



Lovells Coil Springs

Lovells Coil Springs are designed as a superior performance replacement part for mass-produced O.E (Original Equipment) coil springs, they exceed original ratings by 10% - 50% (depending on the application), thus handling is dramatically improved and multiple ride height variations are available for most makes and models.

Lovells coil springs are manufactured to the highest standard in Australian Made **OneSteel** micro alloy steel. Some Lovells coil springs are of progressive rate design. This design enables the spring to increase in spring rate when you need it and decrease when you don't; insuring the ultimate in handling and ride comfort.

All heating and tempering furnaces are electronically controlled to precise temperatures. Each spring is individually hot coiled on a variable speed PLC (Programmable Logic Controlled) coiling machine.

After oil quenching and tempering, the springs are rate tested on a sample basis and scragged solid to achieve the maximum fibre stress.

The springs are then shot peened ready for protective surface finishing, prior to powder coating.

After final inspection the springs are packaged in protective cardboard boxes (unless specified otherwise) ready for warehousing or dispatch.



LOVELLS SPRINGS
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The unique Lovells range covers every spring size and design from monster 1000mm free height coil springs for 200 tonne locomotives made from 56mm high tensile hardened spring steel, to 7mm induction hardened wire springs for a Formula race car.

The range and manufacturing capacity covers applications from performance automotive, freight wagons, mineral processing shaker springs all the way to agricultural springs for scarifiers and cultivators.

Lovells supply springs and suspension components designed and built to withstand extreme operating conditions including super high temperatures, e.g. in steam safety valves to sub zero temperatures for trains in China, Russia, Alaska and Siberia

We can offer materials (including stainless steel) and coating systems to withstand mild acid immersion in coal and gold processing equipment, and extreme fatigue resistant products for mineral shaker springs operating at 20 Hz frequency.

Facilities

Lovells have the largest hot spring coiling plant in the Southern Hemisphere, with an annual capacity of 8,000 metric tonnes per annum. Utilising Australian made OneSteel for all of our raw material, you can be assured of a premium product every time.

Based in Carrington NSW, with State Distribution Centres in Sydney and Melbourne we stock \$7M worth of product, covering vehicle applications from 1954 to current models, which include coil springs, leaf springs, shock absorbers, urethane bushings, torsion bars, lowering blocks and all ancillary components.

Spring Making

Springs made from 4 mm wire to 65 mm bar are coiled in our Carrington plant, in bar lengths up to 12 metres and are surface peeled in-house on our state of the art PLC bar peeling machine. Finished spring testing equipment handling up to 40 tonnes static load capacity and 5 tonnes load at 4 cycles per second dynamic capacity are fully certified.

Lovells computer spring design software can handle the most complex configuration of variable pitch, wire diameter and coil diameter to find a design that will meet your performance and fatigue life needs.

Lovells endurance test rig can cycle your spring design or damper prototypes at one million cycles per week at up to five tonnes oscillating load, allowing rapid proving-up of any new design. A lateral test facility can force simultaneous lateral deflections to model any real-life system behaviour.

Raw Material

Lovells stock an unrivaled range of raw materials which include the following steel grades:

- Silicon Carbon
- Silicon Carbon Vanadium
- Chromium Carbon
- Chromium Carbon Silicon
- Chromium Carbon Nickel Molybdenum
- Stainless Alloys
- Cold drawn, induction hardened wires

5 YEAR/UNLIMITED KM WARRANTY