

奥托机械手

自动导引车

Shell-O-Matic与Clearpath Robotics合作，采用奥托机械手和自动导引车，将人工劳动的灵活性，悬挂链的高效性和自动导引车的安全性及自动化结合在一起。

奥托机械手拥有一系列负载能力，并可与各种承载工具配合，适用于材料运输，使其成为工厂各种工作的理想选择，包括：

- » 用标准的Shell-O-Matic连接器运送蜡模模组和模壳
- » 将物品从蜡模间移动到制壳间
- » 自动脱蜡设备
- » 从正确的方向装载蜡模/模壳
- » 操作模壳/蜡模，以便控制质量或进行清洁

引导

奥托机械手具有激光视觉系统，可以“看到”周围环境，使其能够引导自己进入工厂。

在调试期间，奥托机械手通过WiFi“看到”工厂的几何图形，并“走进”工厂。这可使奥托创建工厂地图，然后用于配置系统并调教奥托机队遵守各种导航限制，包括：

- » 低速区域
- » 单行区域
- » 停止标志
- » 工厂内存在的其他交通规则



奥托机械手的中央管理系统使用工厂地图来决定奥托的最好路径。如果奥托遇到障碍物，他们将“看到”他们，并自动找到到达目标的新路径。奥托机械手很坚固，其主动式悬挂减震系统使它可以适应状态不佳的地面，甚至越过小障碍物（高达22毫米）。

高效性

In operation, the Ottos are assigned pick-up and drop-off jobs from a central WiFi-controlled fleet management system, which is connected to the facility's MES to control material handling. The central system also automatically manages the battery charging of the Ottos to maintain and optimize the fleet's operational efficiency.

多功能化

Once assigned a task, the Otto automatically finds the best path across the factory to perform material delivery. In operation, the Otto interacts perfectly with any humans or other Ottos moving around it. The Otto slows down when it detects nearby movement and creates real-time avoidance trajectories that allow it to interact safely with its environment.

安全性

Shell-O-Matic can install an articulated robot or manipulator on the Otto, which shares the Otto's battery to power its implements. An advantage of this pairing is that it allows the Otto to facilitate the exchange of material between two separate stations.

This flexibility gives further versatility to the system and enhances its adaptability to the evolving material handling needs the factory may experience, including:

- » Raw material package change
- » Produced-part geometry change
- » Addition of new cells in the factory

