TRANSFER CARTS (AGV) AND CARTS

Our automated guided vehicles (AGV) are the best solutions for moving heavy equipment at ground level both indoors and outdoors, ensuring greater productivity and safety.

All our carts feature solid and modular construction, which can be adapted to any application and sector. At JASO, we develop the mechanical and electrical designs—as well as the automation—of all our equipment. This allows us to offer our customers tailored solutions. We adapt the carts to requirements on a case-by-case basis, as they come in a wide range of capacities and sizes.

JASO automated guided vehicles (AGV) feature state-of-the-art technology and all the safety measures, such as electronic and automatic guidance components, SICK safety laser scanners, emergency buttons, light and sound signals when operating and safety warning horn.

We have two types of solutions for each degree of automation:

- Semi-automatic programming wherein an operator intervenes at some point during the process (normally loading and unloading).
- Fully automatic programming wherein operator intervention is limited to entering the required programme or cycle and following up during cycles.

RAIL-MOUNTED ELECTRIC-DRIVEN CARTS:

- Electric battery
- Electric line
- Induction

This type of cart has been designed to be mounted on rails for moving heavy loads in a fixed path. We design and manufacture carts with capacities ranging from 1t to 150t which operate in different ways:

- Electric battery
- Electric line
- Induction

RAIL TRANSFER CARTS:

We also manufacture transfer carts for the handling and maintenance of railway carriages, with capacities ranging from 60t to 150t.

RAIL-MOUNTED ELECTRIC-DRIVEN CARTS:

- Electric battery
- Electric line
- Induction

This type of cart has been designed to be mounted on rails for moving heavy loads in a fixed path. We design and manufacture carts with capacities ranging from 1t to 150t which operate in different ways:

- Electric battery
- Electric line
- Induction

RAIL TRANSFER CARTS:

We also manufacture transfer carts for the handling and maintenance of railway carriages, with capacities ranging from 60t to 150t.

## FULLY STEERABLE, SELF-PROPELLED, BATTERY-POWERED CARTS

Specially designed to move freely on floors whether inside or outside a building without limitations on path length and distance.

We manufacture carts with capacities ranging from 1t to 150t standard and with higher capacities depending on customer needs. They bear heavy loads and can be self propelled and battery powered or manually controlled.

### WE OFFER A WIDE RANGE OF FULLY STEERABLE, SELF-PROPELLED, BATTERY-POWERED CARTS, RAIL-MOUNTED ELECTRIC-DRIVEN CARTS AND RAIL TRANSFER CARTS FOR MOVING HEAVY LOADS IN THE INDUSTRIAL SECTOR.

### Characteristics:

- Reinforced structural design.
- Drive and transport of cable reels tailored to customer needs.
- Dual rotating axle for greater manoeuvrability.
- Single-axle steering with an angle of rotation of +/- 25º.
- Electric driven with electronic control.
- Safety sensors.
- Optional features include SICK safety laser scanners, emergency buttons, light and sound signals when operating, front and rear infrared controls and safety warning horn.
- Waterproof switchboards and connectors.
- Easy access to all components for maintenance.
- Battery charger included.

### Technical data:

<table>
<thead>
<tr>
<th>Capacity (t)</th>
<th>Minimum dimensions (mm)</th>
<th>NO. OF WHEELSΧ</th>
<th>Outer wheel diameter (mm)</th>
<th>Inner wheel diameter (mm)</th>
<th>Max. wheel radius (mm)</th>
<th>Min. steering radius (mm)</th>
<th>Speed (m/min)</th>
<th>Battery</th>
<th>Approx. weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>3200 2750 1850 1500 820 0.25 0.075 3000 2750</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>3600 2750 1850 1500 820 0.25 0.075 3000 3000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>4000 3000 2000 1900 1900 0.25 0.075 5150 3000 2750</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>4000 3000 2000 1900 1900 0.25 0.075 5400 3300 3300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>4000 3000 2000 1900 1900 0.25 0.075 6300 6100 11975</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>4000 3000 2000 1900 1900 0.25 0.075 6500 7900 17200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>4200 3000 2000 1900 1900 0.25 0.075 8500 10425 25125</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>4200 3000 2000 1900 1900 0.25 0.075 8800 10425 25125</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>