

LED3D

Camera analyser

**The full measurement of geometry
of compression spring**



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MicroStudio

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The target: having the full measuring of a coil compression spring, whether grinded or not: it is possible only by using a **LED3D** gauge.

The gauge measures either cylindrical or conical or biconical springs.

The results are stored in the statistical software *MicroStudio PmaR*, that allows the former acknowledgement of the gauging.

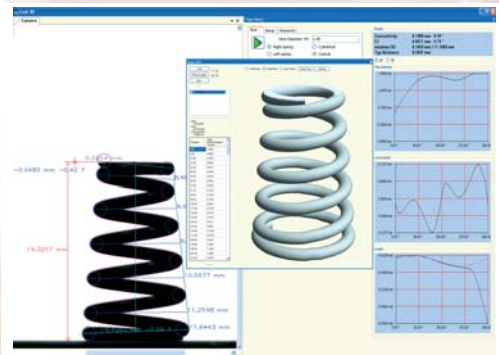
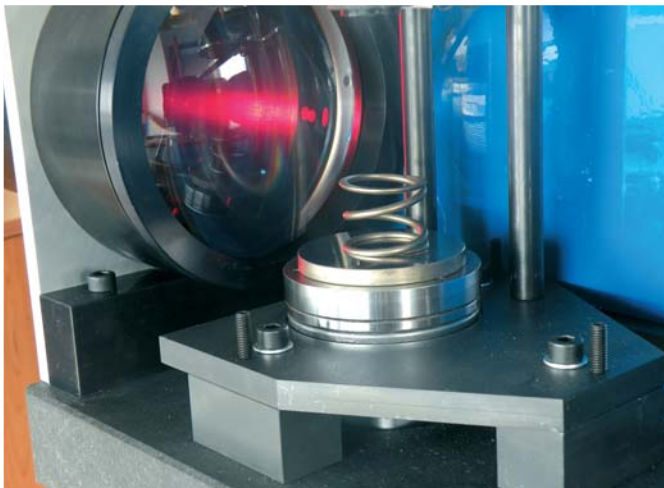
The gauge LED3D measures:

- **The free length L_0**
- **The outside diameter of all the coils**
- **The verticality e_1 of cylindrical springs**
- **The concentricity of conical or biconical springs**
- **The parallelism of surfaces e_2**
- **The percent of the grinded surface of the first coil**
- **The smallest value of the wire diameter of the first coil (if grinded)**

It gives diagrams and values of:

- **The trend of the coil distance with an accurate test of the first coil**
- **The trend of the coils diameter**
- **The trend of the coiling**
- **The dimension of the wire**

And furthermore it shows the effective outline of the spring.



| Model | Spring greatest size | | Smallest wire to be gauged | Test accuracy* |
|------------|----------------------|------------------|----------------------------|----------------|
| | Length | Outside diameter | | |
| LED3D-50 | 46 mm | 30 mm | 0,20 mm | 0.02 mm |
| LED3D-100 | 94 mm | 78 mm | 0,50 mm | 0.04 mm |
| LED3D-120 | 118 mm | 96 mm | 0,65 mm | 0.05 mm |
| LED3D-50H | 46 mm | 30 mm | 0,10 mm | 0.01 mm |
| LED3D-100H | 88 mm | 78 mm | 0,20 mm | 0.02 mm |
| LED3D-120H | 115 mm | 96 mm | 0,20 mm | 0.02 mm |
| LED3D-700 | 700 mm | 280 mm | 1 mm | 0.20 mm |

* well defined and rightly focused boards only, accordingly with *MicroStudio's* procedure.