



# INTRODUCTION



# DIDWANIA GROUP

Compressors & Cryogenics



**INDIA**



**CHINA**



**ITALY**



**USA**

- 100% owned by the Didwania family
- Key products:
  - Reciprocating Gas Compressors
  - CNG Compressors
  - Hydraulic Boosters – Oxygen & Hydrogen
  - LNG & Cryogenic Pumps
- Globally recognized brand
- High technology business, serving large industries and research organizations
- Exports to over 60 countries
- Diversified product portfolio

# GROUP COMPANIES

**Indian Compressors Ltd.**  
Group Head Office



**Ventos Compressors - CET Engineering srl**



**TS Italia srl**



**Xuzhou Auro Compressors Co. Ltd.**



**Knox Western (USA)**



# GLOBAL PRESENCE





# GLOBAL CUSTOMERS



**TAIYO NIPPON SANISO**  
The Gas Professionals

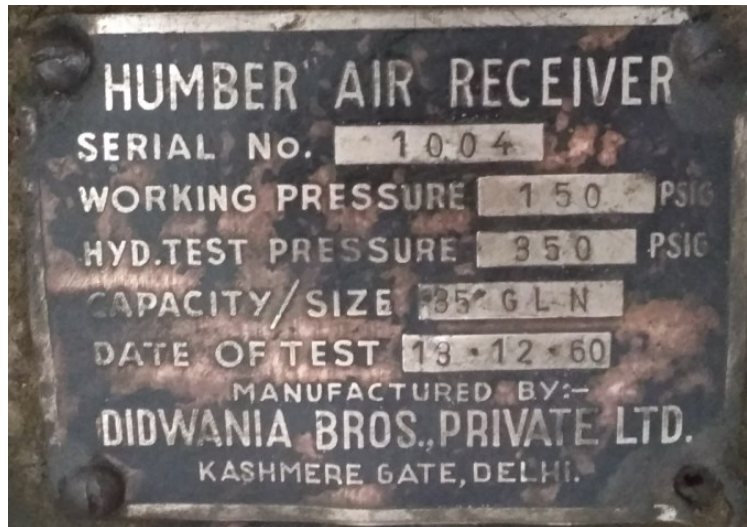


# OUR HISTORY

Incorporated in 1943 as  
**Didwania Brothers Pvt Ltd,**  
by late Sh Girdhari Lalji Didwania



1958: Factory Inauguration by  
Prime Minister Pandit Nehru



# PRODUCTS OVERVIEW

# RECIPROCATING GAS COMPRESSORS



## TP Series

Discharge Pressures up to 7,800 PSIG

3", 3.5" & 4.5" Strokes

550 to 1,800 Continuous RPM

30 to 560 Horsepower

6,000 to 9,000 lb. Combined Rod Loads

Splash Lube Frame to 60 H.P.

## Eagle Series

3", 3.5" & 4.5" Strokes

Discharge Pressures up to 7,200 PSIG

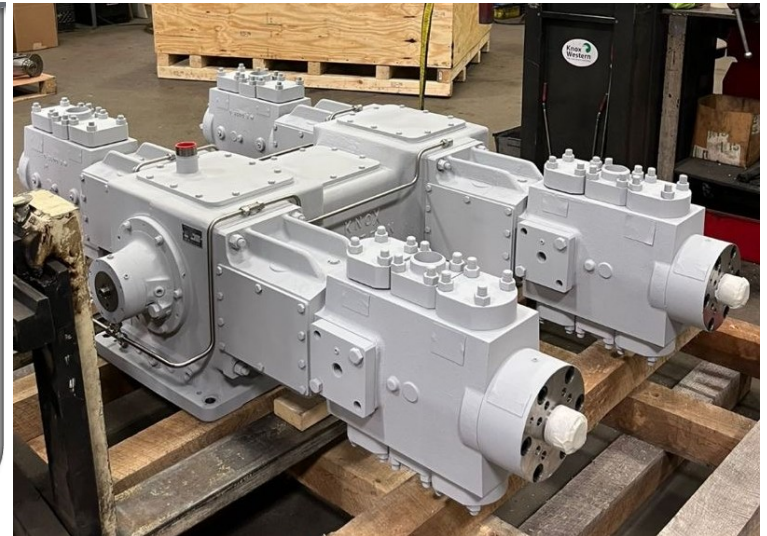
1,200 to 1,800 Continuous RPM

200 to 1,400 Horsepower

24,000 to 60,000 lb. Combined Rod Loads

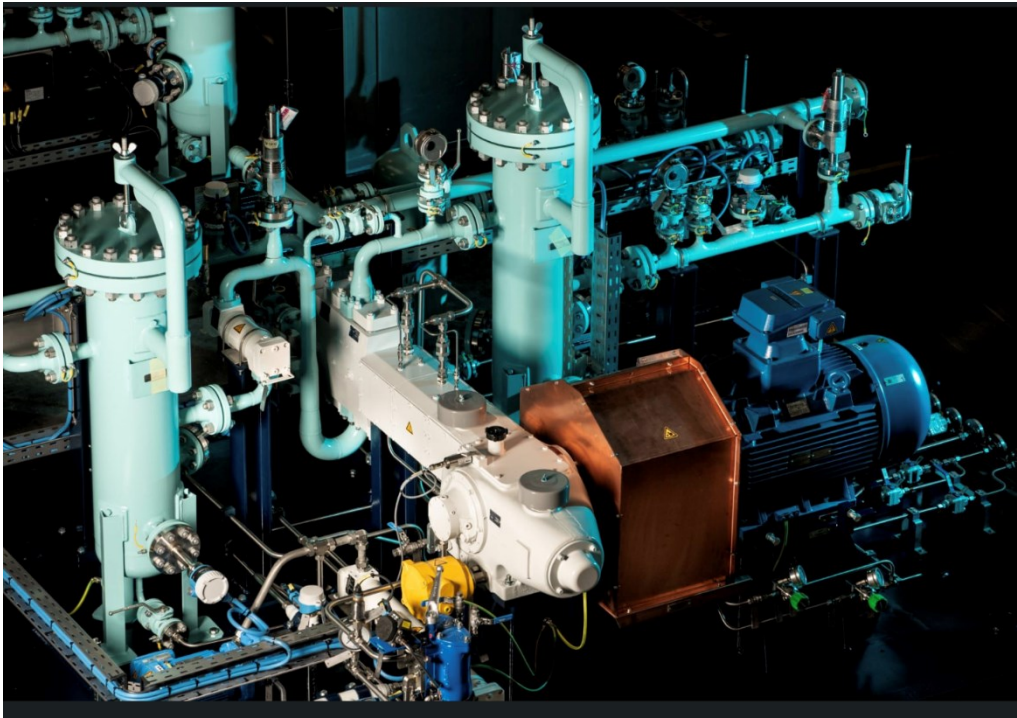
Pump-to-Point, Progressive Lube or Non-Lube

Single to Eight Stage  
1-3/4" to 18-1/2" Cylinders





# OUR FOCUS ON GREEN ENERGY



- HYDROGEN
- SYNGAS
- AMMONIA
- BIOGAS
- CNG
- FLARE GASES
- LANDFILL GAS

# SOFTWARE AND TECHNOLOGY



- Sophisticated, Proprietary Design Software
- Uses experiential database with thousands of applications to ensure an optimum solution including compressor and skid designs
- Rapid Engineer-To-Order capabilities for non-standard or emerging applications

**General**

Project Notes:  
 Quote #/ID: Q#12345  
 Customer: Jon Doe  
 Inquiry Notes: Major Packager  
 Project Notes: CNG Units  
 Order Status Notes:  
 Project Engineer: Open Inquiry Date: Not Yet Specified Application Type: Not Yet Specified

**Unit Performance [F10]**

Current Unit Configuration:  
 Suction Pressure: 225.0000 psig  
 Discharge Pressure: 1450.0000 psig  
 Rotation Speed: 1800 rpm  
 Torque Setpoint: 100.00 %  
 Ambient Temperature: 109.9999 °F  
 1st Stg Suct. Temp: 65.0000 °F  
 2nd Stg Suct. Temp: 120.0000 °F

Unit Performance:  
 Unit Load: 191.18 HP  
 Flow: 1.7504 MMscfd  
 Torque: 38.24 %  
 Operating Issues:

Stage #	Stage #2	Ps	Pd	Ts	Est. Td	Zs	Zd	VEs %	VEd %
#1-HE		224.00	485.97	65.0	161.9	0.986	0.964	64.19	35
#1-CE		224.00	485.97	65.0	161.9	0.986	0.964	65.11	36
#2-HE		475.97	1479.88	120.0	276.1	0.953	0.964	60.39	25
#2-CE		475.97	1479.88	120.0	276.1	0.953	0.964	49.54	20
#3-HE									
#3-CE									
#4-HE									
#4-CE									
#5-HE									
#5-CE									

**Unit Design**

Design Points: (Leave rpm blank to use Frame/Driver Rated Speed. Enter Flow an Amount out of Last Stage.)

ID#	Power	Error (%)	Flow	Desired Flow	Ps	Pd	rpm	Tr-1	Tr-2	Tr-3	Tr-4	Tr-5	Tr-6
1	197.51		1.8138	1.75	225	1450	65.0	120.0	120.0	120.0	120.0	120.0	

**Unit Autosizing Results:**

Estimated Power Required: 207.08 HP

per unit: # of Units= 1

Suggested Staging: 2

User Fixed Staging: 7-Stage

**Frame and Cylinder Selection:**

Frame: Eagle4230 (2-Throw, 500 HP @ 1800 rpm)

Max Throws: 2  
 Stroke: 3.0000 in  
 Rod Diameter: 1.6750 in  
 Maximum Load: 500.00 HP  
 Rated Speed: 1800 rpm  
 Minimum Speed: 550 rpm

Auxiliary Load: 0.00 HP  
 Mechanical Efficiency: 95.00 %  
 Distance Piece Type: Standard  
 Rod Load Max: Compressor: 20000.00 lbf  
 Rod Load Max: Tensile: 20000.00 lbf  
 Connecting Rod Length: 13.7500 in

Manufacturing Status: In Production

# HYDRAULICS BOOSTERS - CNG



## CNG DAUGHTER STATIONS

1,500 compressors  
operating globally

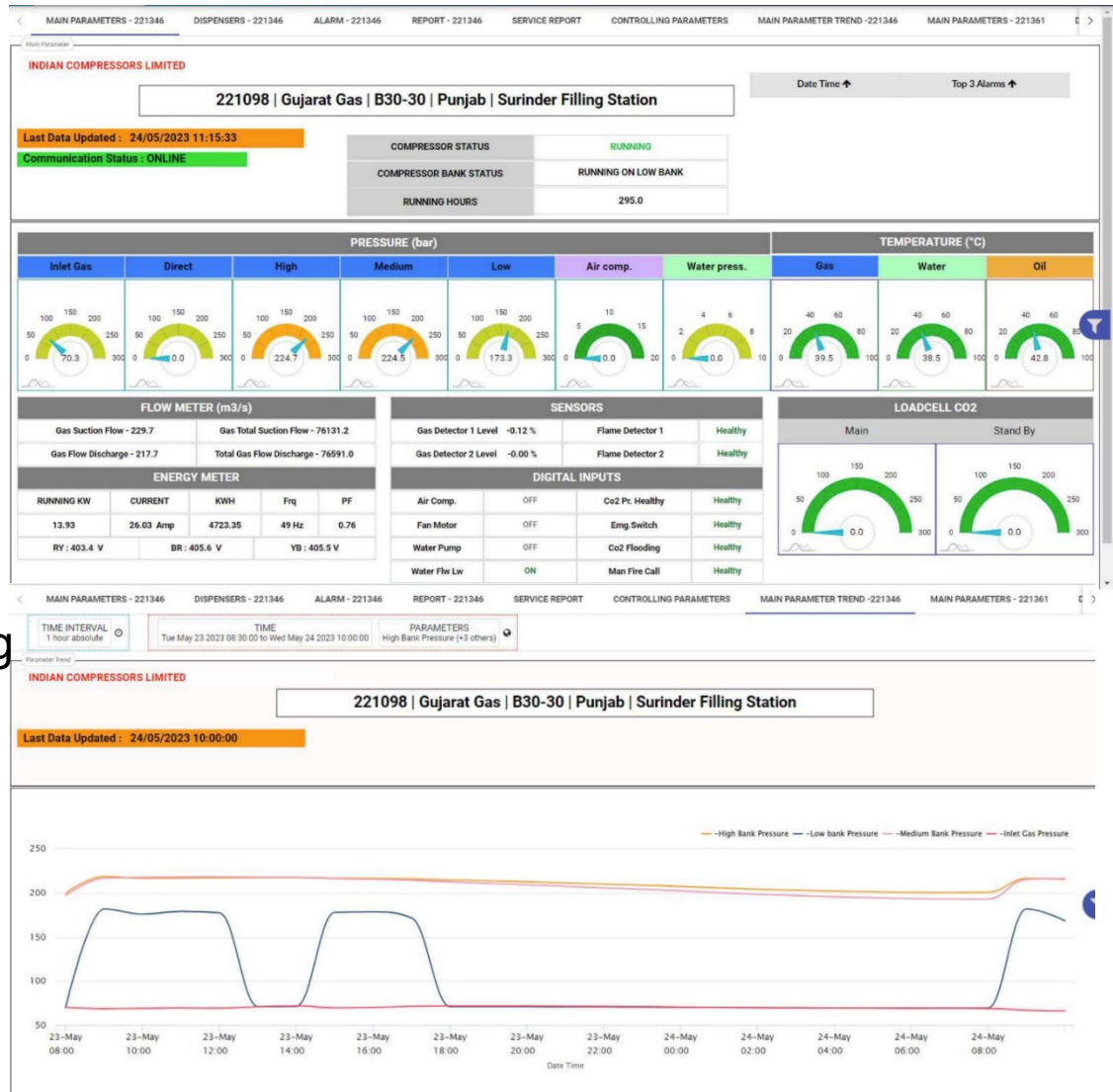




# IOT – CONNECTED COMPRESSORS



- Integrated with CNG Boosters
- Remote health monitoring and compressor control
- Reduces downtime and improves compressor life

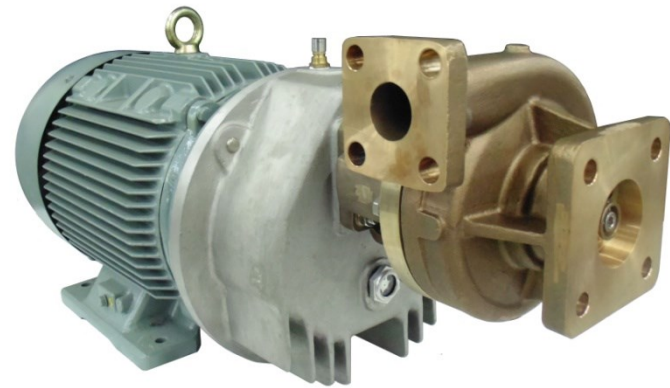




# CRYOGENIC PUMPS



Reciprocating Pumps



Centrifugal Pumps

**LOX - LIN - LAR - CO2 - N2O - LNG - Ethylene**

For Cylinder Filling, Transfer & Process Applications

# CRYO-SCIENTIFIC EQUIPMENT

## CRYOGENIC LIQUID TRANSFER SYSTEMS

TSV series superinsulated vacuum jacketed piping



**CRYOGENIC SUB-COOLERS**

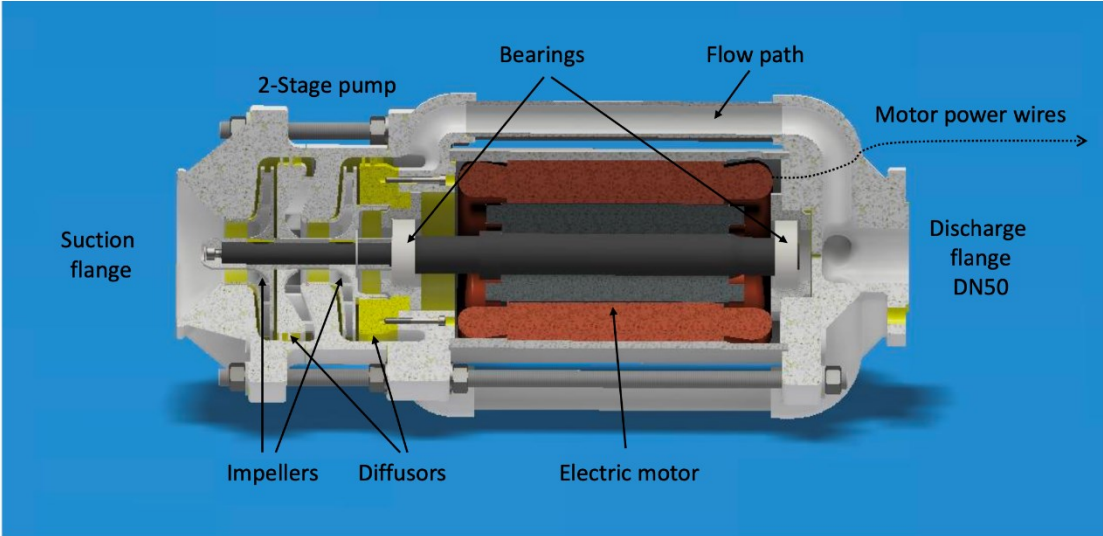
## LABORATORIES & BIO-BANKING WITH LN2



# SUBMERGED CRYOGENIC PUMPS - LNG



MADE IN ITALY





# TURNKEY FILLING STATIONS



Smart Cryogenics



# OIL-FREE HYDRAULIC BOOSTERS – O<sub>2</sub> & H<sub>2</sub>



Oxygen Boosters

Filling Oxygen from PSA Plants into cylinders.

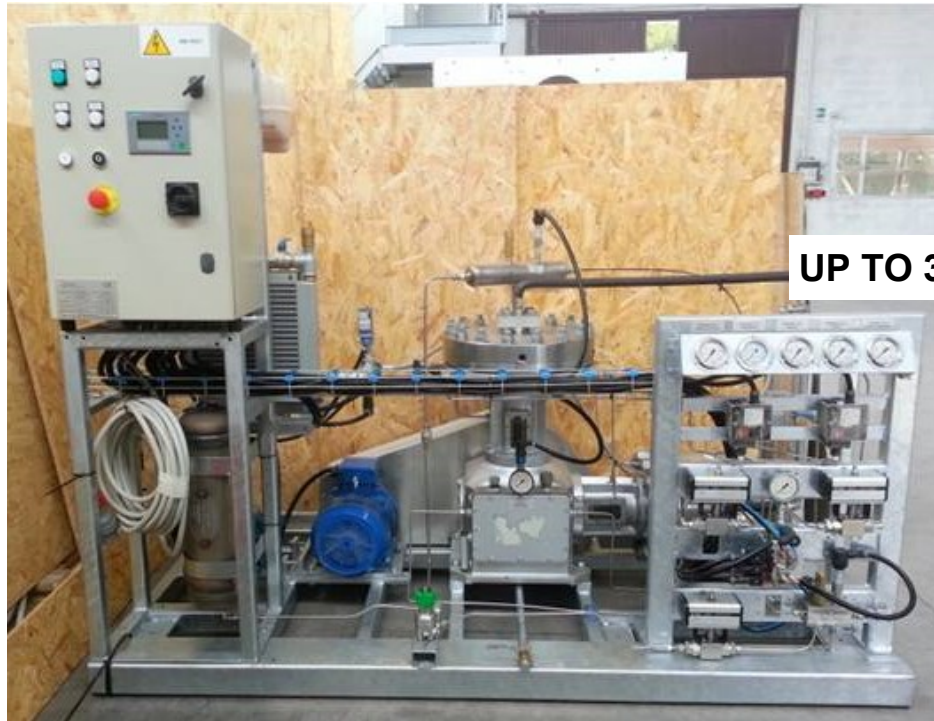


Hydrogen Boosters up to 500 bar





# DIAPHRAGM COMPRESSORS



**UP TO 350 bar**



# CUSTOMIZED APPLICATIONS

## FLUORINE



## NITROGEN MONOXIDE



## SILANE





# PARTS AND SERVICE



Most spares parts are available in stock!



- Comprehensive maintenance contracts for over 600 compressors
- Over 150 service engineers and 1100 operators deployed for the above contracts
- We service all compressors globally



# **GLOBAL OPERATIONS**

# INDIAN COMPRESSORS LTD.

## NEW DELHI, INDIA

- 2 manufacturing locations with total 120,000 sq ft area
- 450 employees
- Products manufactured:
  - CNG Compressors
  - Cryogenic & LNG Pumps
  - Diaphragm & Reciprocating Compressors



Factory in New Delhi



Factory in Greater Noida



# XUZHOU AURO COMPRESSORSCO. LTD.

## XUZHOU, CHINA

### Main activities:

- Component manufacturing for pumps and compressors
- Manufacturing the CNG compressor skids
- In-house quality control of parts and components
- Manufacturing area of 50,000 sqft with 40+ fulltime employees







# XUZHOU AURO COMPRESSORS CO.LTD.

## XUZHOU, CHINA



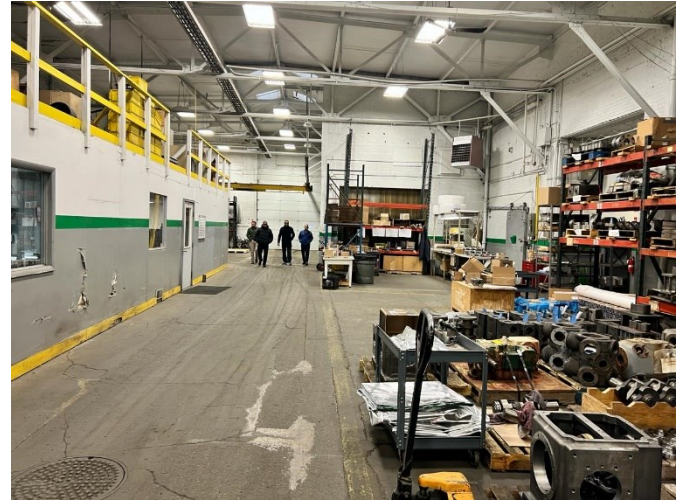


# KNOX WESTERN COMPRESSORS ERIE, PA, USA





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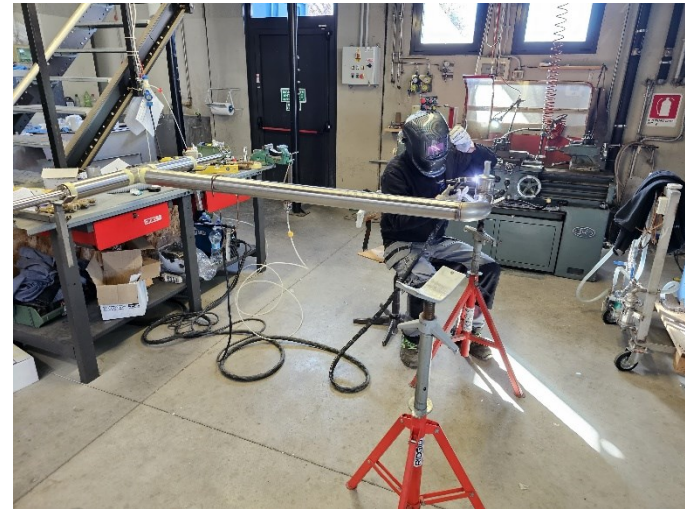
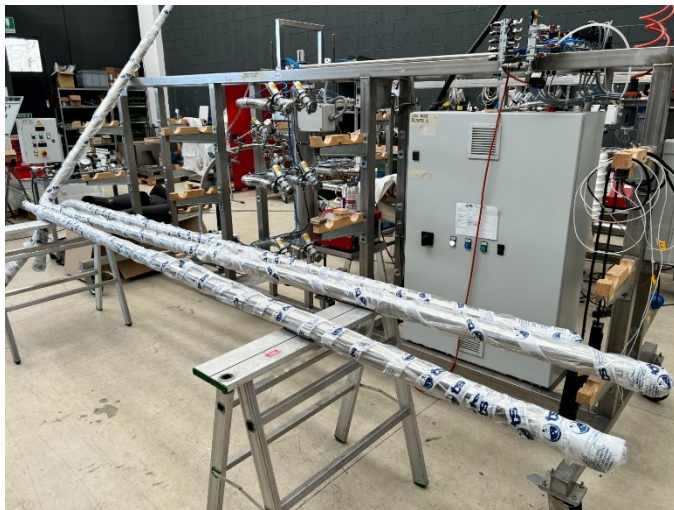




# CET ENGINEERING SRL PERUGIA, ITALY









# GLOBAL SUPPLY CHAIN

- Strong and long-term supplier relationships
- Strong focus on quality and reliability



# QUALITY CONTROL

- Proven safety track record since 40 years
- Component manufacturing outsourced
- Qualified, trained in-house teams for quality check of each part
- Full traceability records
- All compressors are tested prior to dispatch
- Highest standards for oxygen cleaning/  
de-greasing





# MARKETING – TRADE SHOWS

HANNOVER MESSE, GERMANY 2012 – 2024



Hannover 2024



Hannover 2019



Hannover 2012

# Thank You!

**Didwania.com**  
**Ventos-Compressors.com**  
**KnoxWestern.com**  
**Tsitalia.it**

