,000 Pa
- Temperature range from -20 °C- +500 °C

#### CYCLONES & FILTERS & BARCOL SCRUBBER

For materials that **cannot** be filtered using conventional filtering techniques.



#### **SCREW CONVEYORS & MIXERS**



#### <u>Applications:</u>

- Filter systems ranging from 5 m<sup>2</sup> to 2,000 m<sup>2</sup>,
- · The bag filters are used worldwide, in many cases specifically designed for THE SPECIFIC APPLICATION.

#### Screw conveyors:

Are used to transport bulk materials in horizontal, vertical or diagonal directions.

MIXING, RETENTION, CONDITIONING, COOLING, AND **HEATING SCREWS** 

#### Options / variables :

screw conveying, paddle mixers, ribbon mixers, PERFORATED SCREW BLADES, INTERNAL FLOW FOR COOLING AND HEATING, PRESSURIZED MIXERS.



- TOP ENTRY AGITATOR
- SIDE ENTRY TANK AGITATORS
- SANITARY TANK AGITATORS
- AGITATOR COMPONENTS:
- **IMPELLER**
- **SEALS**
- **SHAFTS**
- **MOTORS & COUPLINGS**

**COUNTRY OF ORIGIN: USA** 



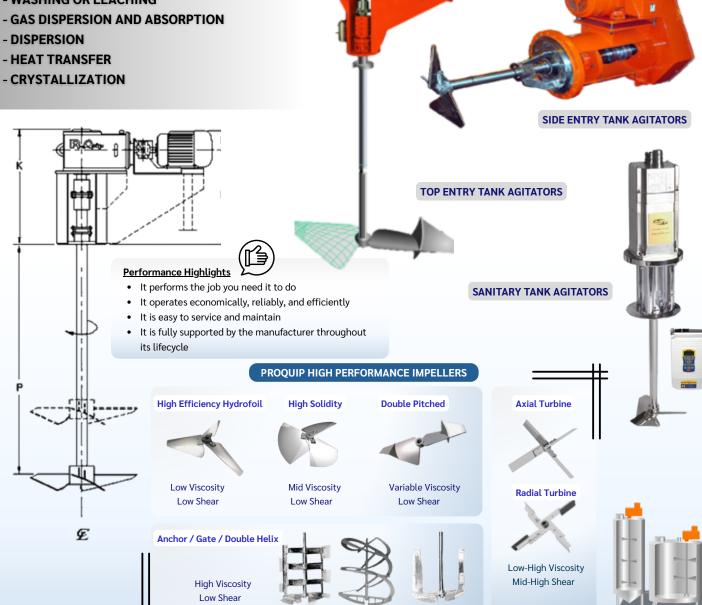
PROQUIP TANK AGITATORS AND MIXERS



#### **APPLICATIONS:**

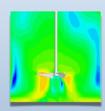
- LIQUID BLENDING
- SOLID SUSPENSION
- WASHING OR LEACHING

- CRYSTALLIZATION



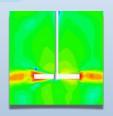


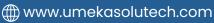
Green Energy Technology at **ProQuip** 





**COMPUTATIONAL FLUID DYNAMICS PLOTS** 









## **dBSilencer** DB ENGINEERING CO., LTD.

#### **PRODUCTS:**

- STEAM SILENCER
- GAS SILENCER
- FAN SILENCER
- STACK SILENCER
- STEAM BLOWING-OUT SILENCER

**COUNTRY OF ORIGIN: KOREA** 

#### **APPLICATIONS:**

- STEAM VENT SILENCER
- SILENCER FOR GAS TURBINE
- SILENCER FOR DIESEL ENGINE
- SILENCER FOR GAS VENT STACK

#### STRUCTURE OF SILENCER

- · Casing Part
  - Diffuser Part
  - Splitter Part
  - Rain Hood Part
  - The others (Support, Lifting Lug, Drain Valve)



STEAM SILENCER



STEAM SILENCER



GAS SILENCER



STACK SILENCER



FAN SILENCER



STEAM BLOWINGOUT SILENCER



# HYOSUNG GOODSPRINGS

#### **PRODUCTS:**

- LINE UP, API PUMPS TYPE
- BOILER FEEDWATER, CIRCULATING, **CONDENSATE PUMPS**
- LINE UP, TURBINE TYPE, DOUBLE SUCTION
- INTAKE PUMPS, ERD PUMPS, PROCESS PUMPS
- HOT WATER CIRCULATION, PRESSURE BOOSTING, SUBMERSIBLE DRAINAGE

**COUNTRY OF ORIGIN: KOREA** 

#### **APPLICATIONS:**

- OIL & GAS PLANT
- POWER PLANT
- INDUSTRIAL USE
- WATER INDUSTRY
- BUILDINGS AND HOUSES

#### **ACCURATE PRODUCT DIAGNOSIS**

**QUICK RESPONSE** 

**GLOBAL NETWORK** 







#### PUMPS FOR OIL & GAS PLANT

LINE UP, API PUMP TYPE





#### **PUMPS FOR POWER PLANT**

BOILER FEEDWATER, CIRCULATING, **CONDENSATE PUMPS** 





### PUMPS FOR INDUSTRIAL USE

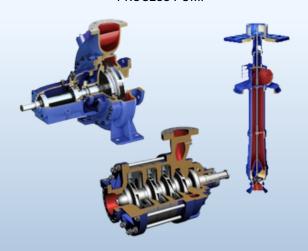
LINE UP, TURBINE TYPE, **DOUBLE SUCTION** 





#### **PUMPS FOR WATER INDUSTRY**

INTAKE PUMPS, ERD PUMPS, PROCESS PUMP



#### PUMP FOR BUILDINGS AND HOUSES

HOT WATER CIRCULATION, PRESSURE BOOSTING, SUBMERSIBLE DRAINAGE





# SEYANG

#### **PRODUCTS:**

- DSH HEATLESS DESICCANT-TYPE AIR DRYER
- DSE EXTERNAL HEATER-TYPE DESICCANT AIR DRYER
- DSI INTERNAL HEATER-TYPE AIR DRYER
- DBP BLOWER-TYPE DESICCANT AIR DRYER
- DSN NON-PURGE TYPE AIR DRYER **AIR FILTER ACTIVATED ALUMINA GEL**

**COUNTRY OF ORIGIN: KOREA** 

#### **APPLICATIONS:**

- GAS DEHYDRATION
- FILTRATION UNIT
- BUILDING UP REPUTATION IN THE NON-PURGE / ZERO-PURGE SYSTEM SECTOR

## **SEYANG AIR DRYER**



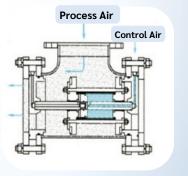
**DSH Heatless Type Air Dryer** 

DSE / DSI Heater Type Air Dryer

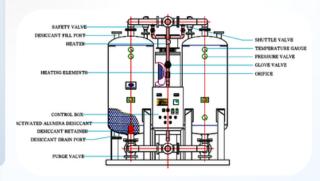
#### DSE / DSI HEATER TYPE AIR DRYER

#### **PRODUCT FEATURES**

- Stable dew point maintain
- Drying and regeneration processes are repeated at 10-minute intervals
- Design and construction can be customized
- Standard Model up to 9,372 Nm3/h can be operated
- Easy maintenance



#### **DSH HEATLESS TYPE AIR DRYER**



#### **SEYANG AIR FILTER**



#### **PRODUCT FEATURES**

Removal of solid impurities and oil of 5 - 0.01 micron

- Pre-filter (NH-3200) 100%
- After-filter (NH-3100)
- Coalescing-filter (NH-1300)
- Customized filtering rate can be applied

#### **PRODUCT FEATURES**

- Consumption of regeneration air 8 10%
- Stably sustained dew point temperature
- The drying and regeneration processes are cycled at 8-hour intervals
- Design and construction can be customized
- Standard Model up to 9,360 Nm3/h can be operated

#### **ACTIVATED ALUMINA GEL**

Adsorbents for drying gas and liquids. Even sized, high mechanical strength and smooth surface.



**ACTIVE ALUMINA** 



**MOLECULAR SIEVE** 



SILICA GEL

LOW TEMPERATURE REGENERATION GEL









# Kリクク

#### **PRODUCT**

- HORIZONTEL SHAFT MIXED FLOW PUMP
- VERTICAL SHAFT MIXED FLOW PUMP
- AXIAL FLOW PUMP
- INLINED TUBULAR MIXED FLOW PUMP
- VOLUTE TYPE MIXED FLOW PUMP
- MULTI-STAGE DOUBLE SUCTION VOLUTE PUMP
- PUMP TURBINE



#### **APPLICATIONS:**

- COOLING WATER SYSTEM
- CITY & INDUSTRIAL WATER SUPPLP
- POWER PLANT
- FLOOD CONTROL, WATER INTAKE
- WATER TREATMENT PLANT
- CHEMICAL PLANT
- POWER GENERATION



#### **PERFORMANCE RANGE:**

- BORE: 200 ~ 4,600 MM.
- CAPACITY: 0.1 ~ 3,000 M3/MIN
- TOTAL HEAD: 1 ~ 150 M.



HORIZONTEL SHAFT MIXED FLOW PUMP



**AXIAL FLOW PUMP** 



**VERTICAL SHAFT MIXED FLOW PUMP** 



**VOLUTE TYPE MIXED FLOW PUMP** 



**MULTI-STAGE DOUBLE SUCTION VOLUTE PUMP** 



**PUMP TURBINE** 



**INLINED TUBULAR MIXED FLOW PUMP** 





- METERING PUMPS, DOSING PUMPS
- AIR-OPERATED DOUBLE DIAPHRAGM PUMPS

**COUNTRY OF ORIGIN: ITALY, CHINA** 

#### **APPLICATIONS:**

- CLEANING & HYGIENE
- WATER & INDUSTRY

#### MECHANICAL-RETURN DIAPHRAGM DOSING PUMP

#### **INTERIOR PART MATERIALS**





#### AIR-OPERATED DOUBLE DIAPHRAGM PUMPS



#### **POLYPROPYLENE**

Wide chemical compatibility. General purpose.



#### **ALUMINIUM**

Wide range of solvent and hydrocarbons resistance. Good level of abrasion resistance.



#### PVDF+CF

**Conductive PVDF: Strong** chemical resistance to acids. High temperature resistance. Groundable.



#### **SS316**

Stainless steel 316: High level of corrosion and abrasion resistance.



#### **POMC**

Acetal: Wide range of solvent and hydrocarbons resistance. Good level of abrasion resistance.









**UMEKA SOLUTECH CO., LTD.** 

## UMEKA SOLUTECH CO., LTD. บริษัท ยูเมก้า โซลูเทค จำกัด

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