

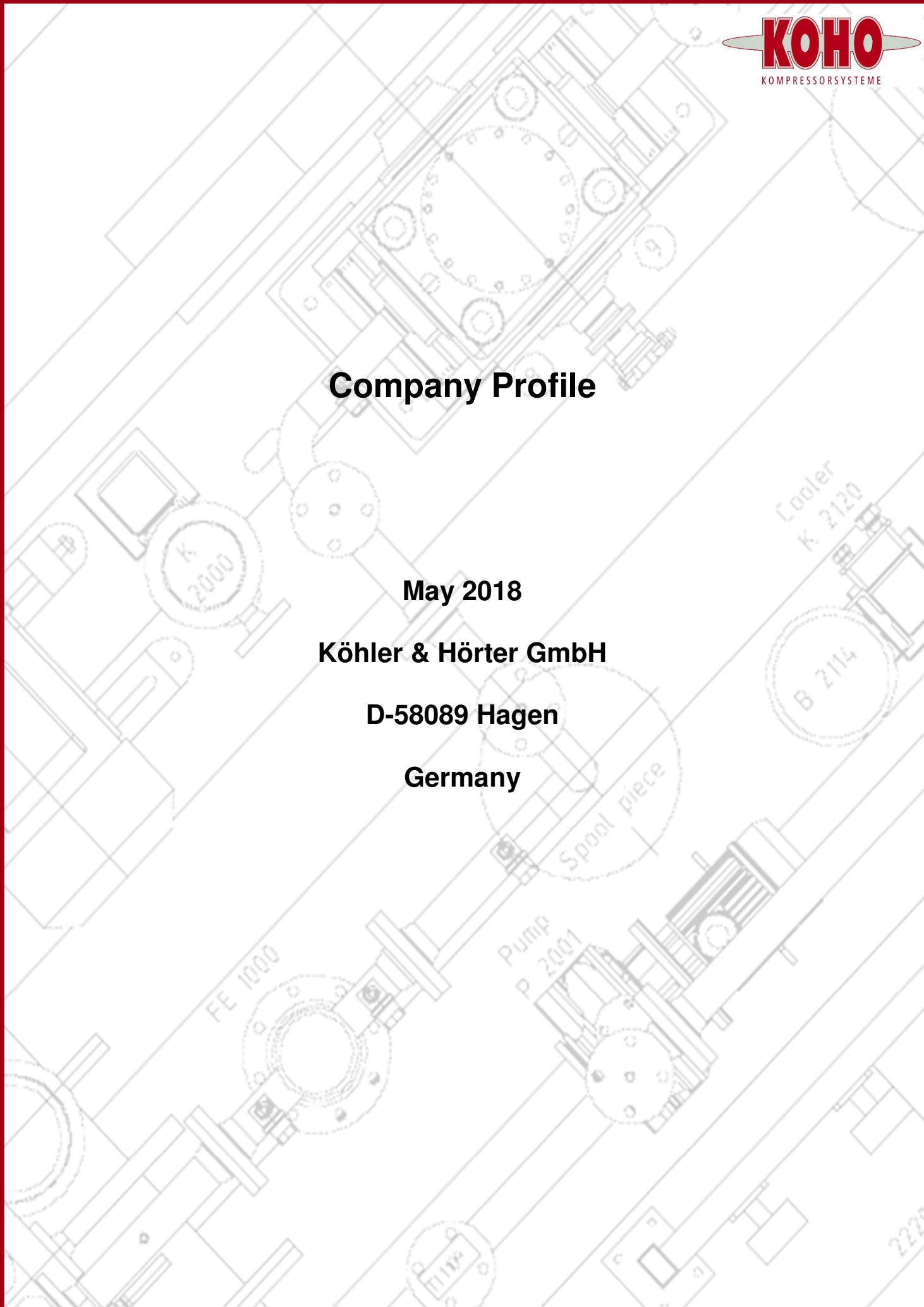
# Company Profile

May 2018

**Köhler & Hörter GmbH**

**D-58089 Hagen**

**Germany**



## 1. Company Outline

Company Name:

Köhler & Hörter GmbH

Address:

P.O. Box 2005  
D-58020 Hagen, Deutschland

Am Tempel 10  
D-58089 Hagen, Deutschland

Communication:

Tel.: 0049 (0)2331-9357-50  
Fax: 0049 (0)2331-9357-98  
E-Mail: [sales@koho-kompressor.de](mailto:sales@koho-kompressor.de)  
Internet: [www.koho-kompressor.de](http://www.koho-kompressor.de)

Established in:

May 1948

Chairman:

Mr. André Hörter  
Mr. Björn Hörter

## 2. Company Outline

Number of Employees:	Engineers:	11
	Administration:	5
	Production:	29

Banks:

- Commerzbank Hagen
- Deutsche Bank Hagen
- Sparkasse Hagen

Products:

- Reciprocating Compressors
- Packaging of reciprocating compressors
- Modernization, retrofitting and overhaul of compressor units for optimized efficiency and greater reliability
- Gastight bulkhead shaft penetrations

Please find below our product range and scope of supply

Construction:

Vertical Construction, Non Lubricated, Reciprocating Process Gas Compressors.

The advantage of vertical type is the extended life time of piston rings and the less wear of cylinder liners, because the weight of the piston do not burden the piston rings.

Media:

Hydrocarbons, Noble gases, Exhaust vapours, pure Hydrogen, Nitrogen and all process gases, even very aggressive Hydrosulphides with the exception of pure Oxygen and Acetylene.

Number of stages:	1, 2, 3 or 4
Number of cylinders:	1, 2 or 3
Suction pressure:	Up to 15,0 MPa g (for booster applications)
Discharge pressure:	Up to 30,0 MPa g
Shaft power:	10 to 500 kW
Volume flow:	Between 100 and 16 000 m <sup>3</sup> N/h (depending on pressure ratio)

KoHo compressor systems are designed for variable suction pressure with specifications and regulations laid down in API 618, ISO 9001, NACE, DVGW, ASME, TEMA, PED, DIN EN 729-3;AD 2000/HPO, Stoomwezen, Norske, Veritas, Germanischer Lloyd as well as special factory standards of International clients.

KoHo has special experience & know how for very aggressive gases, such as NO<sub>x</sub> and H<sub>2</sub>S for many years.

### 3. Main Customers (Excerpt)

#### **Chemicals / Pharmacy:**

BASF AG  
Chemische Werke Hüls AG  
Dow Chemical  
Hoechst AG / Clariant  
InfraServ  
Neste OY  
Wacker Chemie  
H & M ChemPharm  
Clariant  
Dairen Chemicals, Taiwan  
Polynar, Iran  
UCB Pharma, Belgien  
Bheshar, Iran  
Borsodchem, Ungarn

Chemgas  
HDW  
Strabag  
TGE – Bonn

#### **Food Industry:**

Bitburger Brauerei  
General Biscuits  
Guinness  
HAG AG  
Jacobs AG  
HABAS, Türkei

#### **Extraction Engineering:**

Hopfenextraktion  
Uhde Hochdrucktechnik  
Martin Bauer

#### **Petrochemicals:**

Sasol  
Indian Petrochemicals  
Mobil Oil  
OMV  
Shell  
Veba Oel  
Degussa

#### **Engineering and construction:**

Air Products  
Air Liquide  
Buse Anlagenbau  
Mannesmann Anlagenbau  
Messer AGS  
Schlömann Simag  
Welmac  
Ferrostaal

#### **Consulting Engineers:**

Borealis Polymers  
DSD  
ENPPI  
Fortum Oil and Gas Oy  
Neste Engineering  
Foster Wheeler  
John Brown  
Krupp Uhde  
KTI – India  
Lurgi  
Mahler IGS  
Technip  
Messer AGS  
Davy Process Technology  
GS Engineering & Construction

#### **Gas Storage and Exploration:**

BEB Hannover  
Energieversorgung Oberhausen  
Preussag AG  
Wintershall AG

#### **Naval sector:**

A. P. Möller

#### **Public Utility Company:**

Bad Kreuznach; Eutin  
Glückstadt; Illingen  
Lemgo; Paderborn  
Rotenburg; Singen  
Essen; Memmingen  
Münster; Bernburg  
Bocholt; Albstadt  
Herford

#### 4. Representations and Cooperation's

##### **Europe:**

Belgium  
Finland  
France  
Great Britain  
Netherlands  
Norway  
Romania  
Sweden  
Czech Republic  
Hungary

##### **Asia:**

China  
India  
Iran  
Japan  
Qatar  
Korea  
Malaysia  
Singapore  
Taiwan (China)  
Thailand

##### **Africa:**

Egypt

##### **America:**

Mexico  
Brazil

## 5. Tools and Equipment

### **Mechanical machining:**

- CNC- turning centre
- CNC- power drill and mill machines
- Grinding machines
- Honing machine
- Sand blasting machine

### **Welding Equipment:**

- TIG welding machine
- MIG/MAG welding machine

### **Lifting Device:**

- 20 Ton Crane
- 10 Ton Crane
- 5 Ton Crane
- Fork Lifter

### **Testing Equipment:**

- Test room with machine foundation,
- Frequency transformer
- Shop motor for machine test run
- Testing and measurement equipment
- Closed cooling water system for machine test run

### **Office and Engineering Facilities:**

- 3D CAD (Mechanical Desktop, Inventor and Autocad)
- Hardware and software for project control, monitoring, scheduling and optimum utilisation of resources
- Software for sizing, design and selection of components & machines

### **Quality Management:**

In accordance with ISO 9001 through TÜV  
CE-Marking of the Products

### **Welding Approvals:**

In accordance with AD-M HP2/1  
EN 288-3 / EN 287-1 / EN 729-3  
Schweissverfahrensprüfung F3, F4 und A1, A2

### **Classification Certification:**

Bureau Veritas  
Det Norsk Veritas  
Germanischer Lloyd  
Gosgortechnadzor  
Lloyds Register  
TÜV

**The machines and its components are designed according to Customers requirements, and possible to following Codes and Standards:**

AD 2000 / Druckgeräterichtlinie  
Pressure Equipment Directive 97/23/EC (PED)  
ASME Boiler & Pressure Vessel Code VIII/Div.1  
China ML  
TEMA  
Berufsgenossenschaftsvorschriften  
DVGW  
IEC  
ISO 8012  
KHK-Japan  
VDI  
Eurasien Conformity



## 6. Company History

- 1948 Foundation of the company through Mr August Hörter and Mr Alfred Köhler
- 1951 Design and fabrication of own product series of oil-lubricated piston compressors
- 1962 Design and fabrication of the first oil-free piston compressors
- 1965 Relocation to our present operating site
- 1966 Construction and building of the first reciprocating compressors
- 1973 Production of oil-lubricated piston compressors discontinued
- 1974 Enlargement of the type programme
- 1979 First reciprocating compressors for high aggressive NO<sub>x</sub> gas
- 1980 First reciprocating compressors for the CO<sub>2</sub> extraction
- 1981 First leakage-free reciprocating compressor with pressure-tight crankcase
- 1982 First reciprocating compressor for H<sub>2</sub>S sour gas
- 1983 First reciprocating compressor for municipal utility natural gas storage
- 1984 Admission of our reciprocating compressors through Germanischen Lloyd and delivery of the first one for gassing oil tanker
- 1984 Construction and building of the first bulkhead shafts
- 1985 Start of first Quality Assurance logs and order-related archiving
- 1985 Introduction of a new and extended compressor type
- 1987 Delivery of the first H<sub>2</sub>O vapour gas compressor unit
- 1992 Delivery of the 1000th KoHo-Compressor
- 1993 Set-up of Quality Assurance System according to DIN ISO 9001
- 1994 Licence agreement with the Japanese company Tanabe
- 1995 Third party certification through DQS according to DIN EN ISO 9001
- 1996 First compressor package for dry hydrogen with 200 bar outlet pressure
- 1999 Company enlargement. Construction of an additional workshop with compressor test bench and 20 ton lifting crane

- 2002 Third party certification through RWTÜV according to EN ISO 9001, EN 97/23/EG (DGRL), EN 729-3 (AD 2000 HP)
- 2013 Company enlargement. Construction of an additional workshop.
- 2012 First compressor package for bone dry nitrogen with 200 bar outlet pressure
- 2013 First compressor package for outdoor installation in Russia at -47°C
- 2013 Third party certification for Gost-R, Ex-Gost
- 2016 Delivery of the 700<sup>th</sup> Process gas compressor
- 2016 Engineering and development of a gas tight / leakage free compressor
- 2016 Engineering and development of a compressor for cryogenic applications (gas inlet temperature of -163°C)



**KÖHLER & HÖRTER GmbH**  
Postfach 2005  
D-58020 Hagen

Björn Hörter  
Managing Director



KÖHLER & HÖRTER GMBH · POSTFACH 2005 · D-58020 HAGEN

**TO WHOM IT MAY CONCERN**

IHR ZEICHEN

IHRE NACHRICHT VOM

UNSER ZEICHEN  
ca

TELEFON-DURCHWAHL  
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DATUM  
22<sup>th</sup> of May 2018

We, hereby declare that Messrs. **ELECTRO TEHRAN IMPEX Co. Ltd.** (Eltex), having their principle place of business at

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Tehran 15137 13915, Iran.  
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Email : [koho@tehran-office.com](mailto:koho@tehran-office.com)  
Web : [www.eltexco.com](http://www.eltexco.com)

is our official Sales office in the I.R. Iran.

**KÖHLER & HÖRTER GMBH**

 **KÖHLER & HÖRTER GmbH**  
Postfach 2005  
D-58020 Hagen

Björn Hörter,  
Managing Director



HAUSANSCHRIFT:  
GESCHÄFTSFÜHRER:

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SPARKASSE HAGEN

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