TECHNICAL SPRINGS



YOU FACE THE CHALLENGE. WE HAVE THE SOLUTION.

Precision, sound and feel make your product unique. To achieve this, you need high-performance technical springs.

In all conventional materials, in small or large batches.

In uniform quality, with precise delivery schedules.

This is a high demand that we have been meeting since 1928. Specialising in small compression springs and spring sleeves, we have developed into a reliable partner for renowned companies around the world. This is thanks to our expertise, our high quality awareness, and our understanding of what service means.

We are convinced that successful and lasting partnerships extend beyond the order handling process.

Our company concept defines advisory services and customer focus as pillars of equal importance, alongside the manufacturing and distribution of exceptional products.

You experience the full range of services from the very start, from a single supplier.



We do not sell products off the rack, but precisely what you need for your success. The prerequisite for an optimal result is competent advisory services.

We therefore provide you with experienced employees to support you personally throughout the entire development process, from the first idea, through project planning, and up to the series manufacturing of our springs.

Together we can find the perfect solutions for your requirements.

2

QUALITY ASSURANCE. FROM THE VERY START.

We want to convince you through our performance. This is why we are certified according to DIN EN ISO 9001 and ISO/TS 16949.

From the careful selection of our technology partners, to the monitoring and optimisation of all production processes, to precise adherence to schedules: to ensure the satisfaction of our customers, we hold ourselves to the highest standards.

This also means that you can fully rely on our specialists. This is because we ensure every single one of them is alert to the continuous improvement of all processes and methods.

OUR INTEGRATED CONCEPT

DUUM

TOWN THE

(MARCA)

(MANAMA)

COULD

DOME!

COUNTY

COUNTRY

COUNTRY

THE OWNER OF THE PERSON OF THE

THEORY

COOCOL

COMMON

COLLEGE

OUL STATE

THE COURT

000000

COMME

COULDE

MMM

MMM .

COMMON O

COUNTRY OF THE PARTY OF THE PAR

CHILLIAN

CHANNE

MILES OF THE PARTY OF THE PARTY

THE OWNER OF THE PERSON NAMED IN COLUMN

THE THE PARTY OF T

CHANGE OF THE PARTY OF THE PART

COLUMN STATE OF THE PARTY OF TH

DITTITU

for service, sales and logistics, we guarantee the highest degree of adherence to schedules. Every day we dispatch thousands of springs, individually packaged, around the world and just-in-time. Our success vindicates us, with exports already accounting for 50% of our business. DOOR

MAN

MAN

CONTROL

COULDE

COUNTRY

MANA

(MANAM)

COUNTRY

COUNTRY

MANO

(MANAM)

COUNTY

COUNTRY

MANN

(MANAMA)

COUNTRY

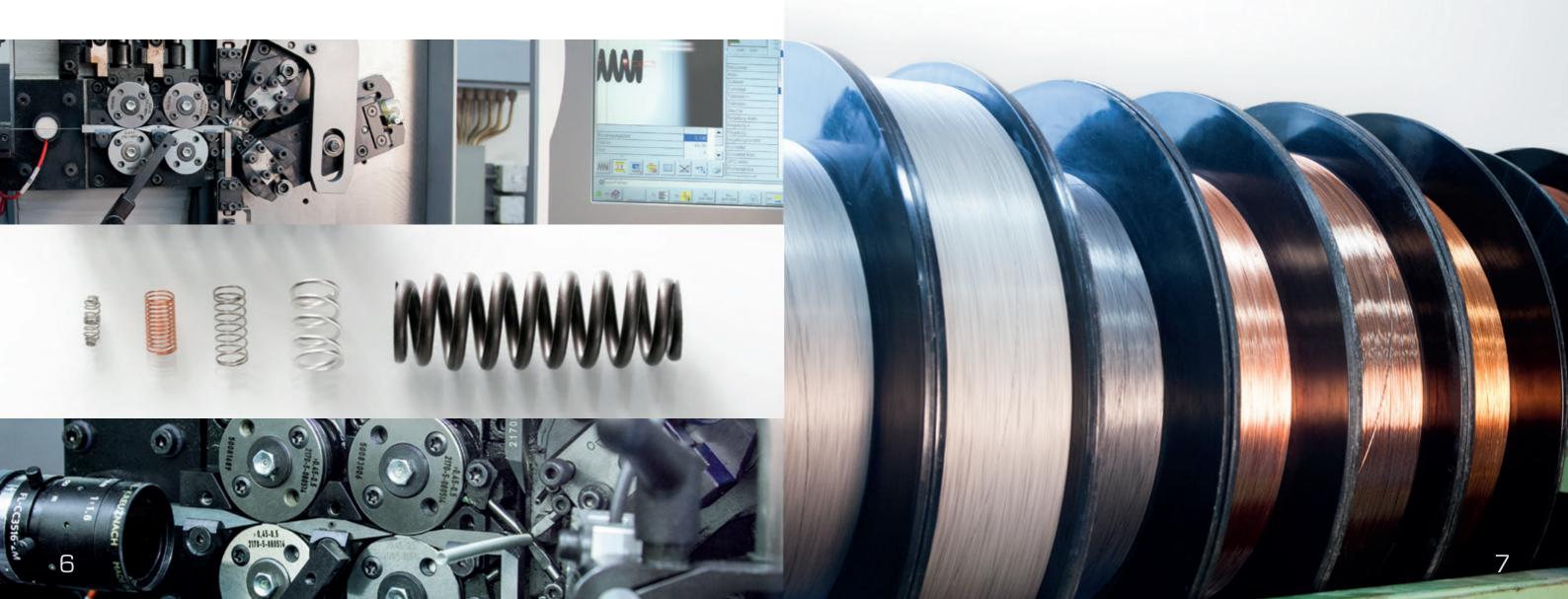
DUULUU

LIVE INNOVATION. WITHOUT COMPROMISE.

Modern production processes allow the use of all conventional materials and surface coatings. With the wide range of equipment forming part of our machinery, we can effectively and economically manufacture custom products at any time, and even make modifications on short notice.

MATERIALS AND SURFACE FINISHES.

Our product portfolio includes sophisticated compression springs and spring sleeves in all conventional materials and surface coatings. We work within a wire diameter range of 0.1–2.8 mm. Whether for samples, small volumes or series manufacturing, our tailored product solutions are consistently coordinated with your requirements.



TAKING PRECISION FURTHER. SPRING SLEEVES.

Comfort, craftsmanship, and the quality of the materials used: the cockpit of a vehicle plays a big role in the decision to purchase.

Alongside design and ergonomics, the feel and sound of the individual control elements define the personal character of a modern vehicle.



But particularly rotary dials, levers and temperature controls are exposed to high loads and stress on a daily basis. Here our spring sleeves can ensure smooth operation.

A PRECISE FIT AT TINY DIMENSIONS. COMPRESSION SPRINGS.

Our compression springs are indispensable in the household products industry, air-conditioning electronics and electrical installations. They are used wherever high precision is required in tiny spaces. This is because it is the individual components that make your product successful.

With our modern manufacturing processes, we can produce precisely grinded end-coils, even with small wire

diameters. This guarantees a clean footprint and optimum force transmission.

For the optimisation of the automated assembly process, we can also produce tangle-free compression springs upon request, and ensure reliable visual differentiation by means of colour-coded surfaces.









INNOVATIONS FOR EVEN GREATER PRECISION. THE LATEST GENERATION OF SPRING SLEEVES.

mmm

We counter the high demands placed on service life and precision with an innovative manufacturing process. Through a firmly bonded adhesion between the sleeve and the spring (elimination of the punch in the sleeve), we achieve consistent characteristics, while significantly reducing the tolerance regarding the spring forces and the geometry of the sleeve. This facilitates the precise insertion of the spring sleeve into its installed position.

Alternatively, plastic sleeves can offer various advantages in relation to feel, sound and wear characteristics.

Matched to their application, the plastic sleeves can be optimised with additional geometrical forms (elliptical, stepped, asymmetrical, flat or square).

All types of thermoplastic material can be used for the sleeves.



APPLICATIONS / INDUSTRIES

Automotive: switches, levers, buttons in the interior, air vents, valve springs Electrical technology: light switches, plug socket fuses, operating switches Mechanical engineering: spring-loaded pressure fittings, clamp springs Household products industry: rotary dials, rocker switches, operating switches

We are certified under **DIN EN ISO 9001:2008** and **ISO/TS 16949**. Member of the Association of the German Spring Industry (Verband der Deutschen Federnindustrie, VDFI)

Gebrüder Hahn GmbH Hälverstrasse 76 · 58579 Schalksmühle kontakt@hahn-federn.de www.hahn-federn.de