Manufacturing facilities

at the Hanover plant

Körting

THE EJECTOR COMPANY

Top quality in-house manufacturing

Based on engineering expertise and experience since 1871

The company

IN-HOUSE MANUFACTURING AT THE HANNOVER PLANT

By combining profound engineering expertise and extensive experience with in-house manufacturing, Körting Hannover GmbH delivers uncompromising quality. A strong customer focus and cutting-edge manufacturing technologies result in top-tier products or pressure equipment. The company has DIN EN ISO 9001 certification. In addition to other international approvals, it has HP0/DIN EN ISO 3834-2 certification from TÜV NORD for manufacturing pressure tanks.

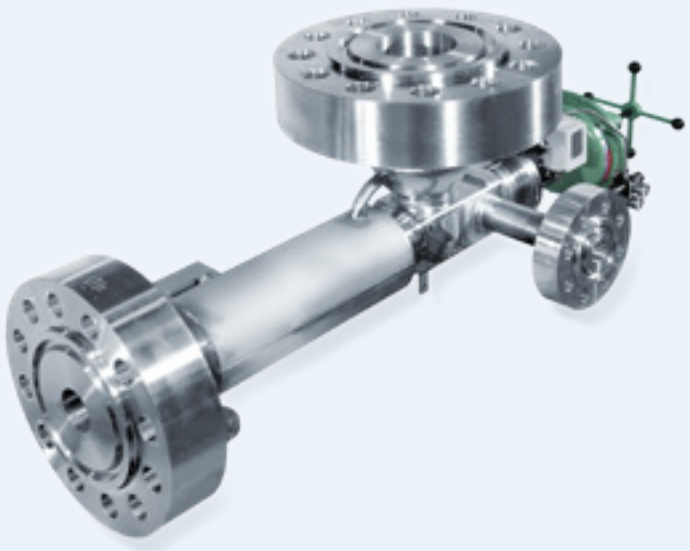
The company concentrates on core skills to achieve a high level of quality. We invest consistently in personnel upskilling programmes, which result in state-of-the-art production processes that are pivotal to the excellence of Körting products. Our manufacturing and development departments work hand in hand to ensure outstanding quality and reliability. Our quality management system constantly monitors and optimises processes across all departments. Rooted in our core philosophy, our certification validates this dedication and the high standards we uphold throughout the company.

Certificates and approvals (a selection):

- TTÜV-Cert DIN EN ISO 9001
- AD 2000 HP0/DIN EN ISO 3834-2
- PED 2014/68/EU
- ASME Certification Mark
- Manufacture License of Special Equipment People's Republic of China

You can find these and lots more certificates here.

HP ejector made of highly corrosion-resistant duplex steel destined for UREA production equipment



Two-stage steam-jet vacuum system with surface condensers made of graphite and Hastelloy

MANUFACTURING FACILITIES

Due to our in-depth expertise, we can also offer contract manufacturing. This brochure outlines the manufacturing facilities at the Hannover plant.

LOCATION

Körting Hannover GmbH's headquarters are at Badenstedter Strasse 56 in 30453 Hannover, Germany.

Contact
Operations and manufacturing management
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+49 511 2129-465

Directions
Google Maps shows the quickest way to reach us.

WHAT WE OFFER:

- **Mechanical processing**
- **CNC oxy-fuel cutting**
- **Sheet metal forming/rolling**
- **Welding/stainless steel pickling**
- **Non-destructive testing/pressure testing**
- **Surface treatment**

FACILITY CAPACITIES

If required, all finished products can be stored in our warehouse, which is 3,500 m² in size.

Floorspace (m²)		Door dimensions (m)	Cran capacities (t)	Hook height (m)
Equipment pre-assembly	2 500	4 × 4	20	6.5
Mechanical fabrication	3 500	4 × 4	5	5
Equipment final assembly and shipping	7 000	3 × 4	5	4

LOADING OPTIONS

We arrange product shipping through freight forwarding partners via road, sea, or air.

Type	Max. component sizes (m)	Lifting capacity (t)
Gantry crane	3.5 × 4 × 20	20

Mechanical processing

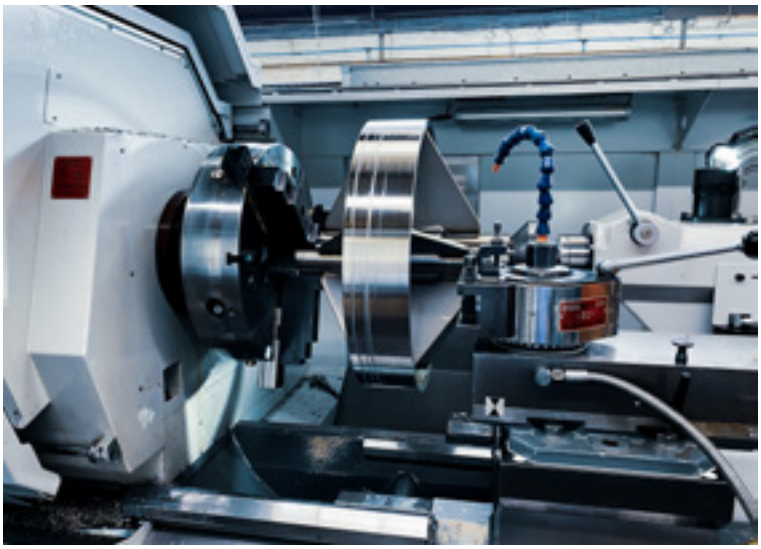
MACHINING

Using various CNC machines, we process ferrous and non-ferrous alloys along with diverse plastics by turning, milling, and drilling. The 5-axis CNC turning centres are designed for all-in-one machining. All-in-one machining of welded assemblies is also possible on a vertical turret lathe and boring mill. We also use further drilling and milling centres and cycle-controlled machining tools.

Multipurpose milling and turning centre DMG – DMU 125 FD	(mm)
X-axis	1 250
Y-axis	1 000
Z-axis	1 000
Turning diameter outside clamp	max. 1 300
Turning diameter inside clamp	max. 1 300

Various CNC turning centres	max. workpiece dimensions	(mm)
Mazak Integrex | Mori DMG e500 HII	Turning diameter Turning length	800 max. 3 000 max.
Okuma Multus B400 - C2000 B400II - W1500 LU3000-M25C DMG MORI CTX beta 2000	Turning diameter Turning length	630 max. 2 000 max.

Various cycle-controlled lathes		(mm)
e.g. Weiler E130	Turning diameter Turning length Bezel diameter	1300 max. 4 500 max. 600 max.



PLASMA AND OXY-FUEL CUTTING

The CNC-driven oxy-fuel cutting machine combined with a nesting program allows precise positioning of parts and a significant reduction in material waste.

Cutting method
Oxy-fuel cutting of up to 100 mm sheet thickness
Plasma with swirl gas technology • ESAB iSeries 600i sheets up to 50 mm thick • ESAB DMX bevelling system Plasma gases: Air, O_2, Ar/H_2, N_2
O_2 = oxygen Ar = argon H_2 = hydrogen N_2 = nitrogen
Cutting range
Width 3 000 mm
Length 6 000 mm

SADDLE HOLE CUTTING MACHINE

The PLC-controlled pipe cutting machine stands for maximum precision and efficiency in pipe cutting and profiling. Thanks to the circular cutting method, it enables neat, fully automated cuts across a wide range of diameters.

Type SCM 630	
Max. Swing Ø	630 mm
Max. Hollow spindle Ø	540 mm
Min. Workpiece Ø	76 mm
Max. Workpiece Ø	630 mm
Max. Cutting length	3 000 mm
Max. bevel cut	+- 45°

Possible cutting shapes	
Nozzle contour	Set-on and set-in
Nozzle contour	On elbow
Offset contours	Set-on and set-in
Bevel cut	0° to 90° branch connections
Intersections	Mit bevel and/or elliptical cuts

SHEET METAL FORMING

Using presses and bending machines, we can manufacture cylinders (e.g. vessel shells) and cones with various taper ratios.

Sheet metal folding machine	Sheet size: 1 500 mm max. · Sheet thickness: 3 mm max.
Hydraulic presses	Press force: 200 t
3-roll plate bending machines with replaceable cylindrical and tapered top roll	Shell size: where Lmax = 2 500 mm with ID > ø 2 000 mm → t = 50 mm thick where Lmax = 2 500 mm with ID > ø 440 mm → t = 32 mm thick where Lmax = 3 000 mm with ID > ø 385 mm → t = 12 mm thick where Lmax = 1 000 mm with ID > ø 385 mm → t = 16 mm thick

Welding

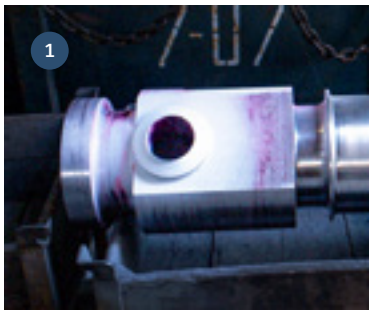
Körting Hannover GmbH's team consists of qualified and experienced welders, welding engineers, welding technicians, and welding foremen. Numerous certified welding procedures are in place for an extensive array of materials.

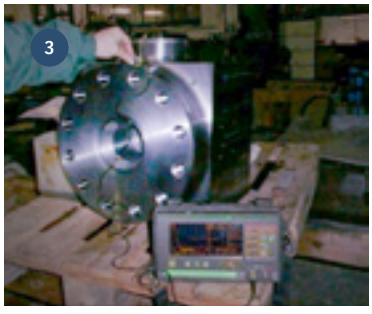
HP0 and DIN EN ISO 3834-2 certification mean that Körting Hannover GmbH is qualified to manufacture pressure vessels and perform all required in-house inspections.

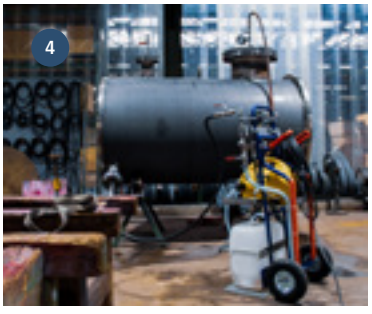
Welding methods
Welding machines (UP)
MMA
MAG
TIG and TIG hot wire
TIG cold wire mechanised
Hot gas extrusion welding/butt welding → for polypropylene (PP)

Non-destructive testing

Our qualified staff (up to Level 3) conducts radiographic inspections per DIN EN ISO 17636-1 and ASME Section V + VIII on all weld seams. Körting's inspection department evaluates all manufactured products in accordance with guidelines and specifications using the processes listed below. It works closely with TÜV NORD and other service providers in the process.







Inspection methods
1) Dye penetrant method
2) Radiographic testing with X-ray tube or isotope
3) Ultrasonic method
4) Hydrostatic testing up to 1 000 bar

Surface treatment

PICKLING

To ensure corrosion resistance, the welded stainless steel assemblies are pickled and passivated.

Immersion pickling is performed in a solution of sulphuric acid and hydrofluoric acid. Depending on the material, it takes 30 to 60 minutes to pickle it at room temperature.

Pickling tank	(mm)
Length	4 000
Width	1 800
Height	1 600
Average filling level	800

Composition	
15% vol. HNO_3	
5% vol. HF	(rest H_2O)

BLASTING

Workpieces are blasted with aluminium oxide or glass beads in the blasting machine. This process is for pre-treatment prior to further coating (e.g., spray painting) or as a final surface treatment for stainless steel parts.

Blasting machine	(mm)
Length	8 900
Width	2 800
Height	2 500

PAINTING

Manual and spray painting, anti-corrosion priming, and top coating in compliance with the required dry film thicknesses.

Paint shop	(mm)
Length	6 000
Width	4 000
Door W × H	2 450 × 2 980

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