

F600/610

Geometry of
Arc Springs





Arc springs are primarily used for shock absorption. Therefore, high quality is most important. imess offers the comprehensive quality test of this component. Various characteristics can be checked both inline as well as offline.

Spring Quality Control

Characteristics	
Radius	inner
	outer
	spring center
Angle	max.
	spring center
Pitch Gap	inner
	outer
Spring Diameter	
Overcut	
Undercut	
Channel Test	
Flatness (additional sensor required)	
further characteristics on demand	

Explanation:

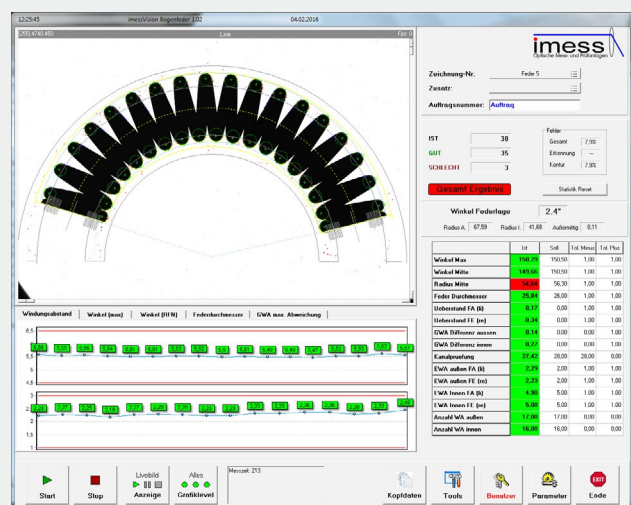
The characteristics are measured contactless. The software evaluates the recorded pictures and judges the quality of the spring according to set nominal values and tolerances. Furthermore, the system provides extensive documentation of the results and includes the statistic over all recorded measurements.

Characteristics:

- Test plan management
- Process control
- Statistics
- Various graphics

Accuracy:

+/- 0,03 mm



Screenshot of software surface

Test Setup:

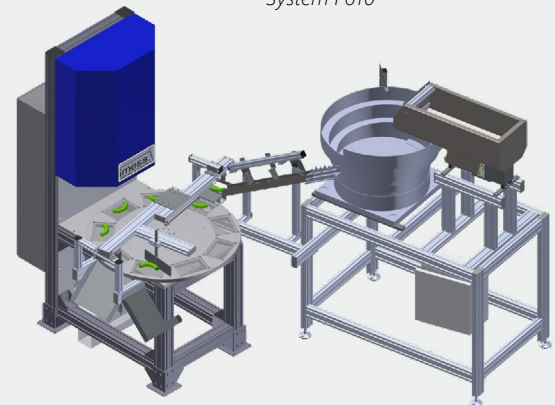
The F610 system measures arc springs automatically inline. The springs are placed with a feeding system (by customer or producer) onto the rotary disc. The camera records the springs with backlight. Afterwards the software evaluates the pictures and signals the controls to sort good and bad parts.

Field of view		Cycle rate
280 x 192 mm	192 x 128 mm	4,5 sec. / spring
146 x 97 mm	50 x 37 mm	3 sec. / spring
further dimensions on demand		

Take a look:
www.imes.com/vertrieb/F610.mp4



System F610



Concept drawing of F610 with feeder and sorting device

Test Setup:

The system F600 has been developed to measure arc springs offline. The arc springs are placed onto a glass plate while the telecentric camera module records the spring against backlight. The quality control including picture recording and evaluation only takes two seconds.

Field of view
192 x 128 mm
146 x 97 mm
50 x 37 mm
further dimensions on demand



System F600

