**Detecting – Metals**

USING SENSORS TO DETECT, RECORD AND POSITION METALLIC OBJECTS

Do you need to reliably detect, record or position metallic objects? To find the best solution, please answer the following questions: What distance to the object do I require? How much space do I have available for installation? What ambient conditions do I need to account for (elevated temperatures, moisture, oil, dirt, etc.)? This is how you select the right technology.
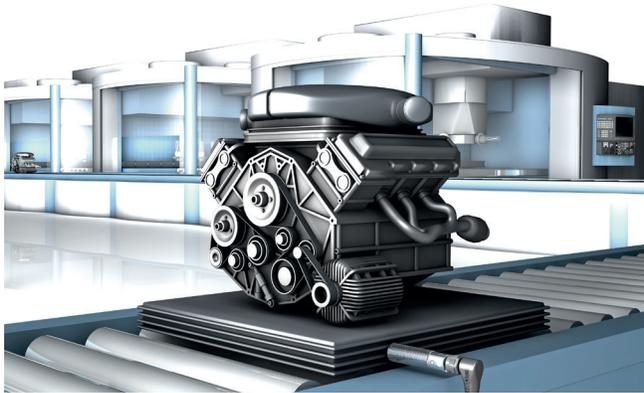
Inductive sensors detect workpiece carriers at close range simply and cost-effectively.
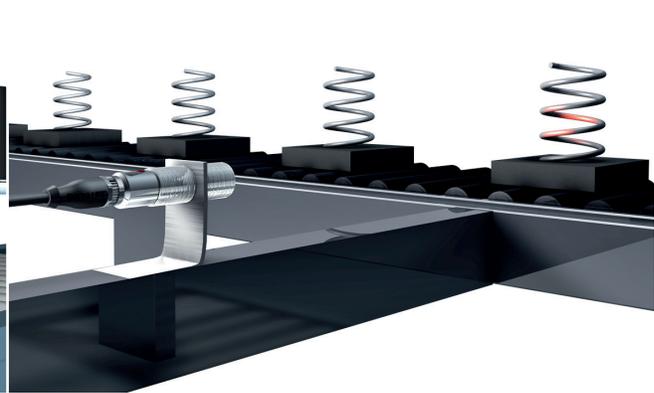
Photoelectric sensors reliably detect steel springs – even from a greater distance.

Inductive sensors detect workpiece carriers or similar metallic objects simply and cost-effectively. This allows you to efficiently move your products through assembly on the transfer system. Any transport backups or missing workpieces are reliably detected. Inductive sensors are extremely reliable and easy to install using plug-and-play.

Photoelectric sensors check the presence of steel springs or similar small objects as they are brought in for processing. They ensure correct installation and assist in process continuity. These sensors stand out with their long ranges.

Inductive sensor for detecting metallic objects at close range – even in harsh ambient conditions

Capacitive sensor for detecting metallic and other objects, such as plastics or liquids

Photoelectric sensor for detecting metallic objects and various other materials from great distances

Ultrasonic sensor for detecting metallic objects and other reflective surfaces such as glass, water, etc. over greater distances

Various technologies can be used for detecting metallic objects depending on the application area:
- **Inductive sensors** for detecting all metallic objects at close range (< 50 mm)
- **Capacitive sensors** for detecting the presence or level of almost any material and liquid at close range (< 50 mm)
- **Photoelectric sensors** in diffuse, retro-reflective or through-beam technology for detecting virtually any object over great distances (> 50 mm) using light
- **Ultrasonic sensors** for detecting virtually any object over greater distances (> 50 mm) using sound