

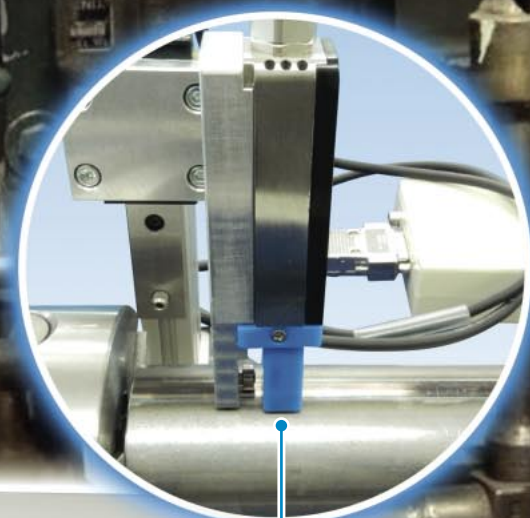


Seam Position Detector

# SEAM SEEKER

SEAM SEEKER

Model:SSF01



## Features

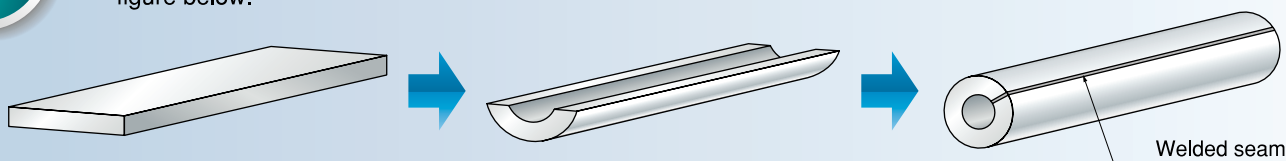
### Features a compact sensor probe.

- Body size : 20 (W) × 20 (D) × 100 (H) mm (excluding the holding jig)
- Sensor contact surface : 18 (W) × 10 (D) mm

- Detects the position of a seam on a round pipe.
- Uses magnetism to perform non-destructive inspection.
- Not affected by reflectance, color (shading) or lighting, because no optical components are included.
- Detects seams even on dented or otherwise damaged products.
- Not affected by oil or other substances on pipe surfaces.
- Takes only about 8 seconds to complete inspection, including bringing the seam into position (for 50-mm dia. round pipes).
- Performs non-contact inspection.  
(The distance between the sensor and the pipe being inspected must be kept constant.)
- Requires no complicated parameter settings (for 360-degree inspection).

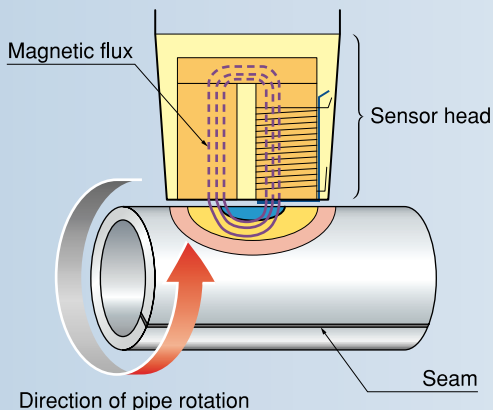
## Object Inspected

- Detects the seam on a seam-welded pipe.
- Inspects pipes produced by rolling sheet steel into a cylindrical shape and then welding the seam as shown in the figure below.



## Non-Destructive Inspection

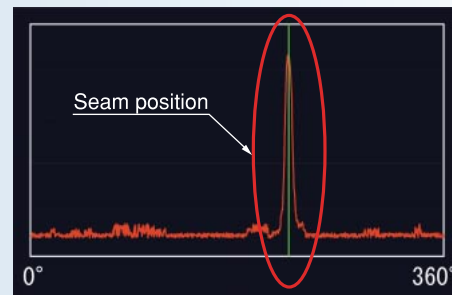
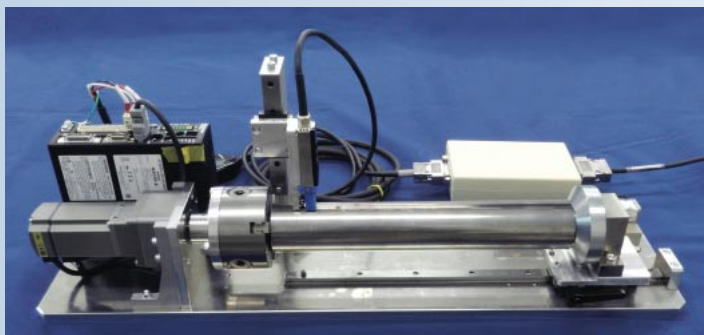
- Causes no scratches or dents on the pipe being inspected.
- Magnetism is not affected by oil or other substances on pipe surfaces.
- Using a cam follower or similar device enables inspection of the pipe without the sensor touching it.



[Enlarged Photo of Sensor's Inspection Area]

## Inspection Process

- The detector obtains magnetic field data from the pipe as it rotates, and then converts the permittivity and magnetic permeability of the metal into numerical values.
- The permittivity and magnetic permeability of the metals in the base material and the seam area differ, causing a peak to appear at the seam location.
- The positional information for the peak is sent to the pipe rotating unit to bring the seam into position.



[Example of Inspection Screen]

## Specifications

Model	SSF01
Supported OSs	Windows 7 and Windows 8 (Please contact us if your OS is not a Japanese version.) Note: The software supports Japanese and English.
Operating temperature range	5°C to 40°C
Operating humidity range	80% RH max. (non-condensing)
Power supply	85 V AC to 240 V AC, 0.5 A (body only)

● Contact Information:

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