SPICA® detects coil edges to position tong prior to handling with a hoisting crane. It can be used in an automated system or as a help to the crane operator with a simple display.

Two detectors check the edges of the coil. They are situated on each lateral part of the tong. They are placed in order to be exactly on top of the edge when the tong is ready to go down without touching the coil. The distance to the coil could be approximately 1.5 m to 2.0 m.

A third detector is placed in the middle of the tong with an orientation at 90°. Its functioning is different: it is dedicated to the centering in the other direction.

Arck Sensor products will:
- Increase productivity and efficiency
- Reduce time loss waiting for load movement
- Increase safety for people, materials and equipment
- Avoid coils damages
- Increase quality
- Allow money savings

**Accurate and Robust:**
The patented sensor technology, its specific design and ruggedness are approved for severe environments; ambient light immunity.
Arck Sensor is a French company specialized in optical measurement in harsh industrial environments. Our mission is to provide the most robust and accurate sensors for container ports and heavy industries in the frame of automation and safety concerns. Since 1998, Arck Sensor has been constantly improving its technology to deliver long term solutions for major container terminals and metal industry companies, worldwide.

**OUR EXPERTISE IN CRANE AUTOMATION AT STEEL WORKSHOP**

- Load movement
- Area restriction
- Anti-collision

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**COIL DETECTION**

SPICA® can detect coil position before picking up with a hoisting crane. It can be used in an automated system or as a help to the crane operator with a simple display. Thanks to these sensors, the coil could be handled without any risk to see the tong touching and destroying the coil.

**Required material**

- Three SPICA® sensors Ref. SOS38-ST
- One calculator Ref. SPC60-ST

**OUR EXPERTISE IN**

- CRANE AUTOMATION
- AT STEEL WORKSHOP

**Example of Display: working in X and Y axis**

<table>
<thead>
<tr>
<th>Incorrect position</th>
<th>Correct position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>IR lights</td>
<td>IR lights</td>
</tr>
</tbody>
</table>

**Coil centring with three sensors: lateral view of the 2 Spica for the X and Y position**

- Move right
- Good positioning
- Move left

**Reflected light**

- SPICA sensor

**Emitted light**

- Coil

**SPICA® SENSOR**

**CALCULATOR**