Aircraft Wing Assembly

https://www.hepcomotion.com/applications/aircraft-wing-assembly/

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>PRODUCT</th>
<th>PROCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive</td>
<td>MHD Track Roller Linear Motion System</td>
<td>Drilling</td>
</tr>
</tbody>
</table>

The Application

The use of robots in the aerospace industry for high volume repetitive tasks has been gathering pace in recent years as the installed costs reduce.

Invariably robots have to be moved to various positions and within our product range we have a number of options to match this task depending on the robot weight, duty cycle and speed requirements.

The application showing a robot on a track is performing the function of drilling and riveting aircraft wings over a 6-metre length.

Product Solution

1.5 tonne robots with all the associated equipment requires robust guidance systems that can work extended periods with no maintenance.

HepcoMotion’s MHD system uses flat tracks with rollers located in cast iron blocks. Integral racks cut into the track provide precision alignment for the drive system with a generous gear mod size to accommodate the high driving forces.

This technology is popular in the field of robots as the rolling motion has an exceptionally high load capacity and is not phased by hostile conditions. Systems can be constructed to achieve any length with an automated lubrication facility for the rack and pinion.