arculus Modular Production System

SOFTWARE MODULES

⌒ Modular Production
Real-time optimized product flow

← **⌒ Warehouse**
Automated goods-to-person

↑　　　↑

⌒ Fleet Intelligent traffic management platform

VDA5050　　　　　　　　VDA5050

ROBOTICS

⌒ arculee Autonomous mobile robot (AMR)

3rd party robots
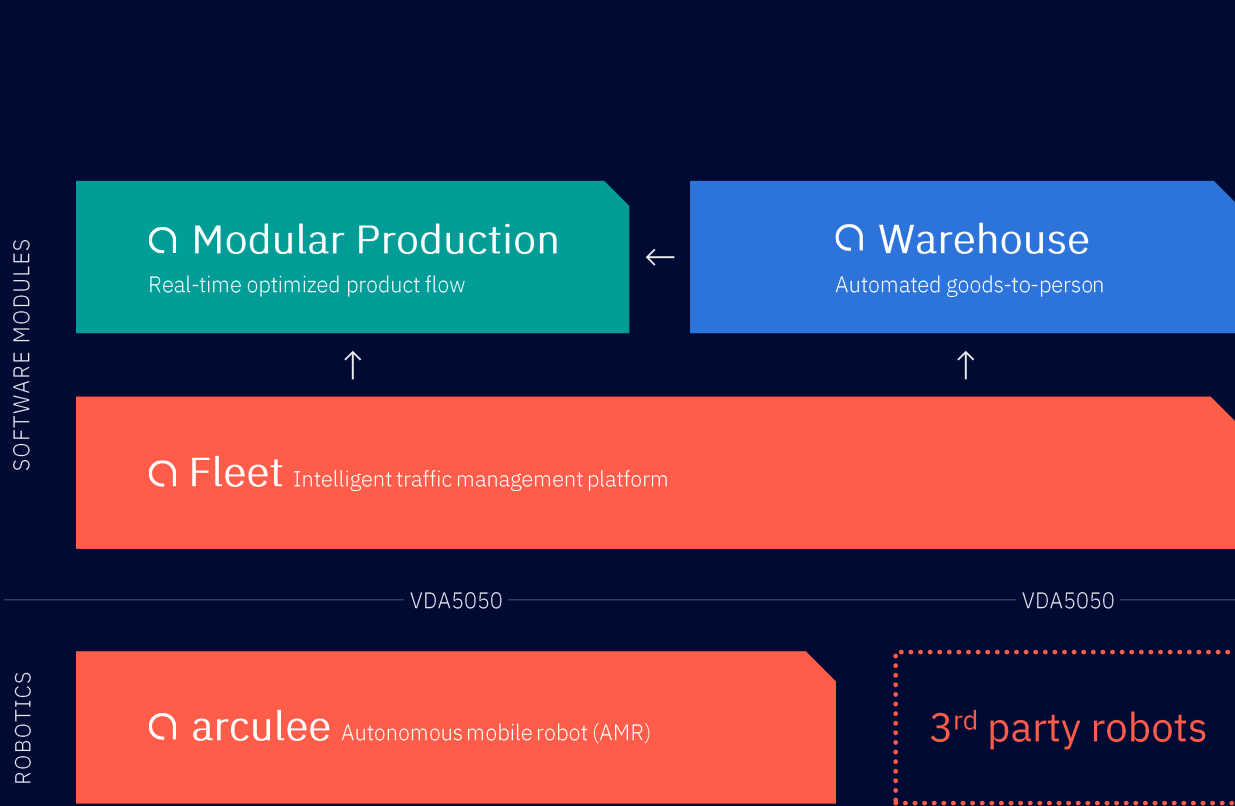
→ first full-stack turnkey Modular Production System

→ AI-powered software suite for Modular Production, Warehouse Management and Fleet Management

→ easy and robust integration of arculee and AMRs from different suppliers via standardized open API (VDA5050)

→ open interfaces for seamless integration into the factory's automation infrastructure

→ layout, simulation, optimization and operation across all verticals in greenfield or retrofit settings

→ available as all-around carefree SaaS / RaaS model

→ arculus competence teams for planning, implementation and 24/7 operations control

⌒ Fleet

Intelligent traffic management platform for fleets of multiple AMRs, integrating 3rd party robots via standardized open API (VDA5050)

→ smart routing and re-routing based on live traffic information

→ predictive path planning to prevent risk of congestion

→ traffic control based on dynamic trajectory envelopes for each AMR

→ planning, simulation, operation and optimization in one system

→ dedicated views for operators, servicing and management

→ 2D/3D visualization and monitoring, custom reports

→ base module for goods-to-person and modular production

Auto OEM

Automation in logistics and production, across plants and geographies, is pivotal to OEM's competitiveness. This requires fast growing fleets of AMRs from different suppliers to be controlled in the same layout.

arculus Fleet works as the auto OEM's standard traffic management platform for any AMR, ensuring maximal robustness from design to operations as well as synergies in Procurement and IT.

One standard solution for all AMRs

+30% AMR productivity[1]

>99,95% system uptime

[1]compared to traditional FM software without dynamic routing