AXTONE COIL SPRING TECHNOLOGY

Axtone manufactures coil springs using rods from 14 mm up to 60 mm diameter, up to 8 500 mm length and the springs have a maximum overall diameter of up to 450 mm.

Whether twisting left or right, rolled out or found directly from the steel bars, with linear or progressive characteristic – nothing is impossible.

A vast multitude of thousands of different types meets the requirements of a wide range of applications, with new additions every day. Be it locomotives, freight wagons (e.g. Y25 bogie and others), passenger coaches, railcars, trams or high-speed trains such as ICE and TGV – Axtone provides the right springs for all kinds of rail vehicles. Additionally, we offer spring solutions for mining industry, construction machinery, playgrounds equipment, power plants, agricultural machinery and systems used for vibration isolation.

Flexible Deployment:

Our R&D adapts with great precision the construction of the springs exactly to the customer's requirements.

Once we know the intended purpose, the load factors the springs have to cope with, and the space we have available, our development department will soon present some convincing designs and calculations to you.

Key Features:

- Wire diameter from Ø 14 mm up to Ø 60 mm
- Max. wire length 8 500 mm
- Max. outer diameter 450 mm
- Max. spring length 900 mm
- Right and left hand coiled
- Primary and secondary springs
- Rolled and unrolled ends
- Spring sets (inside and outside)
- Linear or progressive characteristics
- TKS® springs

AXTONE

TKS® springs

Higher requirements regarding speed and wheel set loads of railway vehicles lead to the need of suspension springs with progressive spring characteristic.

The Axtone TKS® spring with taper rolled wire cross section in the progressively acting coils offers the optimum solution! The wire of the progressive coil zones is taper rolled in such a way that the width of the resulting cross section corresponds to the wire diameter of the spring and the thickness is adapted to the respective stress.

Advantages are:

- Progressive spring characteristic
- Spring with cylindrical form and constant inner and outer diameter
- Shorter in length compared to conventional progressive coil springs
- Lighter in weight than comparable progressive coil springs

Flexible Production:

- Coil springs are made of high-strength spring steels from selected suppliers
- Coil springs are produced with state-of-the-art equipment and processes
- Coil springs stand for high quality, long lifetime and high reliability

The quality of our products and organization is confirmed by numerous certificates.

Contact: