

AGV System Checklist

The basis for further advice

Details of your operating company:

Company	Contact
Department	Telephone
PO Box	Fax
Zip code/city	Cell phone
Country	Email
Industry	Date

Do you already have some experience of automated guided vehicle (AGV) systems?

Personally:	Yes	No
Within the company:	Yes	No

Your project no./your match code:

What you want the AGV system to do/what tasks it needs to perform:

AGV system checklist information

1. General data

When and where do you plan to implement the AGV system?

Decision date: _____ Award date: _____
Planned go-live: _____
Place/address: _____

Operating conditions:

Installation of first AGV system _____ Expansion of existing AGV system _____
Newly constructed application area _____

Area of application: In which areas do you plan to use the AGV system?

Only indoors _____ Assembly _____
Manufacturing _____ Warehouse _____
Goods receipt _____ Goods issue _____
Any other areas: _____

Operating time: How many hours per day will the AGV system be used?

1-shift operation _____ 2-shift operation _____ 3-shift operation _____
Days per week: _____
Number of breaks per shift: _____ Total duration: _____ min

2. Environmental conditions

Environmental factors: What special environmental factors need to be considered?

(See AGV system technical conditions)

Normal conditions as per the AGV system technical conditions
Special temperature range: from _____ to _____ °C (standard: 5°C ... 40°C)
Special humidity: from _____ to _____ % (standard: 45% ... 90%)
Aggressive substances (gases, liquids, etc.): _____
Use in Ex protection zone _____ Use in ISO Class 5 cleanroom _____
IP20 rating sufficient _____ ESD _____
There is foot traffic in the area _____
There are crossings for personnel: Number of crossings: _____

AGV system checklist information

Floor covering: What is the composition of the path surface?

Flooring suitable for AGV system (see AGV system technical conditions)

Concrete flooring	Synthetically sealed	Paving stones (not suitable for an AGV system)
Industrial flooring	Linoleum	Asphalt (not suitable for an AGV system)
Wood	Tiles	Stelcon slabs
Other:		

Floor condition

Earth leakage resistance present (RE \leq 106 Ω , VDI 2510-1 and VDI 4452)

Obstacles on the floor (joints, gullies, etc.)

Path surface impurities

- Type (chippings, dust, etc.)

Basement floor present (load-bearing capacity): N/mm²

Maximum gap in the floor 15 mm

Maximum edge in the floor 15 mm

Cart max. gap in the floor 5 mm

Cart max. edge in the floor 5 mm

3. Transport goods and transport unit

What will be transported?

Please specify the transport goods:

Properties of the transport goods:

Liquid	Fragile	Tends to slip
High/low temperature	Temperature:	°C
Any other special details:		

What type of load carriers will be used?

Euro pallet 1,200 mm x 800 mm (L x W) (DIN 15146-2, see illustration)

Industrial pallet 1,200 mm x 1,000 mm (L x W) (DIN 15146-3)

Euro pallet cage 1,240 mm x 835 mm (L x W) (UIC 435-3)

CHEP pallet 1,200 mm x 1,000 mm (L x W)

Small load carrier 300 x 200 mm (VDA 4500/4504)

Small load carrier 400 x 300 mm (VDA 4500/4504)

Small load carrier 600 x 400 mm (VDA 4500/4504)

Other load carriers:

(attach diagram, if necessary)

AGV system checklist information

Load transfer takes place on

Main route
Other:

Secondary route

Branch route

Load cycles

Ground level

Quantity:

At fixed height

Quantity:

Height(mm):

At variable height

Quantity:

Difference (mm):

5. Material flow

How many transports need to be performed per hour? (Please attach Excel spreadsheet)

From source	To sink	Transport route	Empty run route	No. of transp./h	Transfer height		Comments
					Source	Sink	
ID	ID	m	m	T/h	mm	mm	
Goods receipt	Production	100	50	10	0	600	Example

Type of application

Transport between source and destination

Picking

Assembly chain/flow line mode

Transport mode with linked systems

Other:

Required accuracy

AGV system checklist information

6. Route and layout (please attach diagram/layout)

Properties of the route:

Total route:	m		
Minimum width on straight sections:		... at bends:	(m)
Automatic doors:	pcs.		
Fire doors (fire protection doors):	pcs.		
Airlocks:	pcs.		
Doorways/gateways	pcs.		
• Min. dimensions:	Height (m)		Width (m)
Elevators	pcs.		
• Door dimensions:	Height (m)		Width (m)
• Room dimensions:	Height (m)		Width (m)
• Permissible load-bearing capacity:	kg		

Special features of the route

Route used by other users:

Ramps: Length: m Slope: %

Interfaces to other trades:

Any other special features:

7. Vehicle technology

Vehicle navigation

No special requirements	SLAM		
Laser navigation	Magnetic spot navigation		Navigation based on surroundings
Inductive track guidance	Optical track guidance		Magnetic tape guidance

Vehicle type and quantity

No special requirements				
Forklift:	pcs.	Roller conveyor:	pcs.	Rollers
Lift table:	pcs.	Chain conveyor:	pcs.	Chains
Tractor:	pcs.	Other:		

