





“ Since 1945 innovation and service have developed Hagens Spring Group to be a leading manufacturer of quality springs to the global market. Welcome. ”

*Henrik Hagens CEO*

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**“For Hagens  
Spring Group  
special solutions  
are the standard”**



## Products

# Springs of all sizes

Hagens Spring Group is an order-producing manufacturer of springs, spring solutions and other wire components for the global market. We have the newest technologies and offer springs of all kinds, in all materials and sizes.

Hagens Spring Group offers any kind of surface.

<b>Extension springs</b>	from 0.1 mm to 25.0 mm wire thickness
<b>Compression springs</b>	from 0.1 mm to 25.0 mm wire thickness
<b>Torsion springs</b>	from 0.1 mm to 25.0 mm wire thickness
<b>Pick-up springs</b>	up to 18.0 mm wire thickness
<b>Harrow tines</b>	up to 18.0 mm wire thickness
<b>Special springs</b>	from 0.1 mm to 25.0 mm wire thickness
<b>Wave springs</b>	in flat material 0.5 mm
<b>Die springs</b>	according to ISO 10243 [standard springs]
<b>Disc springs</b>	from 0,1 mm thickness
<b>Single and double pins</b>	from 1.0 mm to 8.0 mm wire thickness
<b>Locking rings</b>	from 0.1 mm to 25.0 mm wire thickness
<b>Springs of flat material</b>	of 0.2 mm thickness



**“ Experience and knowledge  
ensures the quality in our  
production and technical  
support ”**

## Materials

### **Springs requires the right raw material**

Hagens Spring Group works with leading steel mills, and our staff knows which materials can meet the specific requirements for tensile strength and spring application. The most common used raw materials are:

- **EN 10270-1, cold drawn spring wires - SM, SH and DH.**

Used to springs of all kinds.

- **EN 10270-2, oil tempered spring wire - FD and VD.**


Used for higher tensile strength and improved lifetime, such as valve springs.

- **EN 10270-3, stainless spring wires - W 1.4310 common, W.1.4401 acid resistant, W.1.4568 heat resistant and W.1.4462 Duplex.**

Used for high demands regarding corrosion.

We also work with materials for industries with special requirements for the spring wire. Among other: oil and gas industry, food industry and marine where we are working with materials such as Elgiloy<sup>®</sup>, Hastelloy C-276<sup>®</sup>, Inconel X-750<sup>®</sup>, Inconel 718<sup>®</sup>, MP35N<sup>®</sup>, Nimonic<sup>®</sup> 90 and beryllium copper.





**“ Together with our  
customer we create the  
optimum spring solution ”**




## Advice Springs for all purposes

As an order-producing manufacturer the customer's requirements and needs are always at the center. The optimum solution is developed in close dialogue and co-operation with our customer and is based on the customers specific requirements and specifications.

Many years of experience combined with personalized advice from our engineers, technicians and salespeople make Hagens Spring Group able to produce springs for all purposes. With us, springs are not a standard product. It is a product developed from bottom with a focus on functionality, quality and economy.

Hagens Spring Group serves a broad range of customers with very diverse requirements. Our experience with production for many industries means that it is always worth contacting Hagens Spring Group. Some of the industries we supply are:

- **Agricultural Machinery**
- **Pumps and valves**
- **Offshore and Marine**
- **Medical devices**
- **Park and Gardens**
- **Housing and real estate**
- **Food processing**
- **Train industry**



**“ Quality is more than  
control. It is an attitude  
to our work ”**

## Quality **Springs without compromise**


Hagens Spring Group is certified according to ISO 9001 and ISO 14001. This means that all springs are produced according to international quality and environmental management systems.

To ensure an optimized production, standard procedures for documenting the production are followed. This also includes tracking of raw materials and production equipment used.

The quality management system is the basis of our quality objectives and activities for still higher standards.

Furthermore, production is based on the principles of TS16949. This includes among others detailed reports regarding material inspection, production cycle and inspection and test reports.





**“ We know what  
flexibility means  
for our customers ”**

## Flexibility

# Special springs are our standard

Hagens Spring Group is a order-producing manufacturer. Therefore, we emphasize on close relationships and cooperation with both customers and suppliers and understand the importance of being flexible.

The company has adapted to the demands of a modern manufacturing company. Quality, orderly working conditions and environmental issues are important values for Hagens Spring Group. And we are well informed on all important matters related to flexible production of quality springs.

We continue to build our knowledge through networking and development projects, customers, researchers and professionals, just as well as Hagens Spring Group is a member of several leading business and professional organizations. Among others:

- Institute of Spring Technology, IST
  - Spring industry consultants
- Verband der Deutschen Federnindustrie, VDFI





AVOID EXPOSURE  
Laser radiation is  
emitted from this  
aperture

“ The latest technology  
combined with our  
knowledge is the foundation  
of our production ”

## Production

### **Springs directly to the customer**

Hagens Spring Group offers optimum spring solutions, because of our effective production and the right production equipment. This makes us one of the leading manufacturers of quality springs at competitive prices.

Hagens Spring Group offers all kinds of surface – for example, shot peening, galvanizing, delta treatment or painting.

Packaging and delivery are also part of doing business with Hagens Spring Group and the overall process we prepare packing and delivering according to customer needs. If the customer wants the springs delivered in his own packaging, this can also be done.

We are close to our customers, with headquarters and production in Stoevring, Denmark. In addition, we have production and sales office in Ningbo, China.

# History

## About Hagens Spring Group

### **Today** Hagens Spring Group consists of

- Hagens Fjedre A/S, Denmark
- Hagens Springs ApS, Denmark
- Hagens Spring Group Manufacturing (Ningbo) Co. Ltd. China
- Hagens Trading (Ningbo) Co. Ltd. China

The Group has a new visual identity. A more modern expression that reflects the continued development of Hagens Spring Group as one of the leading manufacturers of quality springs for the global market.

**2011** Hagen Spring Group is where the customers are, and we value strong relationships with our customers very high. Therefore, Hagens Spring Group builds a brand new factory with sales office in China.

**2008** In order to optimize the entire process Hagens Fjedre A/S gathers all production in Støevring.

**2005** Hagens Fjedre A/S celebrates its 60th anniversary. Henrik Hagens becomes the new CEO.

**1992** Current CEO - Henrik Hagens - joins the board of Hagens Fjedre A/S. Henrik Hagens is the third generation of the company's founder.

**1982** Hagens Fjedre A/S is growing steadily, and starting production in Gladsaxe at Copenhagen – an area where many customers especially industrial production are located.

**1977** Hagens Fjedre A/S expands again by purchasing a factory in Brøvst, Denmark. Furthermore, the production in Støevring is renewed again.

**1970** Hagens Fjedre A/S celebrates its 25th anniversary, and Knud Hagens entrusts management of the company to the next generation. Peter Hagens becomes Managing Director.

**1966** Production of springs is now so great, and the products so different that there again is need for new facilities. When Knud Hagens want to be closer to the expanding number of customers in Jutland, he chooses also to establish a production with more than 30 jobs in Støevring. Production now includes springs up to 25 mm wire diameter for both the industry and agriculture.

**1960** Hagens Fjedre A/S is in need of more space and expands with additional space on Dr. Olgas vej - also in Frederiksberg.

**1955** Hagens Fjedre A/S moves from Tjørnegade on Frederiksberg to larger premises on Kong Georg's vej. Knud Hagens now produces only springs.

**1945** Hagens Fjedre A/S was originally a mechanical workshop in Frederiksberg in Copenhagen. Engineer Knud Hagens begin parallel to repair of mechanical equipment to produce springs in thin wire.