Active Rotation Control (ARC)

Pin-point positioning saves time and money
MacGregor has developed an Active Rotation Control (ARC) system for its range of cranes that stabilises and automatically rotates a load in the air; making load-handling faster, reducing cargo damage and saving energy.

Pin-point positioning saves time and money

Positioning cargo in port is a difficult and time-consuming job for the crane driver. Limited vision, heavy rain and wind make it even more complicated. A load can start rotating in the air and stopping this motion requires a highly-skilled crane driver. Even for an experienced driver, this operation takes a lot of time and effort. The ARC system overcomes these issues. It has an automatic swivel control that maintains the cargo's position during the entire operation. When activated, cargo positioning times can be shortened by up to 30 percent. Shorter positioning times and a smooth drive significantly lower energy consumption and increase efficiency. These ensure that the ARC solution pays for itself in a short period of time.

Eliminates hazardous tasks
Port workers often have to attach wires to the load and manually pull it into the correct position. This work can be dangerous and there is a risk that the cargo could bump into surrounding structures, potentially damaging them and the cargo. With the ARC solution, these hazardous and time-consuming tasks can be eliminated as the positioning work is automatic.
**Modern technology**

**Electric motor (with brake)**
Frequency-operated for a smooth drive.

**Slipring**
A slipring transmits power between the fixed and moving parts.

**Slewing bearing**
The slewing bearing is centre-line located and electrically operated.

**Gyro**
Gyroscopic stabilisation cancels out torsional pendulations and keeps the cargo steady.

<table>
<thead>
<tr>
<th><strong>Technical data</strong></th>
<th>45t</th>
<th>60t</th>
<th>75t</th>
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</thead>
<tbody>
<tr>
<td>SWL</td>
<td>45t</td>
<td>60t</td>
<td>75t</td>
</tr>
<tr>
<td>Weight</td>
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<td>1.37t</td>
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<tr>
<td>Height</td>
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<td>Diameter</td>
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<td>1.06m</td>
<td>1.08m</td>
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</table>

**Easy to use**
It only takes a few minutes to learn how to use the system. There is a separate control box with two controls: one to set the start position and one to set the end position. With joystick control, the cargo’s position can be accurately fine-tuned.
Wherever needed, you can rely on our support. We serve the following brands globally, and we also serve all others.

- Ankerlökken Marine
- Allset
- ASCA
- Becker
- BMH
- Conver-OSR
- Grampian Hydraulics
- Flintstone
- Greer Marine
- Hamworthy
- Hatlapa
- Hydramarine
- Hägglunds
- KGW
- KYB - ASCA
- KYB - Kayaba Industries / Navire Cargo Gear
- Luezhoe
- MacGregor
- MacGregor-Conver
- MacGregor-Hägglunds
- MacGregor-Kayaba
- MacGregor-Navire
- Navire Cargo Gear
- Nordströms
- Ozean Service & Reparatur
- Platform Crane Services (PCS)
- Plimsoll
- Pusnes
- Porsgrunn
- Triplex
- Vestnorsk Hydraulikkservice (VNH)

MacGregor shapes the offshore and marine industries by offering world-leading engineering solutions and services with a strong portfolio of MacGregor, Hatlapa, Porsgrunn, Pusnes and Triplex brands. Shipbuilders, owners and operators are able to optimise the lifetime profitability, safety, reliability and environmental sustainability of their operations by working in close cooperation with MacGregor.

MacGregor solutions and services for handling marine cargoes, vessel operations, offshore loads, crude/LNG transfer and offshore mooring are all designed to perform with the sea.

MacGregor is part of Cargotec (Nasdaq Helsinki: CGCBV).

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