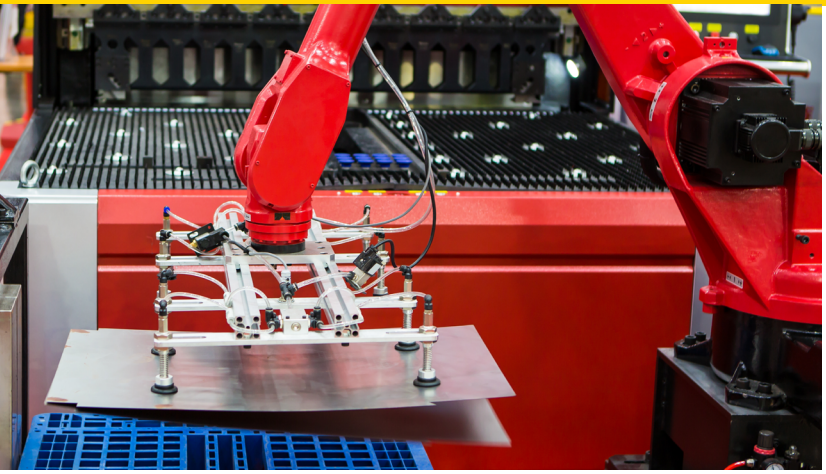
TURCK

Your Global Automation Partner

Inductive Double Sheet Sensor





Easily Detect Double Sheets of Metal

In machine tool applications, if oil or vacuum causes metal sheets to stick together, a double sheet can enter production unnoticed, increasing material waste and risking damage to tools and machines. TURCK's inductive double sheet detection sensor helps identify single and double sheets during material handling. Its one-sided sensing design makes it suited to applications where access is limited, while flexible configuration allows it to work with a range of metals and sheet thicknesses.

The sensor can be integrated into the sheet-handling process, eliminating the need for a separate double sheet detection step. In applications such as robotic sheet handling, this can help shorten cycle times while checking material before it moves on to the next stage. The sensor is designed for use with raw metal sheets as well as finished metal parts.

From steel and stainless steel to aluminum, the sensor supports a variety of metalworking applications. Fifteen material and thickness configurations are preinstalled, and settings can be adjusted via IO-Link to suit the application.

Two switching outputs can be taught for single-sheet and double-sheet detection. Material settings and teach points can also be changed during operation, making it easier to accommodate different production requirements.

The sensor combines an M30 stainless steel barrel housing with a ceramic anti-weld-spatter coating. In addition, with IO-Link, users can configure the sensor and access measurement data. The sensor also operates without a separate evaluation device, simplifying integration into the machine.

Your Benefits:

- One-sided sensing: Fits applications with limited space or access
- Detects multiple metal types with a detection distance of 1 – 12 mm
- Easy IO-Link setup: Choose from 15 preconfigured material & thickness options, remotely teach switching points & change configurations during operation
- Rugged construction: M30 stainless steel housing with a ceramic anti-weld-spatter coating

Technical Data

Typical device data

Type Designation	ID	Range	Communication	Configuration	Housing/Protection	Detection Method
NI5DS-EG30F-IOL8X-H1141/S3709	100054697	1 - 12 mm	IO-Link enabled	Configurable for multiple sheet thicknesses and materials	Robust ceramic-coated stainless steel housing, IP68/69K	Single-sided detection of double sheets

Inductive Double Sheet Detector

