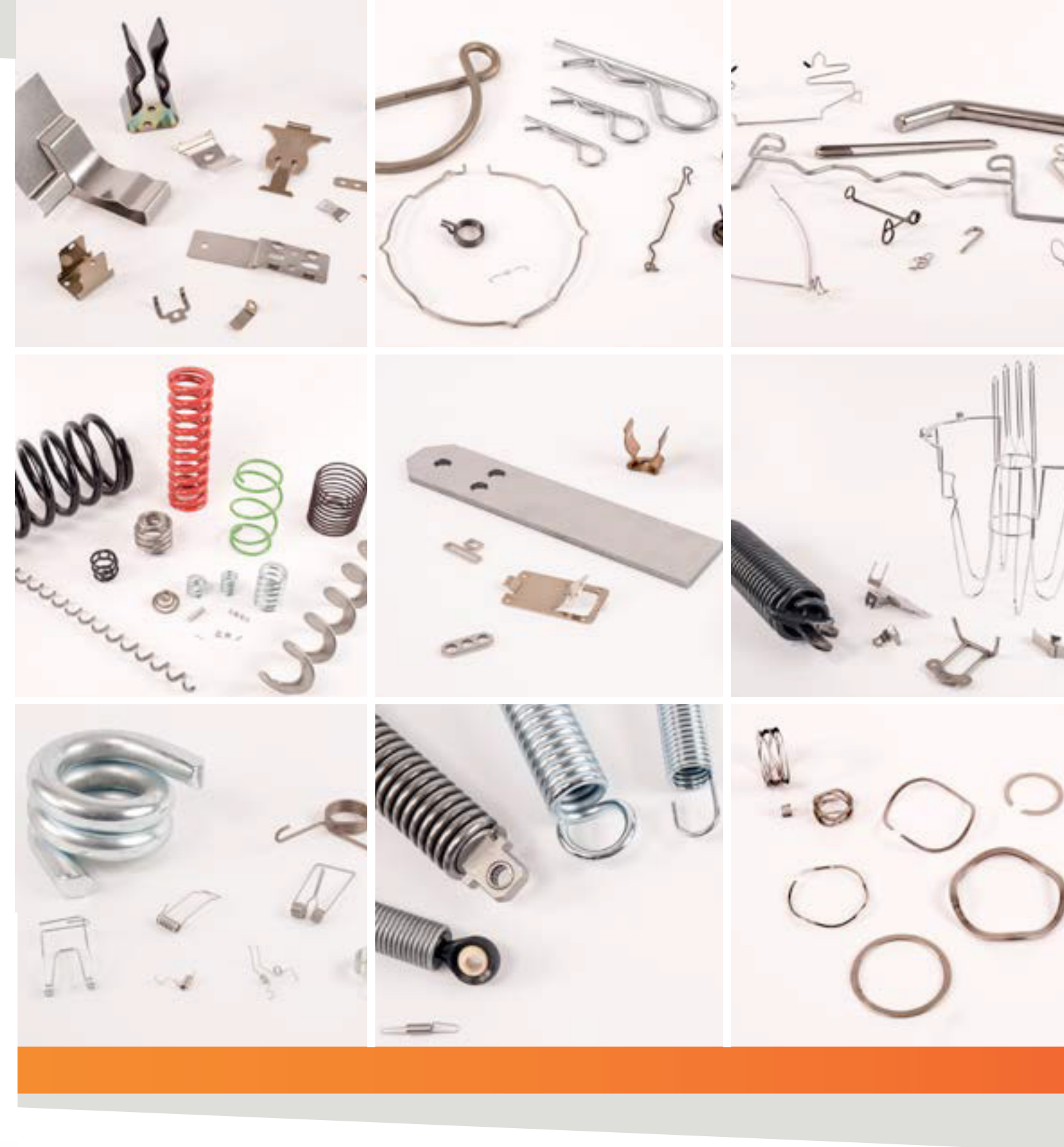


PRODUCT OVERVIEW

Due to our modern and advanced machinery, we possess, for nearly every order, the appropriate productive resources. We manufacture the most diverse products from wire and leaf springs, which serve diverse applications, such as:

	Material thickness
LEAF SPRINGS	0.15 to 12 mm
SNAP RINGS	0.20 to 12 mm
WIRE PRODUCTS AND WIRE SPRINGS	0.20 to 25 mm
COMPRESSION SPRINGS	0.20 to 65 mm
CLOCK SPRINGS	0.50 to 3 mm
METALWARE	
DISK SPRINGS	0.50 to 20 mm
DIE SPRINGS	
TORSION SPRINGS	0.20 to 25 mm
TENSION SPRINGS	0.20 to 25 mm
COMPOSED PRODUCTS	
CONVEYORS	



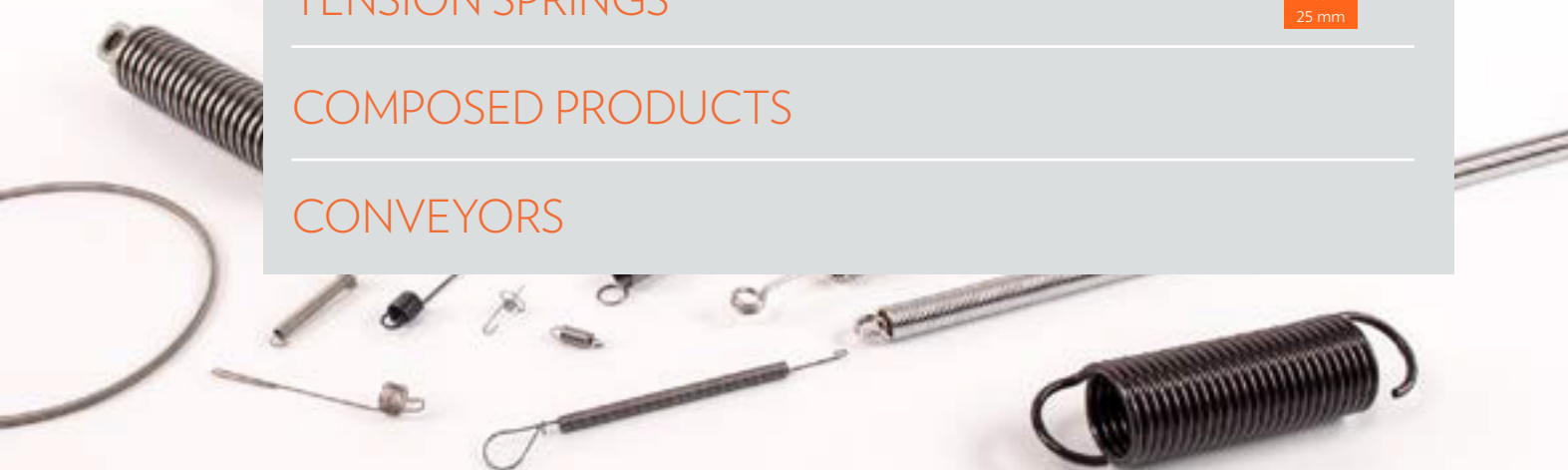
SPRINGS AND INDUSTRIAL
WIRE PRODUCTS

**FROM TECHNICAL
ADVICE UNTIL
THE PRODUCTION
WITHIN OUR
OWN FACTORY**

Springfactory De Spiraal B.V.
Metaalstraat 9
7483 PD Haaksbergen
The Netherlands

T +31 (0)74 291 45 08
F +31 (0)74 291 23 11
E info@despiraal.nl

WWW.DESPIRAAL.NL





THE WAY WE WORK

The Spiraal is a versatile supplier. Originally we are known as a factory, however, we do not limit ourselves to the production processes only. Due to our experience and knowledge we know everything about the manufacturing processes of springs. By means of advising, producing prototypes, delivering customization and by subsequently granting service, we think along with our customers during the entire process. The customer is the central aspect, and that's whom we invest in. Each day again.

ABOUT DE SPIRAAL

De Spiraal develops and produces technical springs, leaf springs and industrial wire products. With more than 70 years of experience and the present craftsmanship, we gladly think along with our principals from the initial stage. We already take advantage of our technical knowledge when drafts are being made. We are therefore able to supply products to our customers, which meet their specific demands. We invest both, in our customers and employees. Our products are consistently of high quality because we consider the human being as a central aspect. Besides, we are constantly seeking for, and curious about the newest production techniques and methods. Existing processes are being carried out as flexible and efficiently as possible, which enables us to minimize the duration of delivery and to manage urgent orders.

We are versatile and we are nearly always able to meet the criteria of the varied desires of our customers. With our modern, comprehensive and advanced machinery we possess, for almost every order, the appropriate productive recourses.

At Tribelt, our sister company settled at the same production facility in Haaksbergen (NL), we are specialised in the development and production of a large variety of metal conveyor belts. Due to the combination of wire products and conveyor belts, De Spiraal and Tribelt have access to all the necessary elements to guarantee both, a fluent production and delivery process.



ADVICE

- ▶ Technical calculation
- ▶ Material knowledge
- ▶ 3D design
- ▶ Prototyping
- ▶ Product optimisation
- ▶ Tool shop



PRODUCTION

- ▶ Advanced machinery
- ▶ CNC directed multi-axis spring coilers- and wire bending machines
- ▶ Laser cut facilities
- ▶ Universal brake presses
- ▶ Automated stamping machines
- ▶ Comprehensive manual labour department
- ▶ Deburring and smooth down
- ▶ Warmth treatments



SERVICE

- ▶ Surface treatment
- ▶ Tests and inspection
- ▶ Engrave
- ▶ Documentation
- ▶ Labelling
- ▶ Packaging
- ▶ Fulfillment

QUALITY

Providing customers with products which meet their expectations is something we enjoy working on every day. We consider quality as paramount. Our knowledge, experience, and craftsmanship contribute, each day again, to this major priority.

Our production processes have been, for many years already, described within the quality management system. Besides, we are ISO 9001 certified. Due to our tests and inspections we guarantee products of high quality, and if necessary and desired, we confirm this in reports.

MARKETS



ENGINEERING

Engineering is our most important sales market. The machines are build for a variety of industries such as: packaging industry, industrial bakeries and slaughter industry. Our flexibility enables us to prevent stagnation at our customers.



AGRO TECHNOLOGY

Agro technology is mostly seasonal. In order to respond properly to this, we keep stocks of the desired products for our customers. This consists of a broad assortment whereby good logistic facilities are our demand.



AVIATION

Aviation is all about demanding extreme safety and demanding products of high quality. Using the most modern norms and standards and implementing the First Article Inspections is common for us.



OFFSHORE AND MARITIME

A characteristic of this sector is that we are working with exotic materials. We have much alloys in stock in order to deliver quickly. Being able to trace components is essential, therefore, we are able to provide you of unique codes which will be engraved in the products.



PRECISION INDUSTRY

The necessity of handheld devices is increasing; this causes the devices to become more compact. Components must become smaller as well. We have the ability to manufacture these precision mechanic springs.



LIGHTING TECHNIQUES

The lighting industry uses our products extensively. We manufacture for instance resilient and/or clamping elements to remain spots on their place. Next to that, lamps consist of diverse wire components.



CLIMATE TECHNIQUE

The use of resilient and clamping elements is indispensable by manufacturing and mounting climate technique. HVAC ducting, flue tube and covering frame: they will all remain on their spot by means of wire products, safety clips and snap rings.



BICYCLE INDUSTRY

When thinking of the Netherlands you immediately think of bicycles. Every bicycle consists of diverse components created by us. Everybody of course knows about the saddles, however, also the wire products, in order to position the mudguard, and the resilient clip, are common for us.



MEDICAL DEVICES

Within the medical science the usage of technological devices becomes much more important. Within this technique the extreme accurate positioning is essential. Play-free mechanisms with the shape of leaf springs are therefore good applicable.