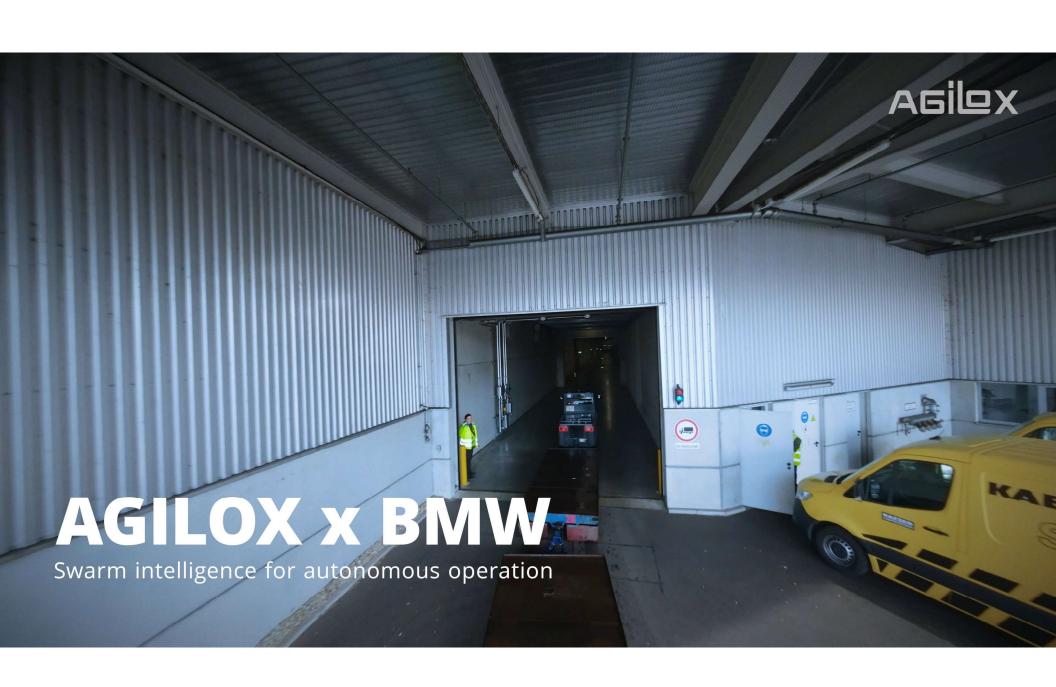


About us

- >280 employees
- >2.000 AMRs in the field
- Over 300 customers
- In more than 70 countries
- Locations on three continents and over 20 partners







Project facts

- 30 AGILOX AMRs
- ~ 3.5k km per week
- ~ 2.8k tons per week



Motivation = WHY?

1. People

- Shortage of skilled workers / population development
- Sick leave
- Vacation

2. Industry 4.0

- Dealing with new technologies
- Tracking of transports

3. Environment

- Cleanliness of production
- Reduction of damaged goods, accidents

FOCUS ON VALUE-ADDING ACTIVITIES ALLOWS TO OPTIMIZE MATERIAL FLOW







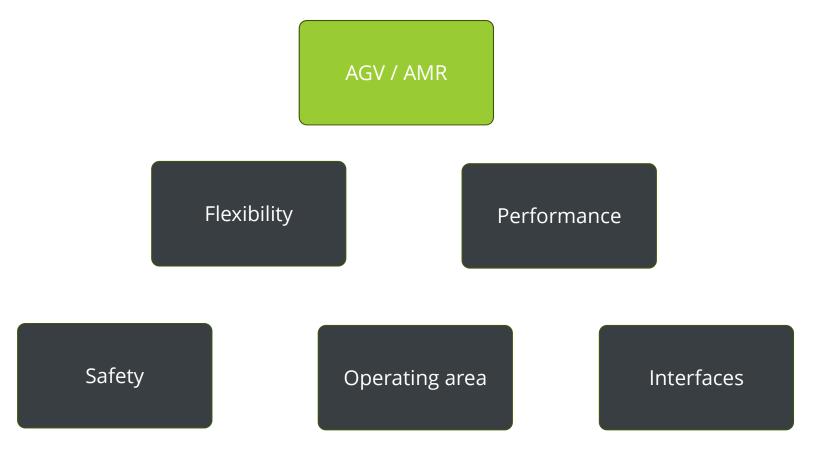
GOAL

Optimize material flow &

Provides solutions for 70% of use cases

- 1. Raw material transport
- 2. Empty loadcarrier handling
- 3. Pick-to-AMR approach







AGV vs. AMR

AUTOMATIC GUIDED VEHICLES

- Fixed and static route guidance
- Processes are fixed and difficult to change
- Mostly central fleet manager
- On-site adjustments are often not possible without an external connection & costs

AUTONOMOUS MOBILE ROBOTS

- Flexible route guidance
- Swarm intelligence
- System can be configured by yourself
- Simple modification of processes, layout, stations, transport orders, ...
- Plug & Perform



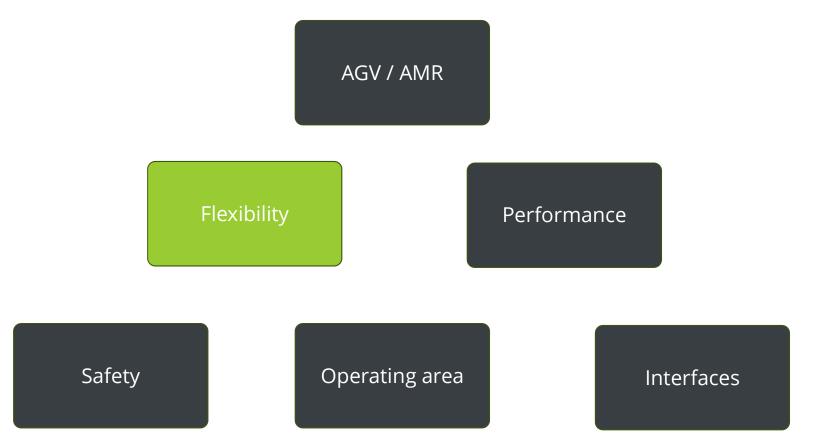


ASIL

AMR necessary

- Designed to bring the logistics industry to the next level -











Flexibility

User first experience

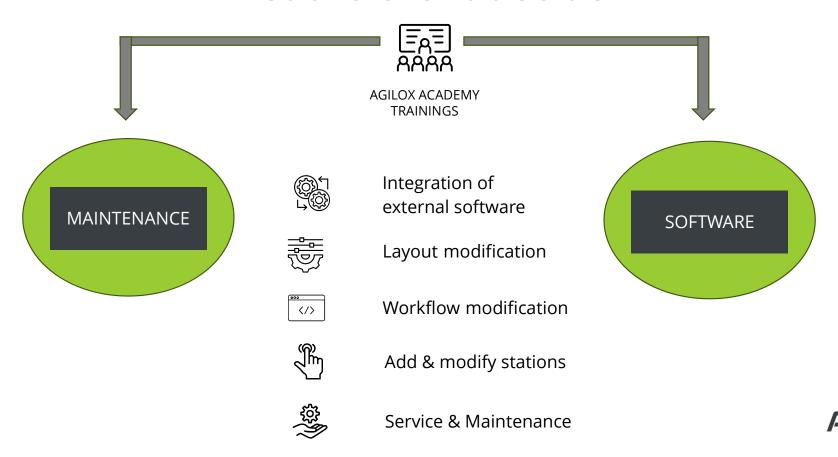
Easy setup

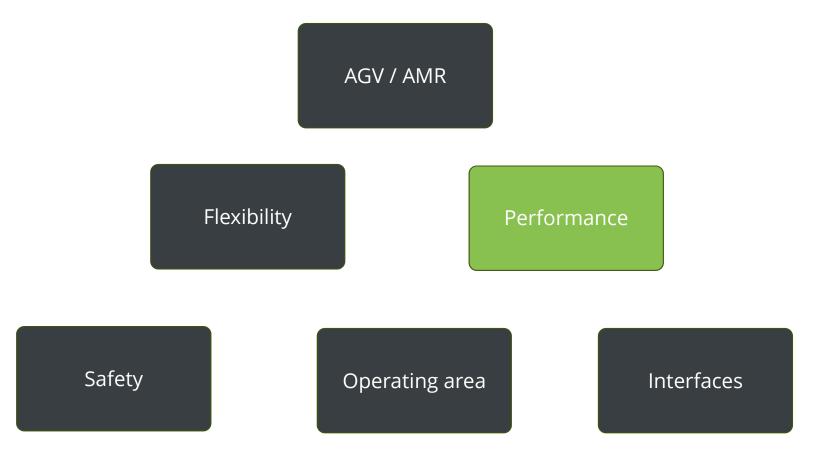
Easy use



DIY approach // Independency

Let the client decide









Constant material flow under all cirumstances

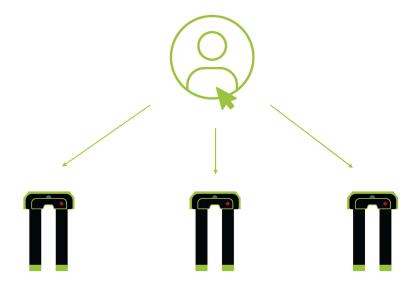


Redundant system setup



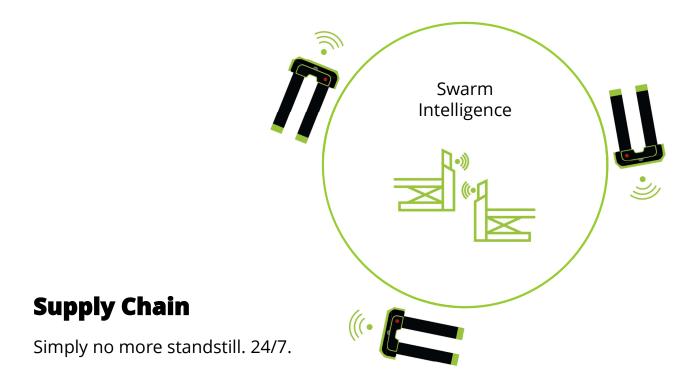
Performance – Centralized intelligence

Host computer on the customer server

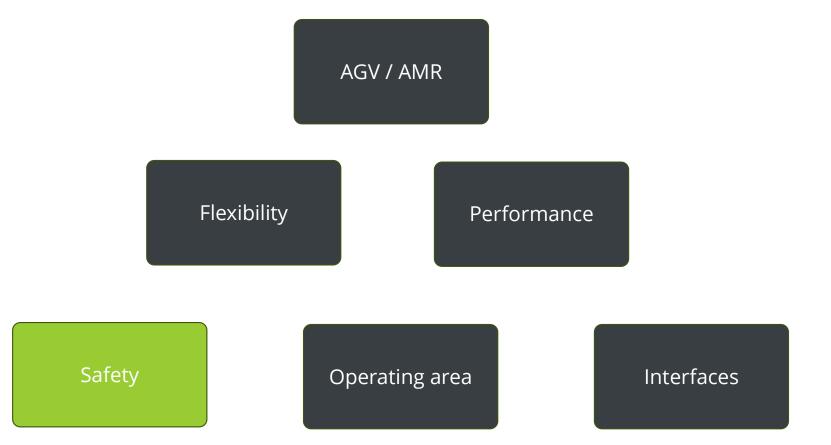




Performance – Decentralized intelligence









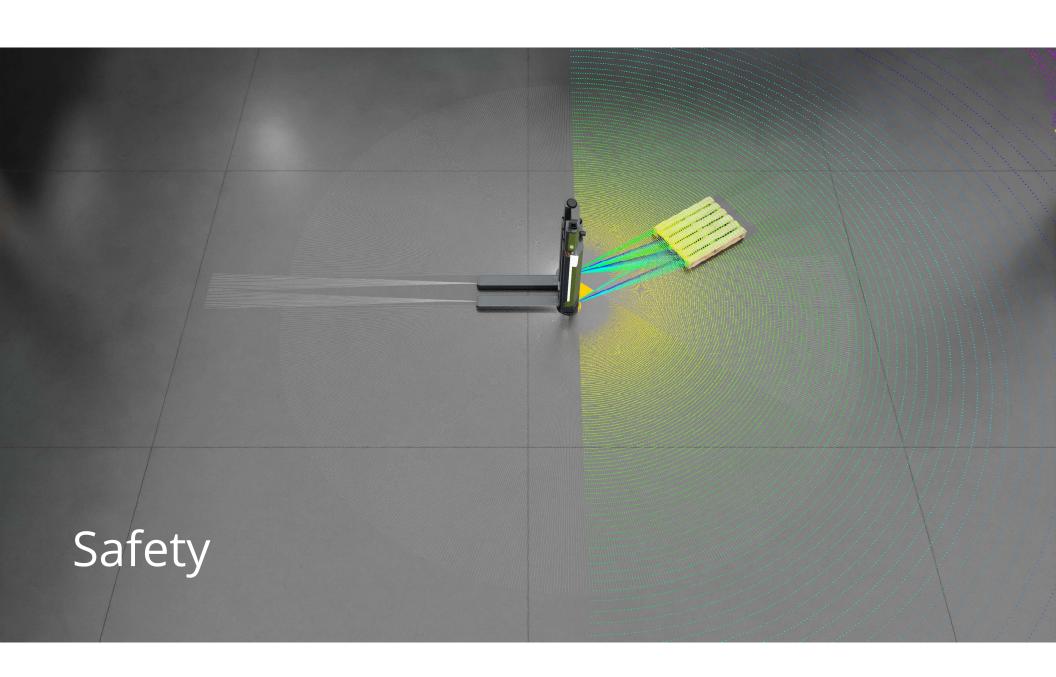


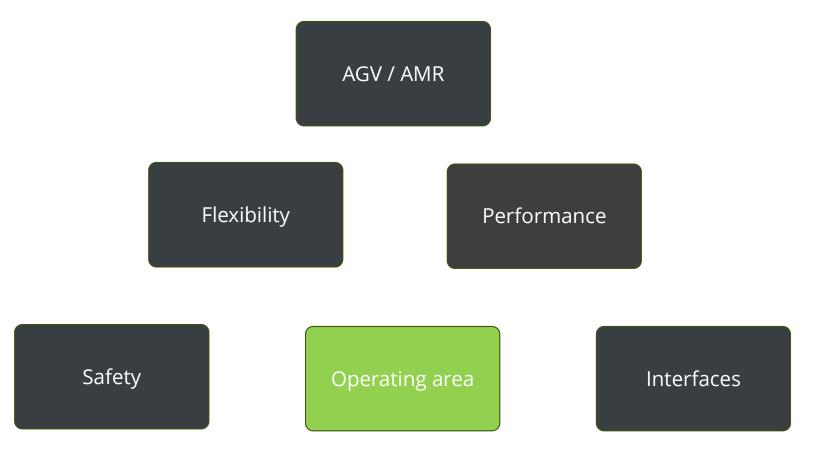


As safe as technically possible

360° safety field EN ISO 3691-4 conform Additional sensors













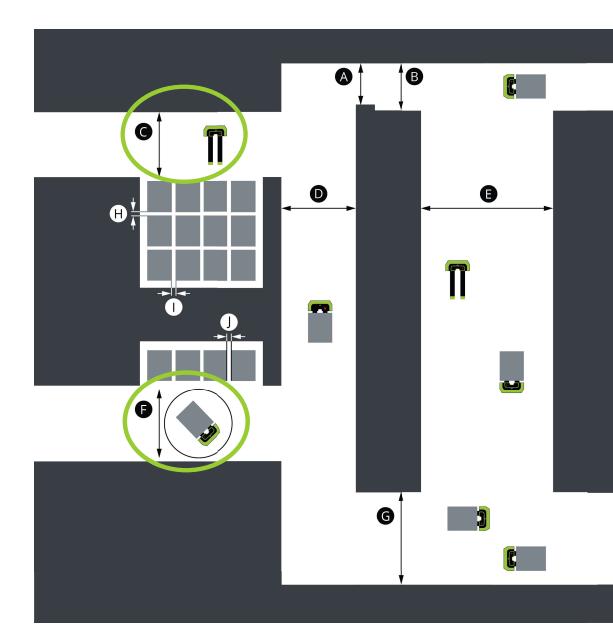
As little as possible

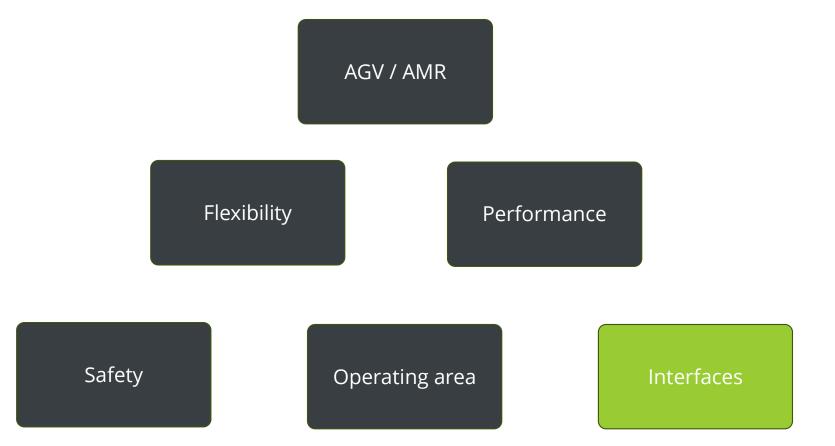
Omnidirectional movement



Operating area

VEHICLE DIMENSIONS (L X W X H)	(NAM)	1.511 x 810 x 1.862 mm
LOADCARRIER		EPAL – 1.200 x 800 mm
MIN. PASSAGE WIDTH	A	1.400 mm
MIN. AISLE WIDTH	В	1.600 mm
MIN. AISLE WIDTH (PARALLEL)	•	1.800 mm
IDEAL AISLE WIDTH	D	2.000 mm
IDEAL AISLE WIDTH (TWO-WAYS)	•	2.900 mm
TURNING CIRCLE	•	2.100 mm
MIN. AISLE WIDTH (TWO-WAYS)	G	2.600 mm
BLOCK STORAGE GAP	•	50 mm
BLOCK STORAGE GAP	0	200 mm
SINGLE STATIONS	0	100 mm











Seamless integration

Different levels of integration

Interfaces



Interfaces

- Many possibilities with REST API
- IO signals via AGILOX IO Box
- Handling of mixed fleets is an important future use case (VDA5050)



AGILOX AMR for 70% of usecases

Easy setup & usebility

Constant & redundant



360° safety

Omnidirectional

X Swarm tech

