

FEDERAZIONE NAZIONALE  
IMPRESE ELETTROTECNICHE  
ED ELETTRONICHE



**AssoAutomazione**  
Associazione Italiana  
Automazione e Misura

# Automatic Guided Vehicles (AGV)

Sistemi innovativi per l'alimentazione e la  
comunicazione.



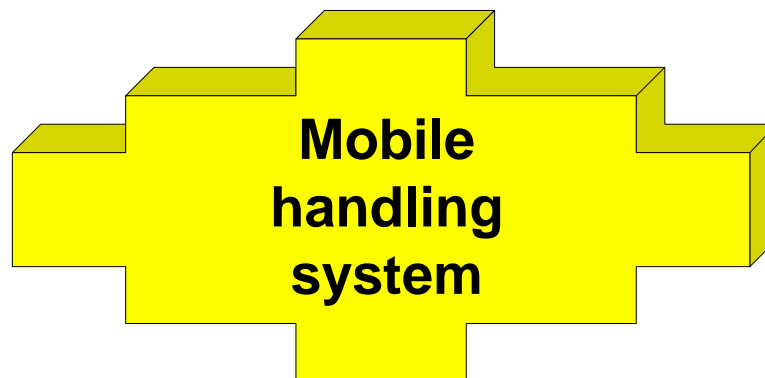
# Il “mobile handling”: applicazioni AGV nell’intralogistica.





# Il “mobile handling” e la mecatronica

Le applicazioni di “Mobile Handling” (es. AGV / EMS) sono un classico esempio di integrazione e di progettazione mecatronica:



# Selezione della motorizzazione e del controllo.

1) implementazione del diagramma di carico.



2) dati applicazione.

Pos	R	Accel.	v Start [m/s]	v End [m/s]	a [m/s <sup>2</sup> ]	Time [s]	Distanc [mm]	Pos [mm]	Accum. time [s]	Ma stat [Nm]	Ma stat+dyn [Nm]	Fz stat [N]	Fz stat+dyn [N]	mech. Brake	Emerge
1	↔	+	lin	0	1	0,2	5	2500	2500	5	26,10	92,77	0	0	<input type="checkbox"/>
2	↔	+	-	1	1	0	45	45000	47500	50	26,10	26,10	0	0	<input type="checkbox"/>
3	↔	+	lin	1	0	-0,2	5	2500	50000	55	26,10	-27,90	0	0	<input type="checkbox"/>
4	•	+	-	0	0	0	30	0	50000	85	0	0	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	↔	-	lin	0	-1	0,2	5	-2500	47500	90	8,700	30,92	0	0	<input type="checkbox"/>
6	↔	-	-	-1	-1	0	45	-45000	2500	135	8,700	8,700	0	0	<input type="checkbox"/>
7	↔	-	lin	-1	0	-0,2	5	-2500	0	140	8,700	-9,300	0	0	<input type="checkbox"/>
8	•	+	-	0	0	0	30	0	0	170	0	0	0	0	<input checked="" type="checkbox"/>

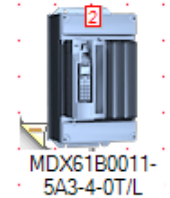
3) selezione della motorizzazione.

Drive selection

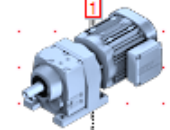
Gear unit size: 0  
Gear ratio: 0  
Motor size: 0  
Speed class: 0

S 1	S 2	Serial	Catalog designation	Output tor [Nm]	Speed cla [rpm]	Act. motor [rpm]	Rated mot [Nm]	Gear ratio	Output spe [rpm]	Servic	max. gear [%]	Eff. mot. loa [%]	Max. mot. I [%]	Jx/Jm+b
✓	✓	1	R37DRE90L4BE2/TF	92,77	1430	1265	10	13,25	95,47	1,40	48,8	20,32	73,3	35,32
		2	New drive											

4) selezione del controllo.



5m

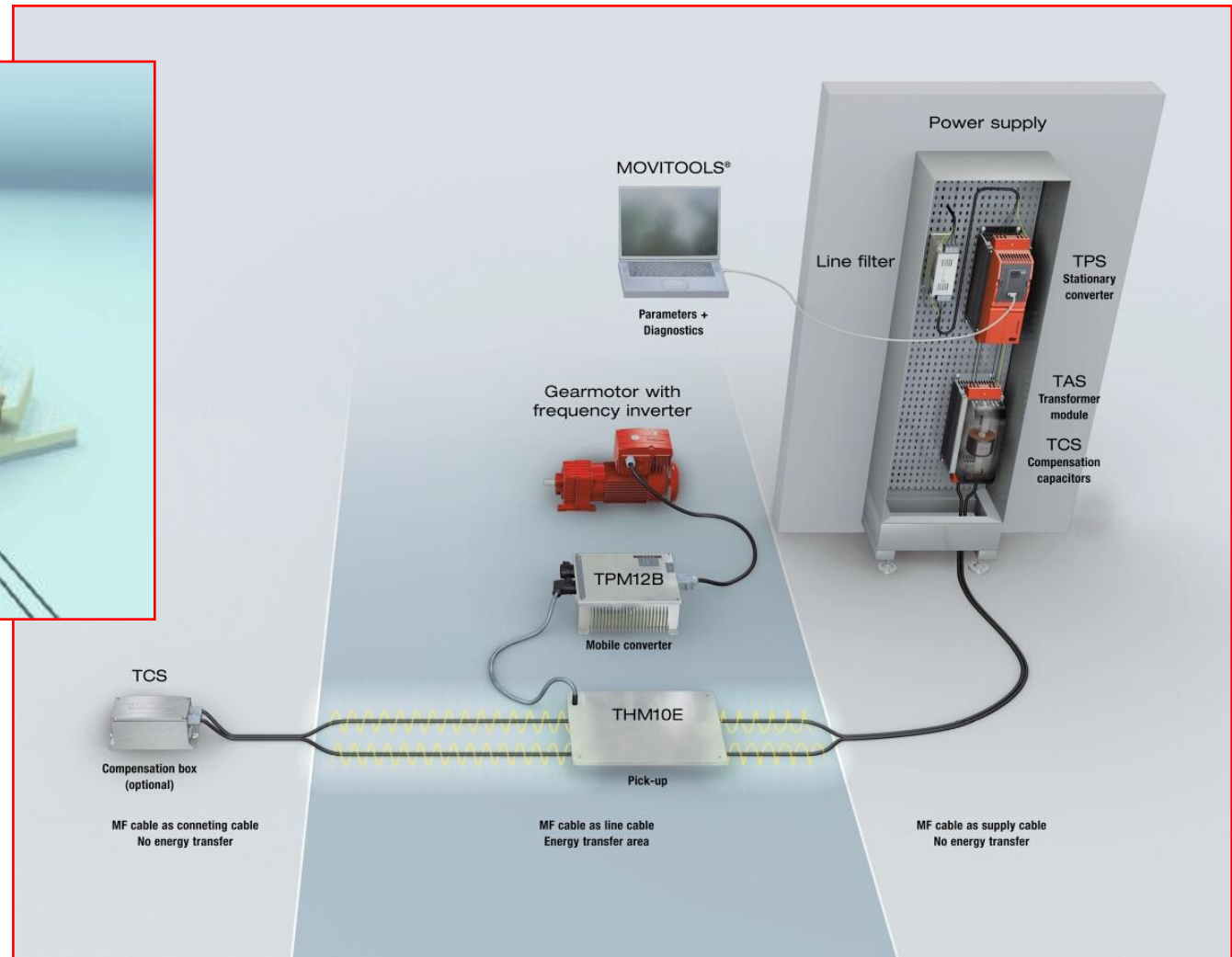
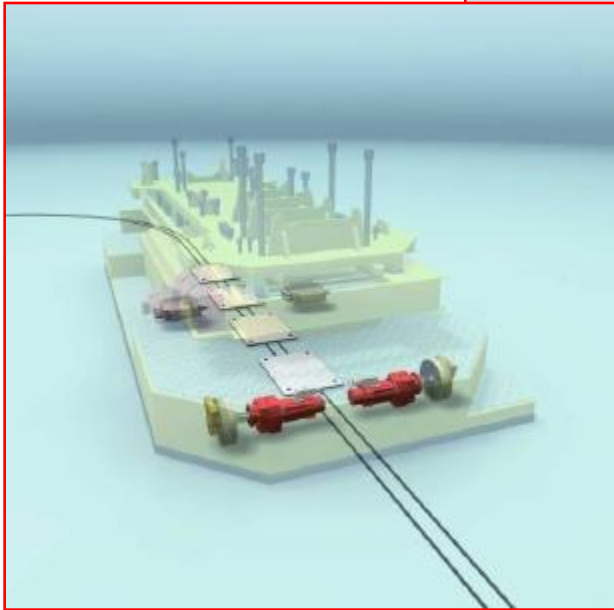


R37DRE90L4BE2 /TF



TRASLAZIONE

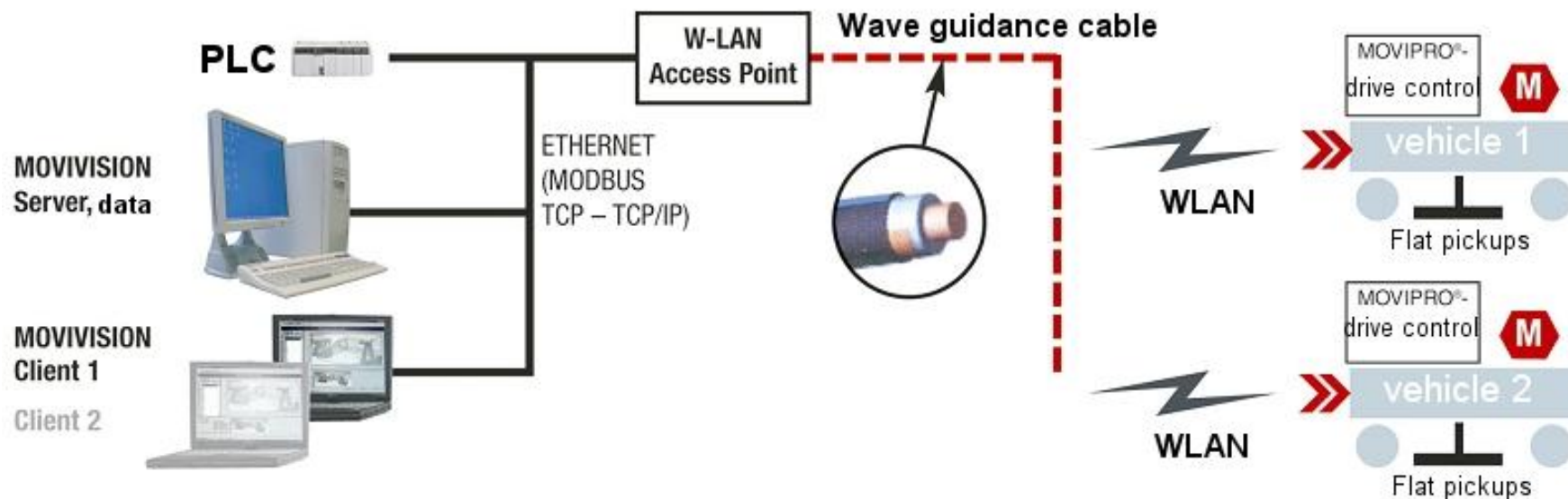
# Trasferimento dell'energia senza contatti.







# Trasmissione delle informazioni.





# Controllo dell'azionamento.

MOVIVISION - Anlagensvisualisierung

Datei Sprache Extras Info

FunctionGroup : FG1 - Device : SC\_ID70\_IP152 - Parameter Track EditorControl

FG1 - Authlevel : SystemAdministration

- DIO\_ID50\_IP122\_SN000F5
- FVW\_ID11\_IP243\_SN000814
- FVW\_ID15\_IP212\_SN000325
- FVW\_ID21\_IP131\_SN000219
- FVW\_ID25\_IP246\_SN000369
- SC\_ID70\_IP152

Parameter

- Parameter Track Editor
- EHB Online
- SC-Parameter
- SC-Diagnose
- PLC
- LSI
- Buffer

- TES\_ID31\_IP247\_SN000209
- TES\_ID32\_IP248\_SN000201
- TES\_ID33\_IP249\_SN000379
- WE\_ID01\_IP241\_SN000791
- WE\_ID02\_IP242\_SN000930
- WE\_ID03\_IP245\_SN000857
- WE\_ID04\_IP239\_SN000204
- WE\_ID05\_IP250\_SN000225
- WE\_ID06\_IP244\_SN000361

Section Box

Zoom In  
Zoom Out  
Save  
Load

Drawing Property

RotationAngle 90  
XInvert True

Section Main Properties

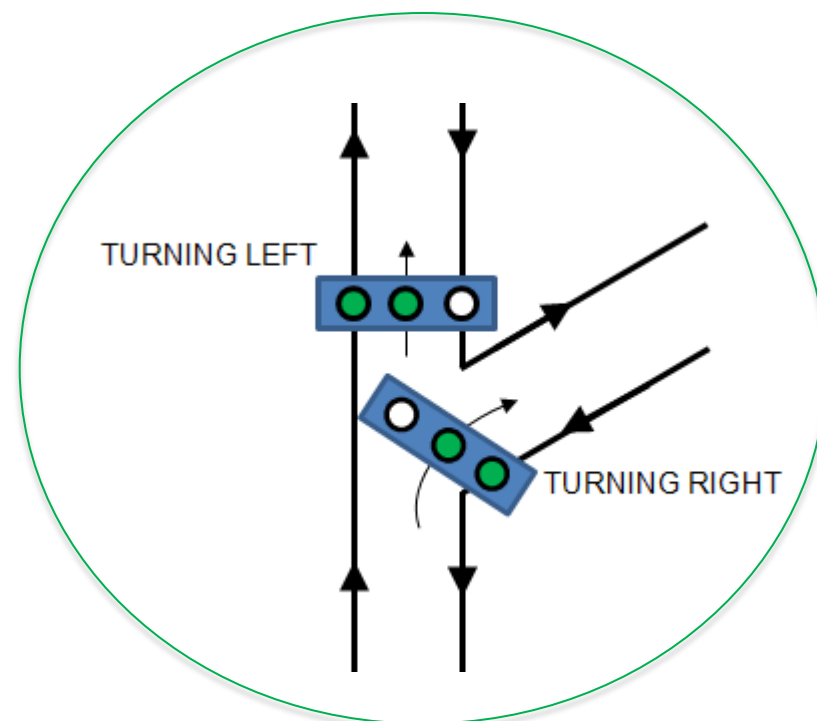
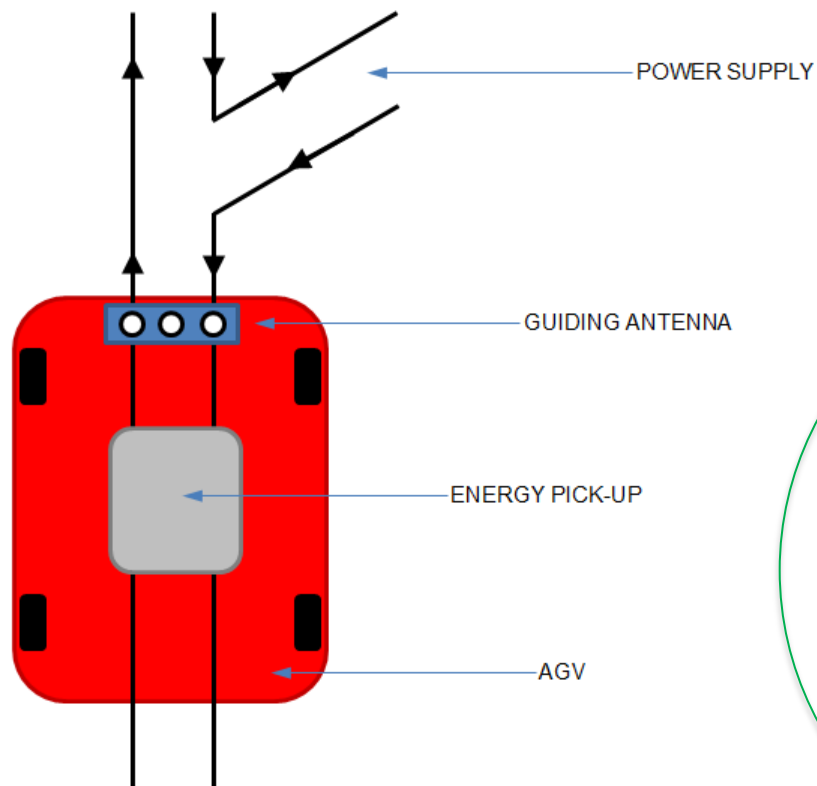
Tracks (Auflistung)

RotationAngle  
Rotation Angle (must be between 0° and 360°)

Update Database Cancel



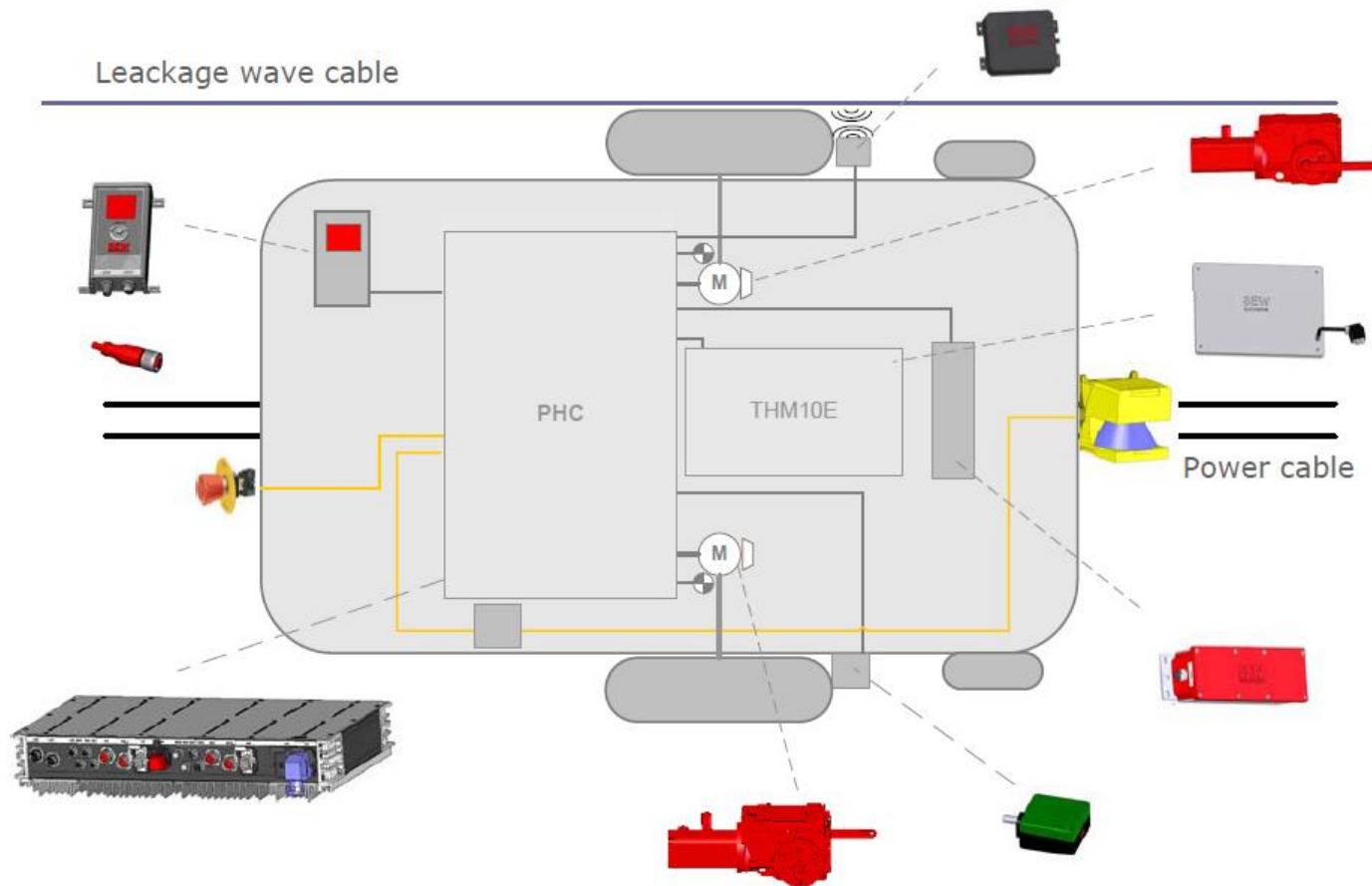
# Controllo dell'azionamento.

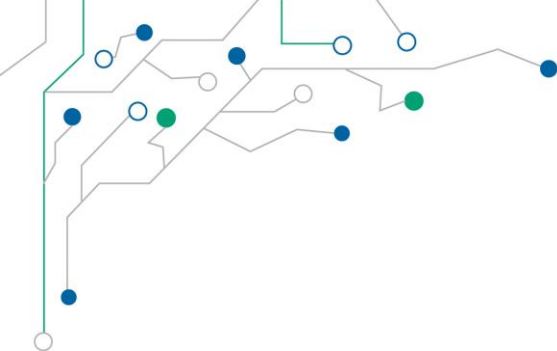






# Posizionamento dei componenti sul AGV.





# Grazie per l'attenzione!