



CUSTOM-MADE COMPRESSORS



EN

RELIABLE BEYOND LIMITS

PIONEERS IN THE MANUFACTURING OF COMPRESSORS SINCE 1943

Since its foundation in 1943, ABC Compressors has been developing highly reliable solutions for a wide range of industries and applications. Its international vision and commitment to growth began with its first exports in the 1950s and its subsequent geographical expansion, leading to its presence today in more than 130 countries.

THE NUMBERS DRIVING CHANGE



+80

YEARS OF EXPERIENCE



+130

COUNTRIES



+700

SPECIAL COMPRESSORS



+4000

COMPRESSORS FOR PET



www.abc-compressors.com



80 YEARS OF EXPERIENCE

1943

- Foundation of the company in Eibar, Spain

1950

- 1st compressor in Europe

1960

- 1st compressor in Latin America
- 1st gas compressor

1970

- 1st compressor for the petrochemical industry
- 1st installation for a nuclear plant
- 1st compressor in Africa

1980

- 1st PET compressor
- 1st compressor for cogeneration
- 1st compressor in Asia

1990

- 1st compressor for water treatment
- Opening of the new factory and headquarters in Éibar, Spain
- 1st 1MW compressor

2000

- 1st compressor with Variable Speed Drive (VSD).
- Manufacture in accordance with API 618 regulations
- Expansion of the Official Services network to 5 continents

2010

- Opening of assembly and testing plants in China and Brazil
- New branch in Pune, India
- Creation of ABC Compressors Technology Center
- Launch of HORIZON y ECOO (CO₂) ranges

2020

- New branch in Miami, United States
- Launch of the SynchronizAIR Compressor Management System.
- Launch of the EVA Virtual Assistance System
- 1st 2MW compressor

PRESENT DAY

- Launch of the HORIZON SYNCHRO range
- Launch of the X-PET range
- PET compressors for rent
- Zero Leak Systems

CUSTOM-BUILT COMPRESSION FOR HIGH-DEMAND ENERGY AND INDUSTRIAL ENVIROMENT

RELIABILITY FOR THE MOST DEMANDING INDUSTRIES

At ABC Compressors, we specialize in the design and manufacturing of air and gas compressors tailored for critical applications. With more than 80 years of experience, we provide solutions that deliver outstanding reliability, durability, and performance, even under the most challenging operating conditions. Our compressors are trusted across Oil & Gas, energy, and other demanding sectors, where compliance, safety, and efficiency are non-negotiable.



Horizontal reciprocating compressors



API 618 compliant design



1 to 6 compression stages



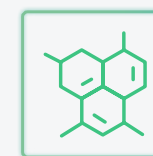
1 to 6 cylinders



Electric motor driven



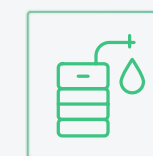
NACE materials available upon request



Suitable for all gases except Oxygen and Acetylene



From atmospheric pressure up to 250 barg



Lubricated and non-lubricated compressors



Condensate management system for saturated gases



Zero-leakage option available

PRODUCTION CAPACITY

Through its production facilities, ABC offers its customers different supply alternatives, preserving the quality and warranty of its compressors by manufacturing them entirely in Europe and packaging them in Europe, China, or Brazil as required.

	ABC EIBAR	ABC WUJIANG	ABC ITUPEVA
ENGINEERING AND R&D&i	•		
PROJECT MANAGEMENT	•	•	•
MECHANIZATION	•		
COMPRESSOR HEAD ASSEMBLY	•		
ASSEMBLY OF THE COMPLETE COMPRESSOR UNIT	•	•	•
TESTING OF THE COMPRESSOR UNIT	•	•	•

PROJECT MANAGEMENT



ASSEMBLY PLANT

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HEADQUARTERS

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ASSEMBLY PLANT

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FAST DELIVERY TIME

The project managers work closely with the sales team to meet all the customer's requirements at all stages of the project, with the support of mechanical and electrical specialists and using advanced design and management tools, with the following objectives:

- Analysis and study of the specifications
- Configuration of the machine and auxiliary equipment
- Definition of electrical and control schematics



CUSTOM CONFIGURATION

Following detailed engineering, key documents are ready for review prior to production. Quality is assured from individual parts to the warranty of the entire compressor unit. ABC has testing facilities at all its plants to monitor parameters and performance under real conditions. ABC's engineering service incorporates interconnected auxiliary equipment in the factory on a single chassis to test the compressor groups prior to delivery.

ANALYSIS OF THE
SPECIFICATIONS

PRODUCT
CONFIGURATION

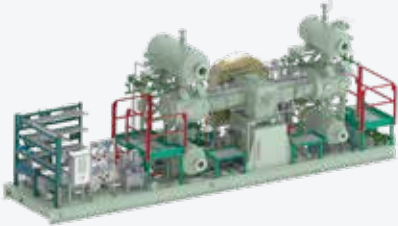
DETAILED
ENGINEERING

MANUFACTURING
AND ASSEMBLY

TESTING OF THE
COMPRESSOR

DELIVERY AND
START UP

SOLUTIONS AND PRODUCT RANGE

		kW	DIAMETER OF PISTON ROD	STROKE	LOAD ON PISTON ROD
	HA (Horizontal A)	300 kW	32 mm	150 mm	3000 kg
	HG (Horizontal G)	800 kW	40 mm	150 mm	5000 kg
	HP (Horizontal P)	1400 kW	50 mm	200 mm	14000 kg
	HX (Horizontal X)	4000 kW	75 mm	200-240 mm	24000 kg



RELIABILITY

- Up to 5 years warranty.
- 24 hours x 365 days of operation.
- Service starting from 8,000 hours.
- Minimal vibration and noise.



EASY INSTALLATION

- Quick start up and mobility.
- No vibration isolation required.
- Reduced installation space.
- Special training on site.



ENERGY EFFICIENCY

- Market leader in kWh/Nm³.
- Lowest total operating cost.



RESISTANCE

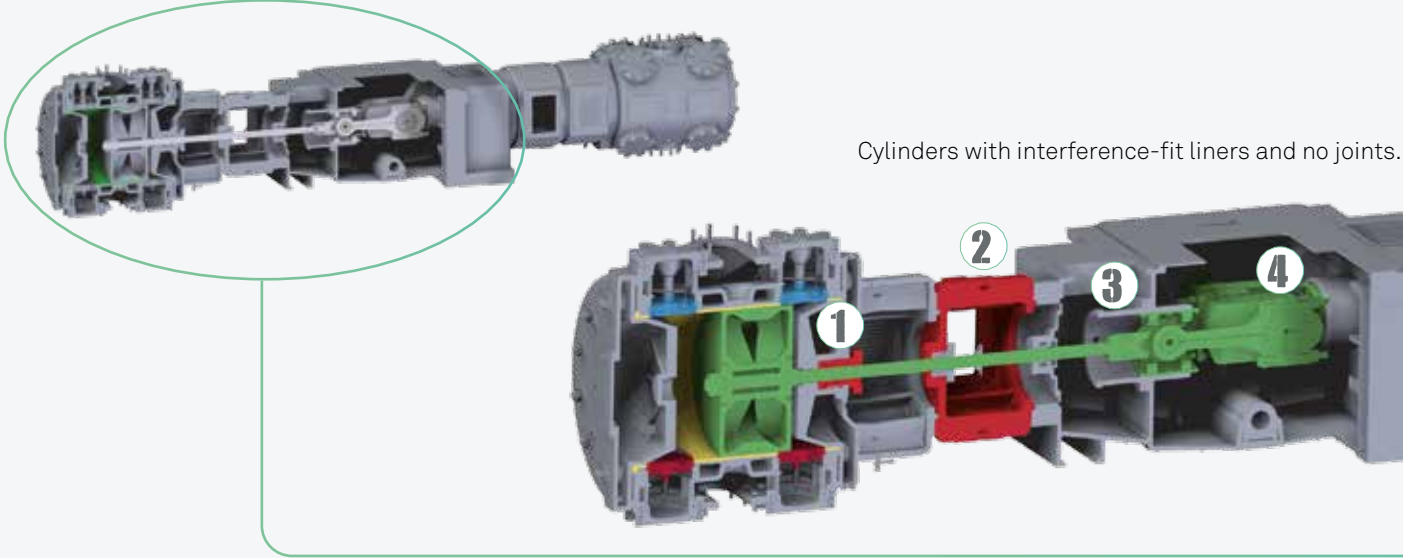
- Total guarantee and efficiency in demanding conditions.
- Maximum durability of parts.

Our precision engineered compressors follow the **API 618 standard**. Each unit is fully customized according to our customers' specifications. Quality and adaptability in every detail.

REGULATIONS

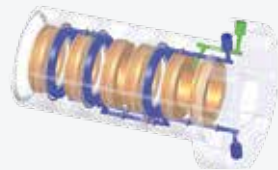
EUROPEAN DIRECTIVES: **2006/42/EC ATEX**
DESIGN STANDARDS: **AD2000, ASME, Tema C, Tema R, NEMA**
PETROCHEMICAL INDUSTRY STANDARDS: **API 618 & NACE**
CHINESE STANDARDS: **SELO & GB**
AMERICAN STANDARDS: **ASME U stamp**
BRAZILIAN STANDARDS: **NR12, NR13**

LATEST GENERATION COMPONENTS



1 PACKINGS

Water-cooled.



2 DISTANCE PIECE

Type A, B, C or D distance piece.



3 CROSSHEAD

Made of cast steel with removable slides and hydraulic or SUPERBOLT tightening.



4 FORGED CONROD

With friction bearings and hydraulic or SUPERBOLT nuts.



PULSATION ANALYSIS

API 618 approach 1, 2 and 3.



VALVES

Pressure relief for explosions in the crankcase with flame arrestor.



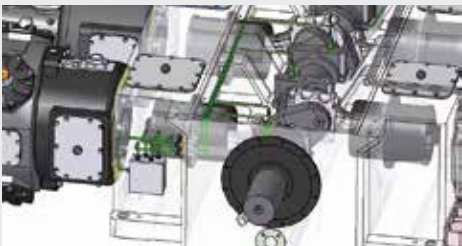
FORGED CRANKSHAFT

Available on all models, from one to six cylinders.

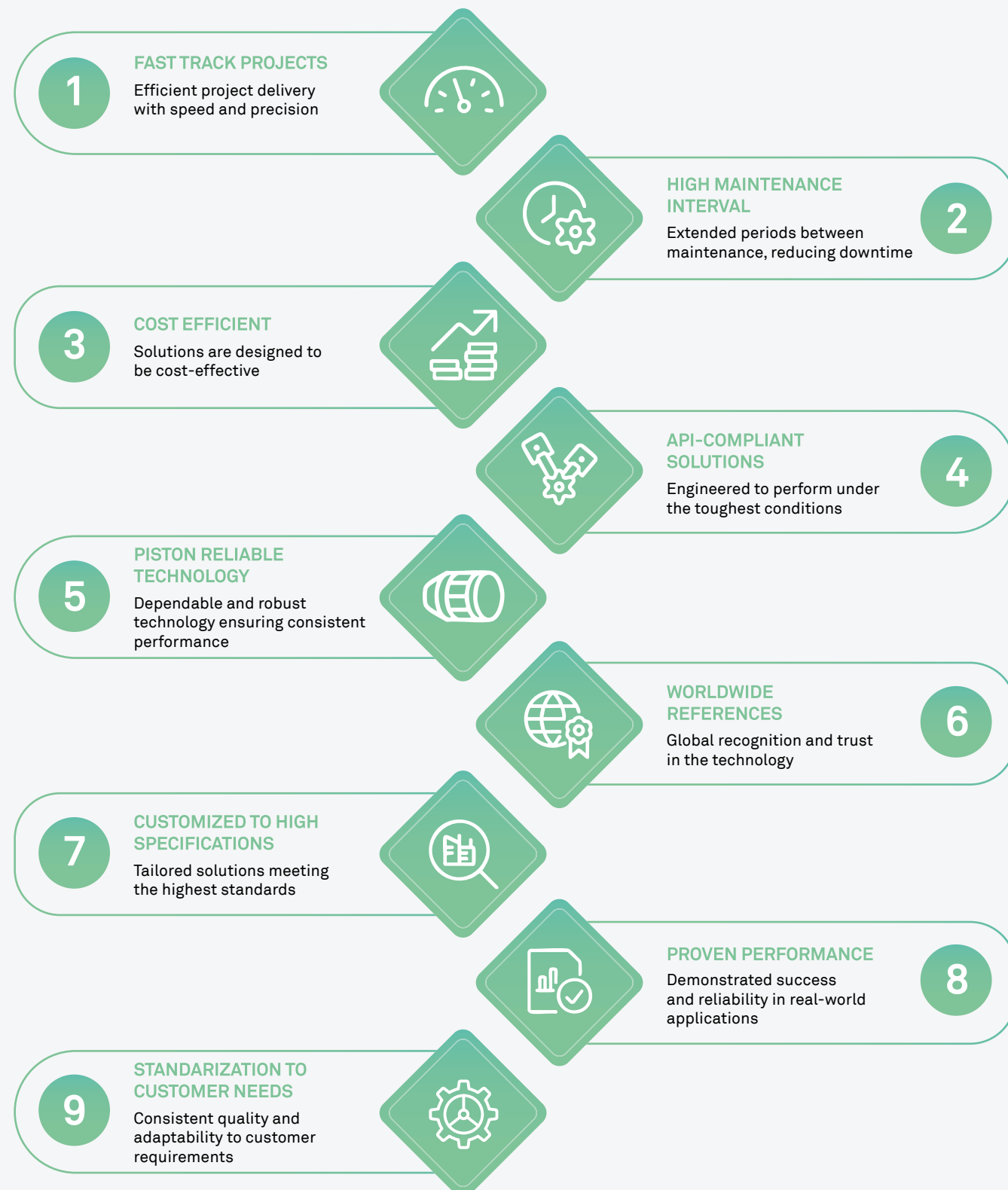


INSTRUMENTATION

For predictive maintenance: rod drop, vibrations, cylinder pressure, temperatures, etc.



WHAT MAKE US DIFFERENT



MARKETS AND EXPERIENCE



1. SMR Steam Methane Reformer



2. COGENERATION



3. BIOGAS



4. WASTE RECOVERY



5. ASU Air Separation Unit

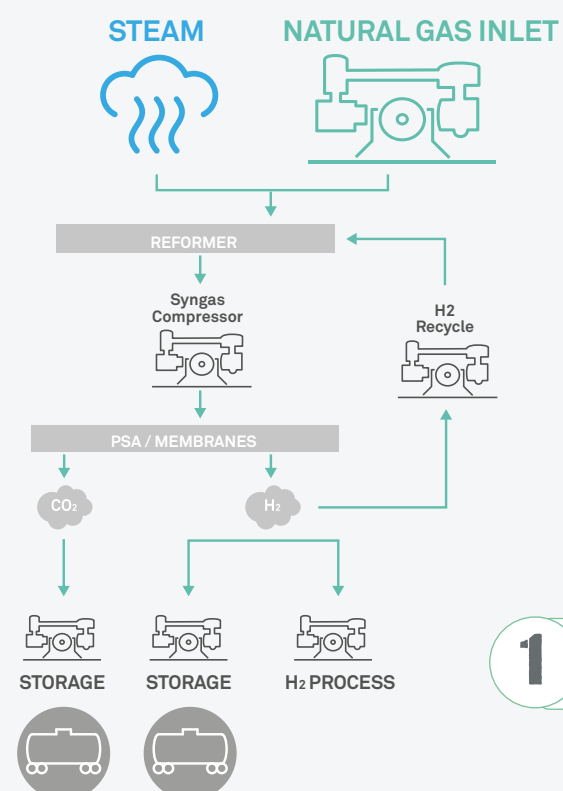


6. PET Bottle Blowing



7. PLANT INERTING & PROCESS

8. GREEN H₂ PROCESS9. CO₂ RECOVERY



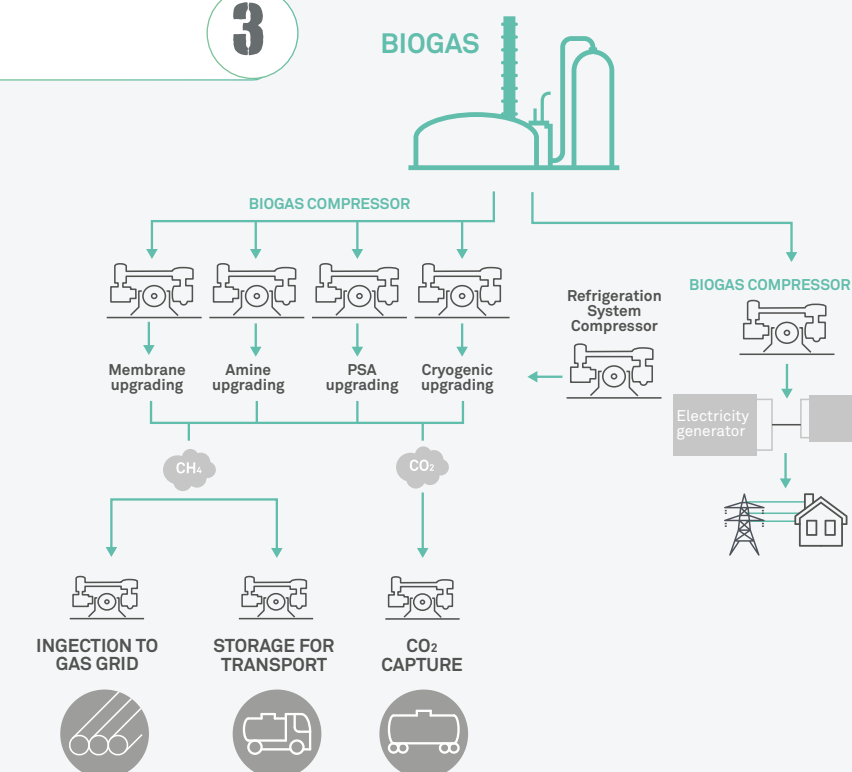
1

SMR Steam Methane Reformer



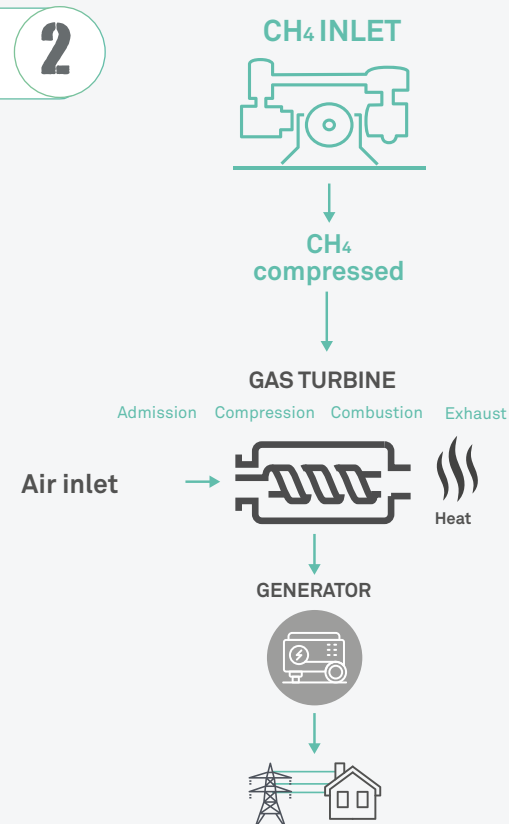
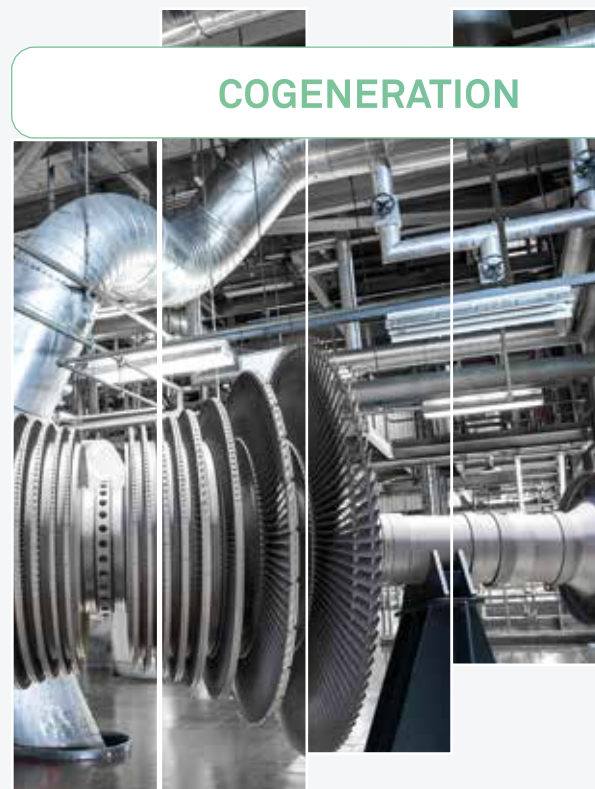
BIOGAS

3

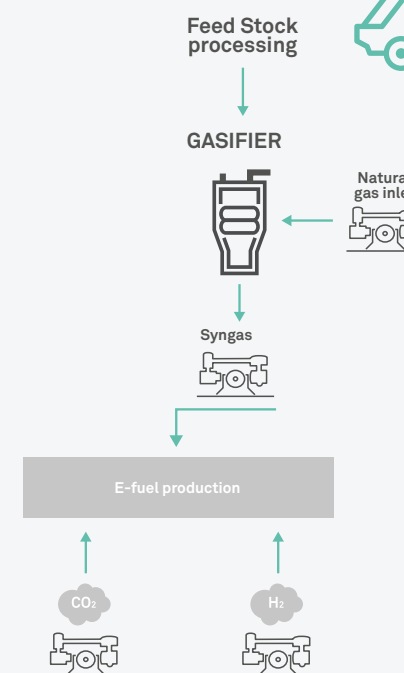


COGENERATION

2



WASTE TRUCK

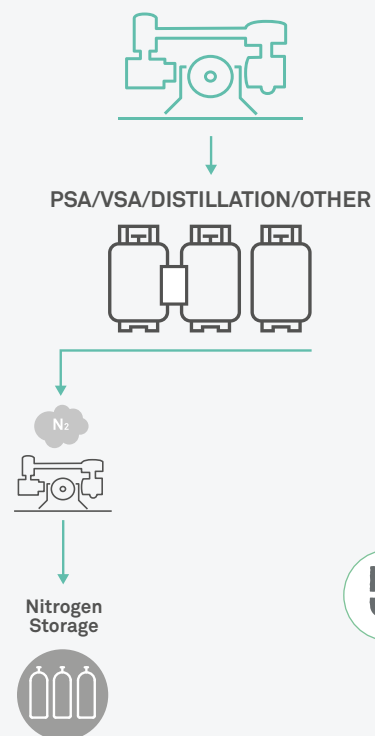


4

WASTE RECOVERY



COMPRESSED AIR



5

ASU Air Separation Unit

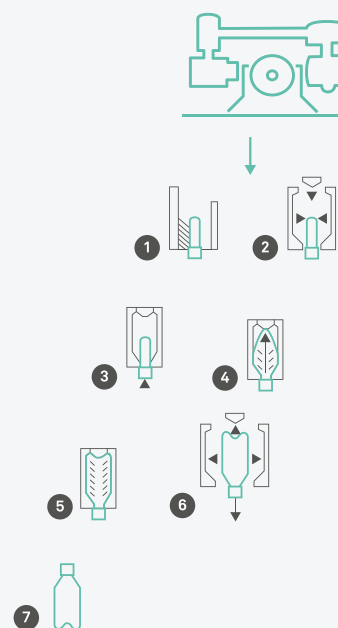


PET bottle blowing

6

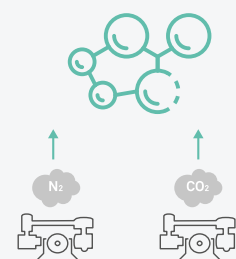


COMPRESSED AIR



PLANT INERTING & PROCESS

7

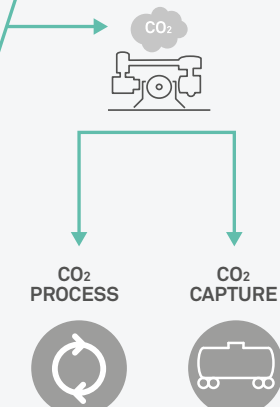
CHEMICAL PROCESS
(INSTALLATION)CO₂ RECOVERY

9

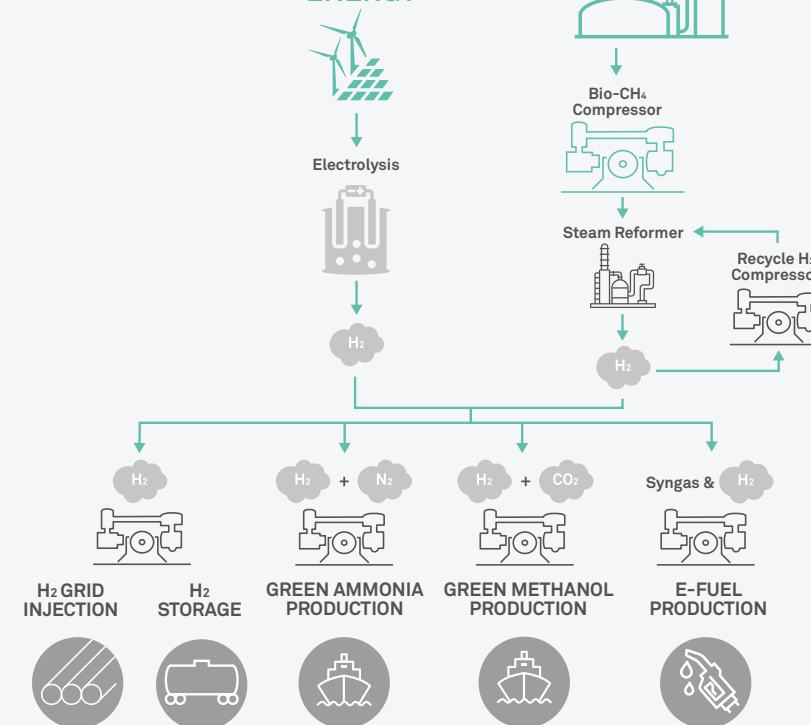
BIOETHANOL
PLANT

BREWERY

CRY ICE

BIOGAS
PLANTRENEWABLE
ENERGY

BIOGAS



8

GREEN H₂ PROCESS

CASE STUDIES

Hydrogen Production

With more than 50 hydrogen compressors supplied for grey hydrogen applications. Today, we continue to push the industry forward with the development of hydrogen compressors designed for decarbonization applications and the energy transition.



3EHA-4-LGT
Hydrogen Production

COMPRESSOR MODEL	1EHA-1-LGT	4EHA-6-LGT	4EHP-4-LGT	1EHA-2-LGT
GAS	HYDROGEN	HYDROGEN	HYDROGEN	HYDROGEN
Nº STAGES	1	4	4	1
Nº CYLYNDERS	1	6	4	2
SUCTION PRESSURE (bar)	25	1,2	1,1	8,4
DISCHARGE PRESSURE (bar)	34	40	66	12
POWER (kW)	11	200	400	75

Hydrogen Derivates

With a strong track record in the sector, we have been designing and manufacturing compressors for applications related to hydrogen derivatives. Our equipment plays a key role in the production of ammonia, methanol, SAF (Sustainable Aviation Fuel), and synthetic fuels.



6EHP-6-LGT
Hydrogen derivates

COMPRESSOR MODEL	1EHA-2-LGT	6EHP-6-LGT	2EHP-2-GT	3EHA-4-LGT
GAS	SYNGAS	SYNGAS	CO2	CO2
Nº STAGES	1	6	2	3
Nº CYLYNDERS	2	6	2	4
SUCTION PRESSURE (bar)	145	1,5	1,17	1,5
DISCHARGE PRESSURE (bar)	150	150	9,65	27,33
POWER (kW)	75	800	360	160

CASE STUDIES

Cogeneration

For many years, we have supplied compressors for turbine feed in cogeneration processes, both in simple and combined cycles. Our solutions ensure optimal performance and maximum energy efficiency in every project.



1EHP-6-GT
Cogeneration

COMPRESSOR MODEL	1EHP-6-GT	1EHP-1-GT	1EHP-6-GT	1EHP-2-GT
GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS	NATURAL GAS
Nº STAGES	1	1	1	1
Nº CYLYNDERS	6	1	6	2
SUCTION PRESSURE (bar)	17	18	32	17,5
DISCHARGE PRESSURE (bar)	67	66	51	36,5
POWER (kW)	1250	190	1300	250

Waste Recovery

We are experts in the manufacturing of compressors for waste recovery and regeneration processes. We supply equipment that compresses syngas for gasification and purification applications, where gas pressure is a critical factor for both efficiency and safety.



3EHA-4-LGT
Waste Recovery

COMPRESSOR MODEL	3TEHA-3-LGT	3EHA-4-LGT	1EHA-1-LGT	3EHP-4-LGT
GAS	SYNGAS	SYNGAS	SYNGAS	SYNGAS
Nº STAGES	3	3	1	3
Nº CYLYNDERS	3	4	1	4
SUCTION PRESSURE (bar)	0	0	28,8	1,1
DISCHARGE PRESSURE (bar)	24	18,2	57	18,7
POWER (kW)	55	110	22	265

CASE STUDIES

CO₂ Capture

We provide standardized CO2 compressors for clean CO2 capture and treatment processes. In addition, we design tailor-made solutions for applications where CO2 is not pure or where operations require high-pressure performance.



COMPRESSOR MODEL	3EHP-4-LGT	2EHA-2-GT	2EHA-6-GT	2EHP-4-GT
GAS	CO2	CO2	CO2	CO2
N° STAGES	3	2	2	2
N° CYLINDERS	4	2	6	4
SUCTION PRESSURE (bar)	1	1,2	1,2	0,3
DISCHARGE PRESSURE (bar)	10	19	18,5	21
POWER (kW)	500	110	280	500

3EHP-4-LGT
CO₂ Capture

Air Separation Units

With a large number of references provided for this application, at ABC Compresores we are experts in the manufacture of nitrogen and air compressors for air separation plants.



COMPRESSOR MODEL	3EHP-6-GT	1EHA-2-GT	2EHP-4-GT	4EHA-4-LT
GAS	N2	N2	N2	AIR
N° STAGES	3	1	2	4
N° CYLINDERS	6	2	4	4
SUCTION PRESSURE (bar)	7	7	1,8	0
DISCHARGE PRESSURE (bar)	73	27	8	36
POWER (kW)	1000	75	320	110

1EHA-2-GT
Air Separation Units



SUSTAINABILITY

Our commitment to the SUSTAINABLE DEVELOPMENT GOALS.

More than 70 annual initiatives directly related to the Sustainable Development Goals, covering more than 70% of the goals.

SUSTAINABLE DEVELOPMENT GOALS



- Among these, the most notable are:
- More than 80% of our suppliers are local.
 - 100% production control, from machining to final testing.
 - Digitalization of our Technical Service to provide remote technical support.
 - More than 50% of the factory's energy consumption is obtained through solar panels installed on our roof.
 - Reduction of energy consumption thanks to cutting-edge technology (permanent magnet motor + variable speed drive).
 - Elimination of idle times as the main objective of the new HORIZON SYNCHRO range.
 - Development of a compressor manager with machine learning to reduce energy consumption.
 - Versatile and adaptable compressors to reduce the carbon footprint.
 - Energy recovery through hot water generated by the compressor.

PRODUCTION CAPACITY

International customer service



NORTH AMERICA +10 services **USA** · Ontario **CANADA** · Mexico City **MEXICO** · **CARIBBEAN** Havana **CUBA** · **SOUTH AMERICA** Caracas **VENEZUELA** · Lima **PERU** · Guayaquil **ECUADOR** · Itupeva **BRAZIL** · Santiago de Chile **CHILE** · Buenos Aires **ARGENTINA** · Bogota **COLOMBIA** · **EUROPE** 9 services **SPAIN** · 9 services **FRANCE** · Hamburg **GERMANY** · Amsterdam **NETHERLANDS** · Belgrade **SERBIA** · Kiev **UKRAINE** · Vajta **HUNGARY** · Sofia **BULGARIA** · Bucharest **ROMANIA** · Zagreb **CROATIA** · Moscow **RUSSIA** · Istanbul **TURKEY** · +3 services **ITALY** · Katowice **POLAND** · **AFRICA** Addis Ababa **ETHIOPIA** · Cairo **EGYPT** · Nairobi **KENYA** · Kampala **UGANDA** · Tunis **TUNISIA** · Accra **GHANA** · Lagos **NIGERIA** · Johannesburg & Cape Town **SOUTH AFRICA** · Casablanca **MOROCCO** · Walvis Bay **NAMIBIA** · Algiers **ALGERIA** · **ASIA** Lahore & Karachi **PAKISTAN** · Riyadh **SAUDI ARABIA** · Tehran **IRAN** · Dubai **UAE** · Pune **INDIA** · Tokyo **JAPAN** · Shanghai-Wujiang **CHINA** · Ho Chi Minh City **VIETNAM** · Manila **PHILIPPINES** · Jakarta **INDONESIA** · Seoul **SOUTH KOREA** · Dhaka **BANGLADESH** · Taipei **TAIWAN** · Yangon **MYANMAR** · Bangkok **THAILAND** · Kuala Lumpur **MALAYSIA**



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