TRUST THE WORLD'S
EASIEST AMR SOLUTION.
Agilox

About us

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

Challenges & requirements of clients

Motivation	Flexibility	Project Timeline	Service & Support
Use cases	AGV / AMR	Interfaces	ROI / TCO
Operating area	Safety	Performance	

Challenges & requirements of clients

Motivation	Flexibility	Project Timeline	Service & Support
Use cases	AGV / AMR	Interfaces	ROI / TCO
Operating area	Safety	Performance	

Motivation

- Industry 4.0
- Shortage of skilled workers / population development
- Sick leave
- Vacation
- Failure safety
- Tracking of transports
- Batch tracing
- Cleanliness of production
- More safety / avoid accidents
- Reduction of damaged goods

FOCUS ON VALUE-ADDING ACTIVITIES
ALLOWS TO OPTIMIZE MATERIAL FLOW

AGILOX

Optimize
material flow

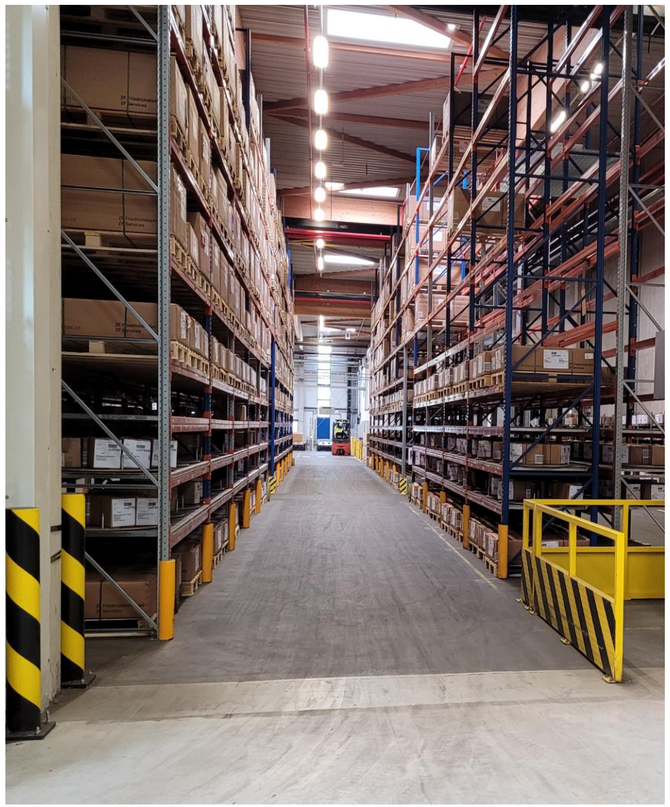
Provides solutions for
80% of use cases

AGILOX

Use cases

CLASSIC PALLET STORAGE

NARROW DRIVING LANES



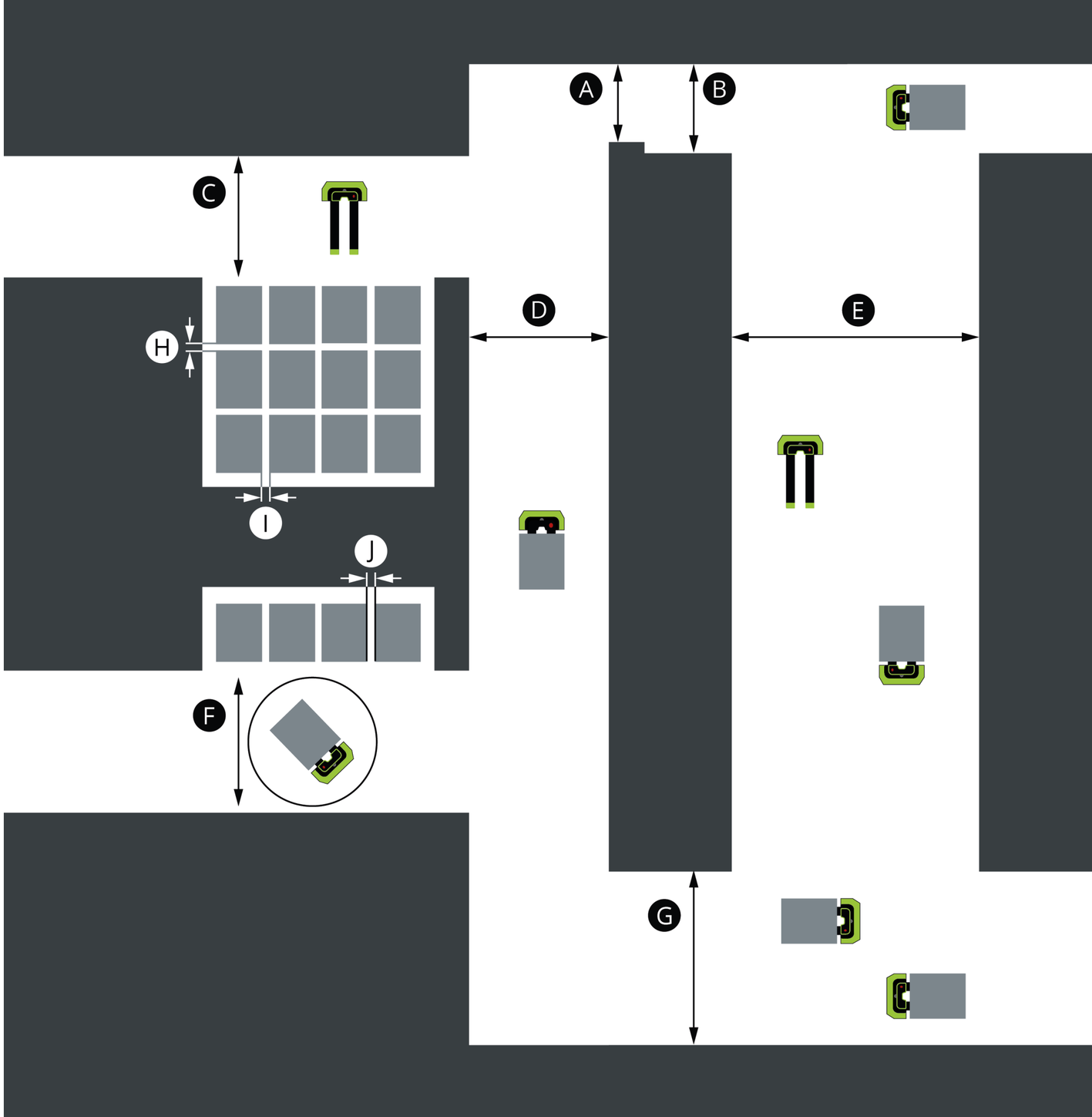
DOLLY-STATIONS

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

On-site visit & consulting

Operating area

VEHICLE DIMENSIONS (L X W X H)		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	B	1.600 mm
MIN. AISLE WIDTH (PARALLEL)	C	1.800 mm
IDEAL AISLE WIDTH	D	2.000 mm
IDEAL AISLE WIDTH (TWO-WAYS)	E	2.900 mm
TURNING CIRCLE	F	2.100 mm
MIN. AISLE WIDTH (TWO-WAYS)	G	2.600 mm
BLOCK STORAGE GAP	H	50 mm
BLOCK STORAGE GAP	I	200 mm
SINGLE STATIONS	J	100 mm



AGILOX

As little as possible

Omnidirectional movement

AGILOX

Flexibility

AGILOX

Important

User first experience
Easy setup
Scalability

AGILOX

AGV vs. AMR

AUTONOMOUS GUIDED VEHICLES

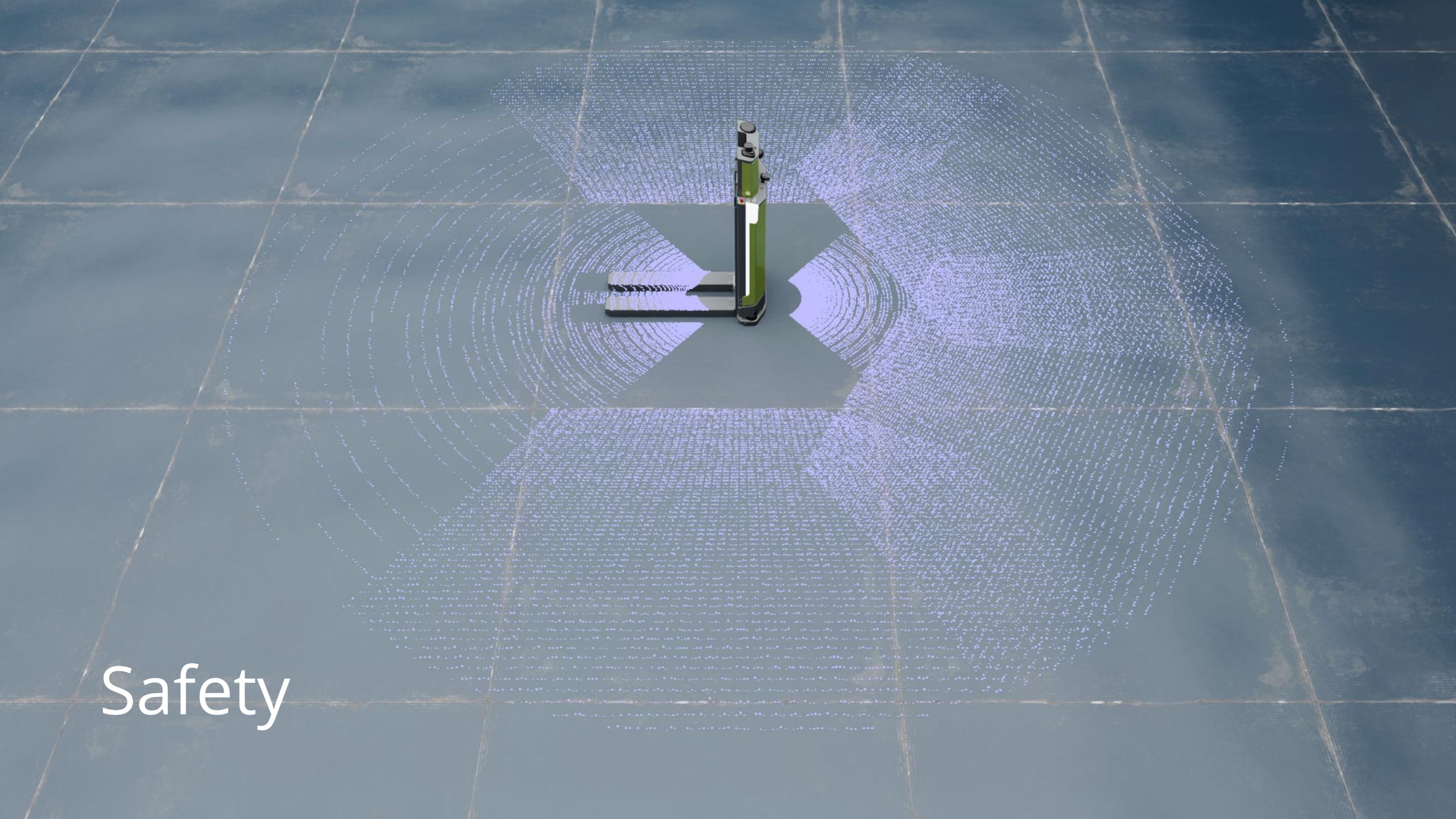
- Fixed and static route guidance
- Processes are fixed and difficult to change
- Central fleet manager
- On-site adjustments are not possible without an external connection

AUTONOMOUS MOBILE ROBOTS

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

AMR necessary

Designed to revolutionize the logistics industry.



Safety

Higher than the
normative regulations
As safe as technically possible

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

Project timeline

PROJECT PHASE

First contact

Engineering & purchasing

Lead time

Comissioning

As soon as possible

First contact

Engineering &
purchasing

Lead time
~ 8 - 10 weeks

Comissioning
~ 1 – 2 weeks

Interfaces

- Many possibilities with REST API
- IO signals via AGILOX IO Box
- AGILOX is part of the VDA 5050 board
- Handling of mixed fleets is an important use case

X-Swarm Technology

Dynamic routing & swarm intelligence

AGILOX

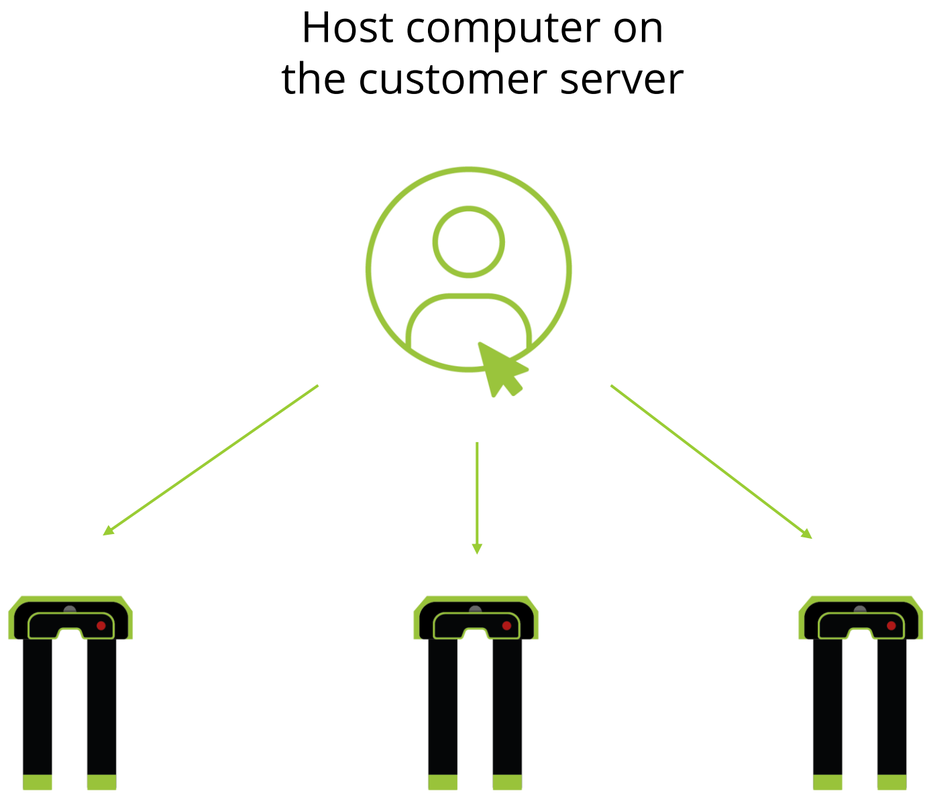
AGILOX

Seamless integration

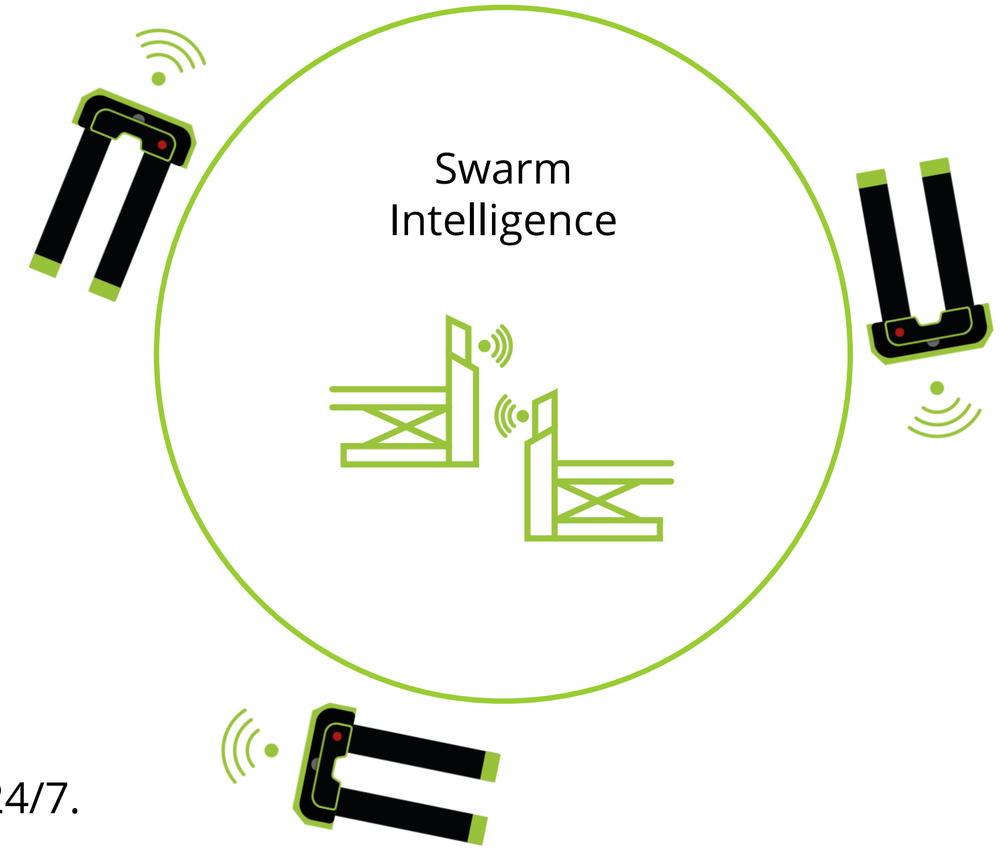
Different levels of integration combinable

AGILOX

Performance – Decentralized intelligence



Performance – Centralized intelligence



Supply Chain

Simply no more standstill. 24/7.

Constant material flow
under all cirumstances

Redundant setup +
X-Swarm intelligence

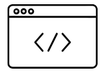
Service & Support

Client

WHAT THE CLIENT
SHOULD BE ABLE TO DO

Integration of
external software

Layout modification



Workflow modification

Service & Maintenance

Add & modify stations

Service & Support

WHAT WE DO

COMISSIONING

MAINTENANCE

ADMIN

AGILOX ACADEMY
TRAININGS

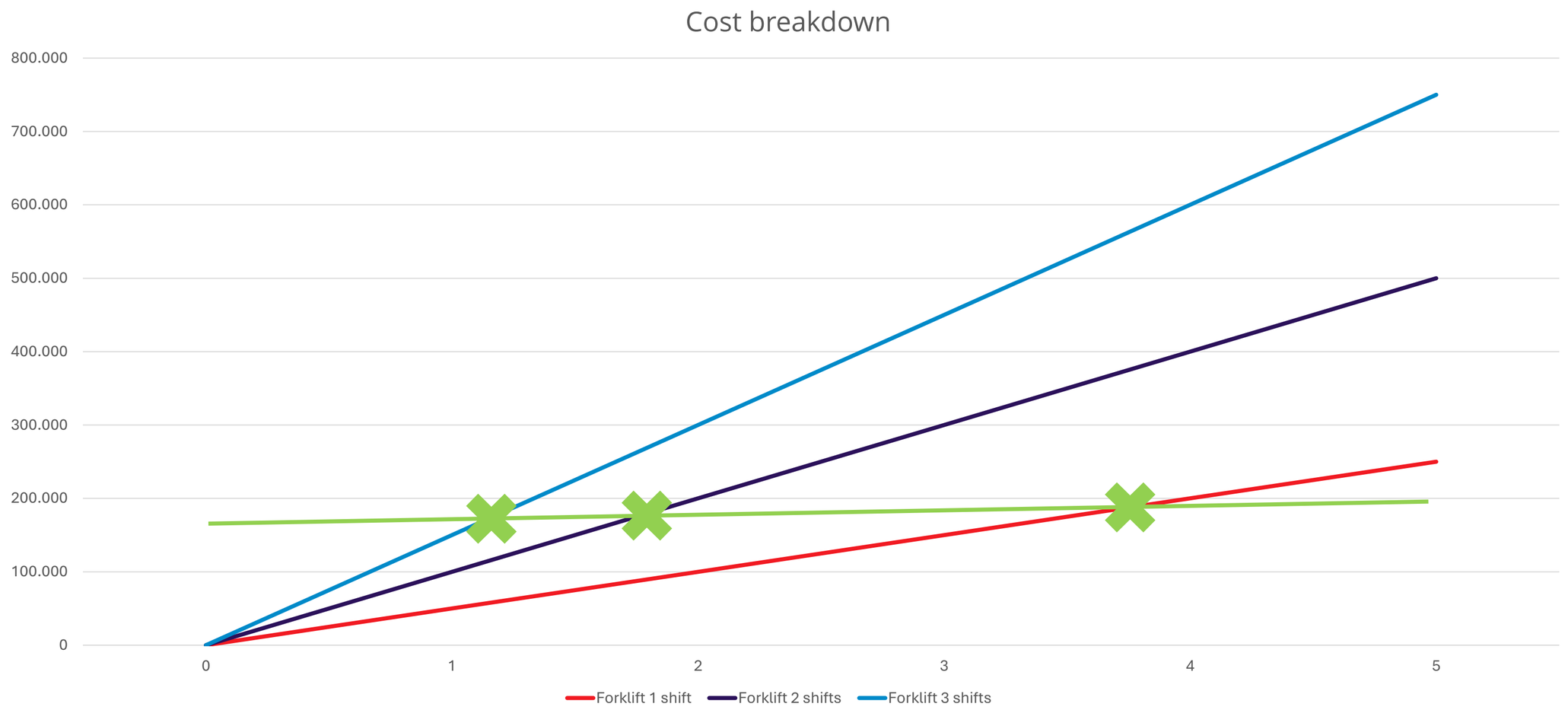
AGILOX

DIY approach
Independency

Let the client decide

AGILOX

ROI | TCO



*est. 50k € per annum per forklift

Less than 2 years

AGILOX

1,3 years

AGILOX

Challenges & requirements of clients

80% of usecases	Easy setup	Project Timeline	Service & Support
Consulting	AGILOX AMR	Interfaces	ROI / TCO
Omnidirectional	360° safety	Performance	

Project timeline

2017

05 | Tender

08 | Start Pilot Project for 1st AMR

11 | Expansion for 2nd AMR

2018 - 2019

Installation of additional 11 AMRs

2019

German Logistics Award

2021

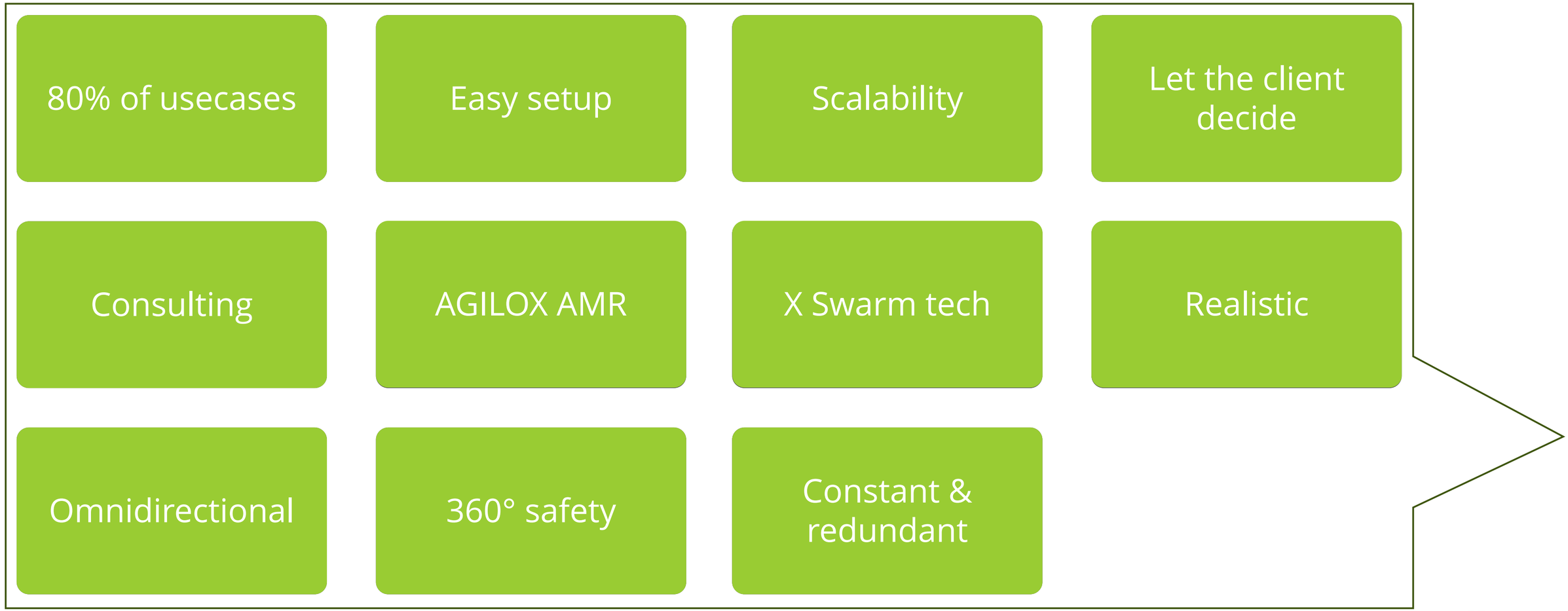
Installation of additional 14 AMRs

2024

IFOY Award Nominee

Expansion of the swarm planned

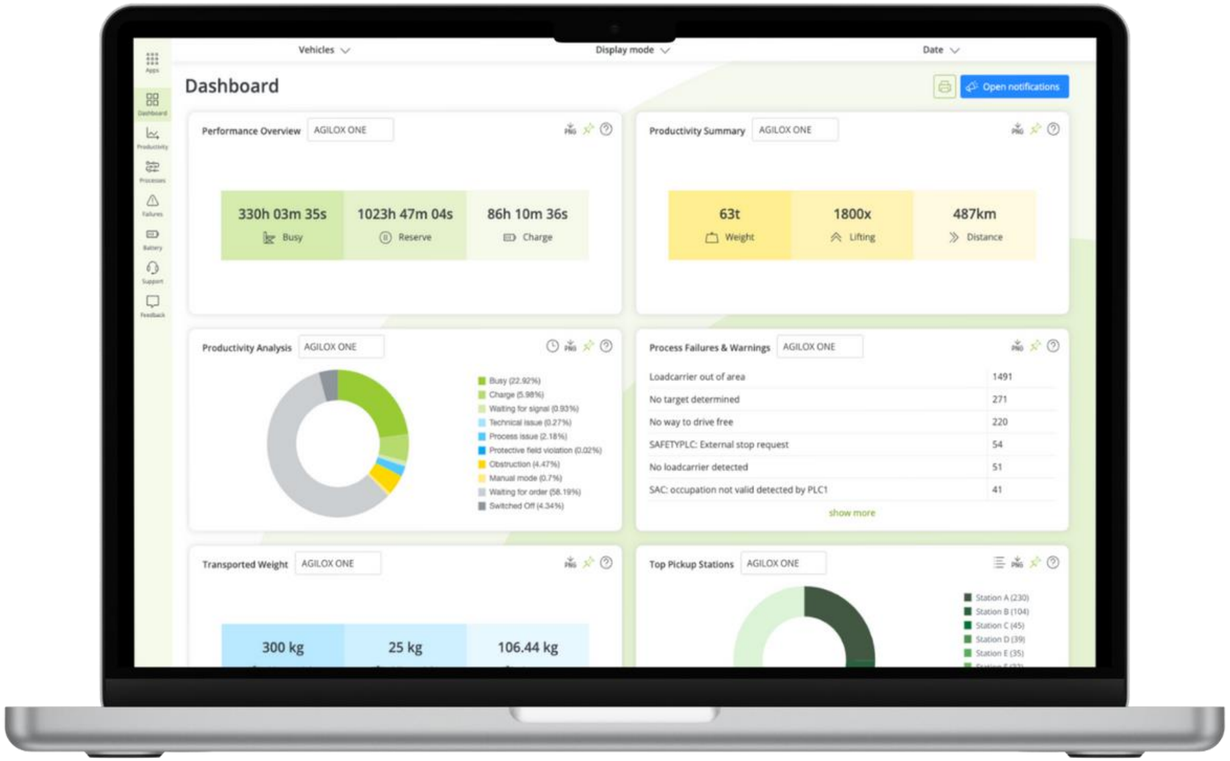
Challenges & requirements of clients



Project facts

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

AGILOX Analytics



AGILOX x BMW
Swarm intelligence for autonomous operation

FIND US AT BOOTH M21
AGILOX