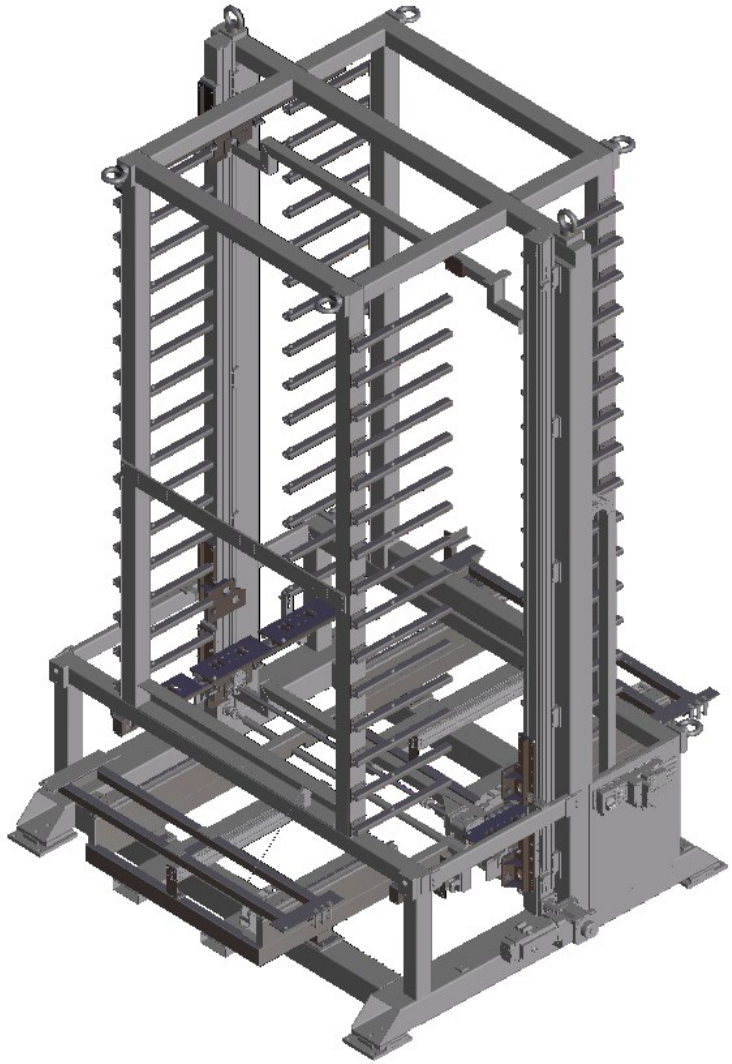
CUBO

ENGINEERING

ADVANCED SYSTEMS FOR AUTOMATION

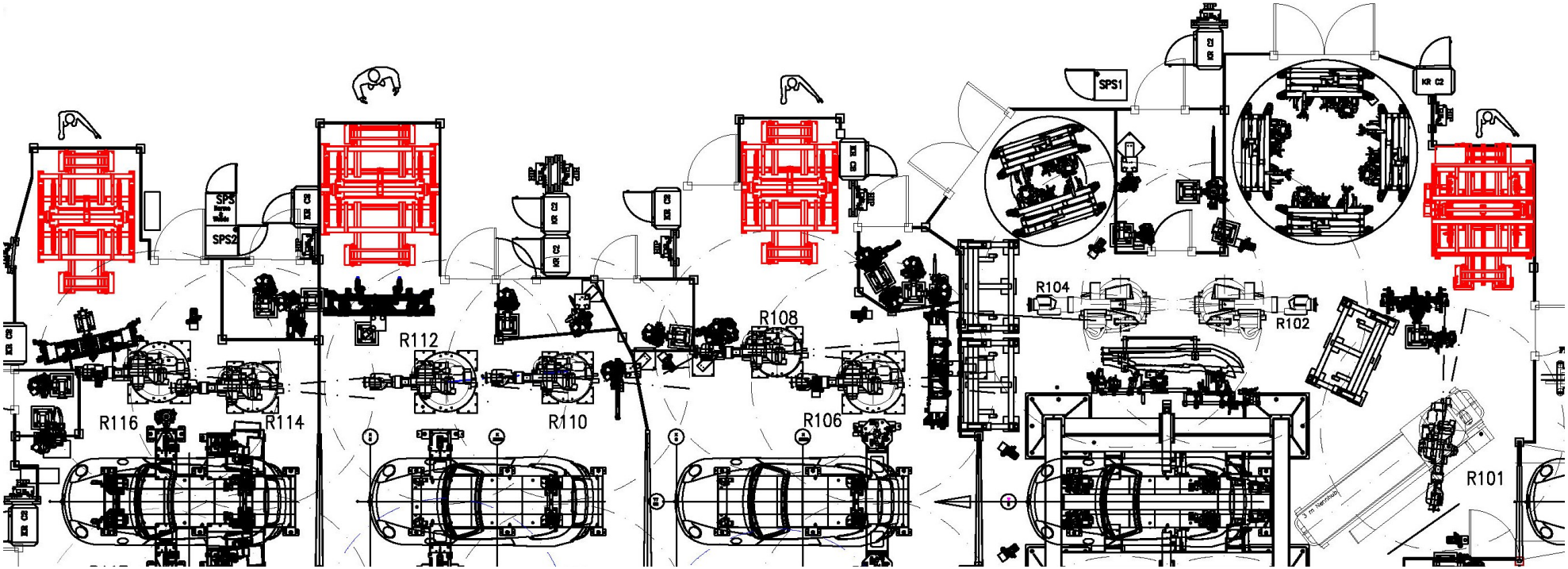
Teilemagazine



Giugno 2018

CUBO Teilemagazine

CUBO Teilemagazine nasce con lo scopo di fornire alle linee automatiche un sistema automatico di immagazzinamento elementi.



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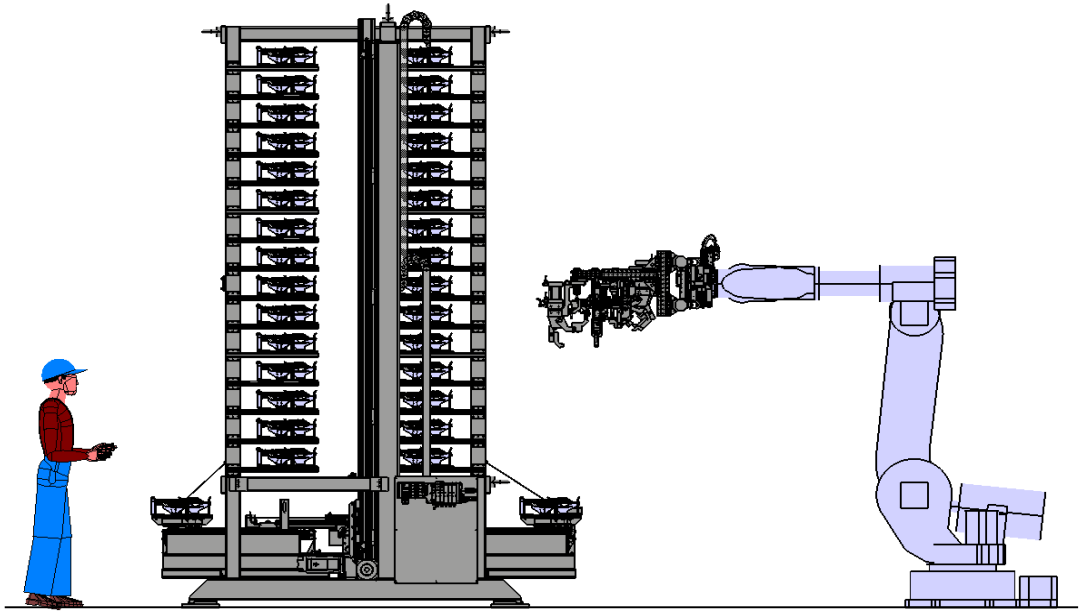
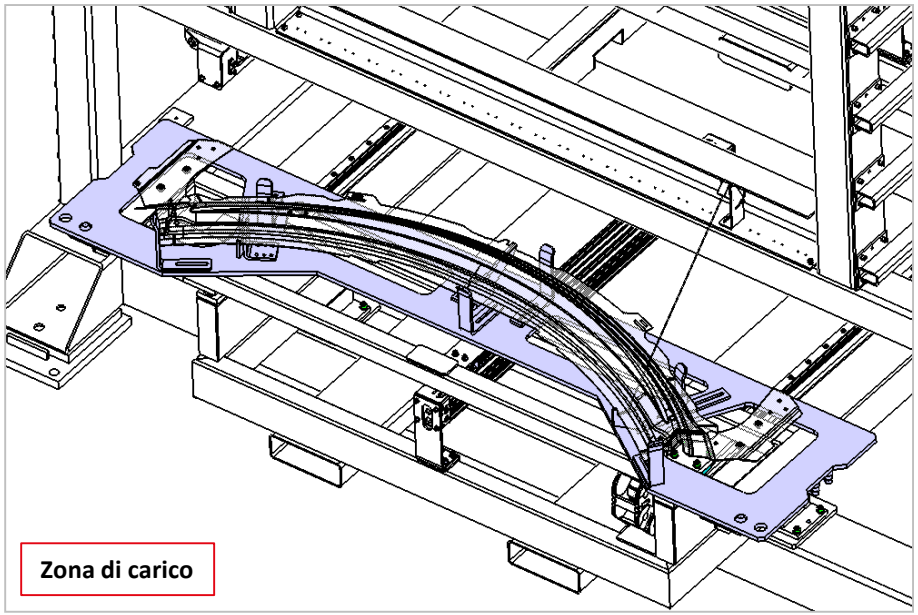
Sistema automatico di immagazzinamento elementi

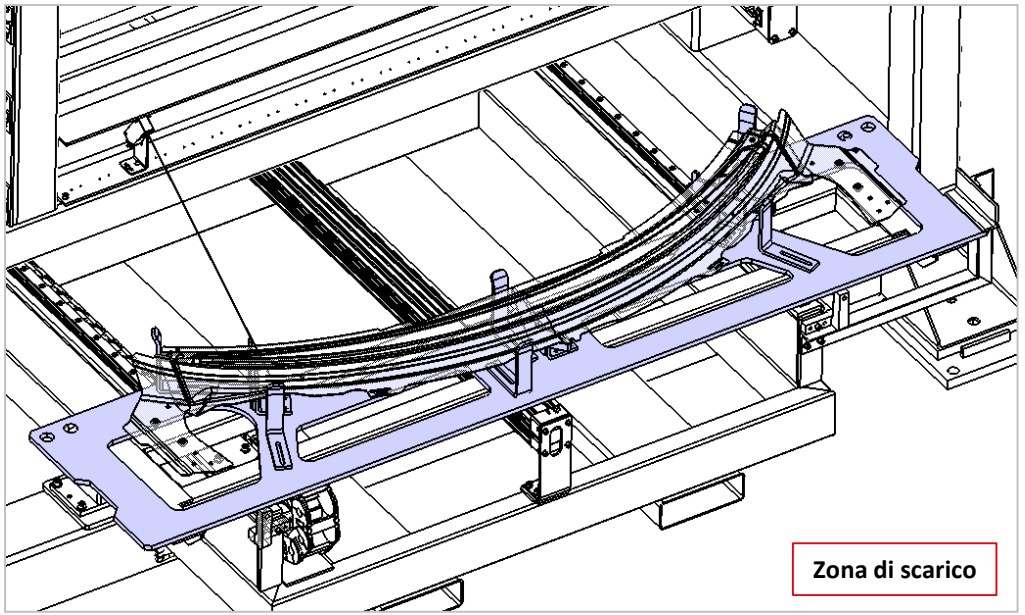


Zona di carico

Zona di prelievo

- Immagazzinamento di elementi diversi
- Scelta libera di carico con Mix 100%
- Scelta libera di prelievo con Mix 100%
- Adatto per linee promiscue
- FIFO





Gli elementi da immagazzinare vengono posizionati manualmente su vassoio

Gli elementi immagazzinati sono messi a disposizione del robot su vassoio

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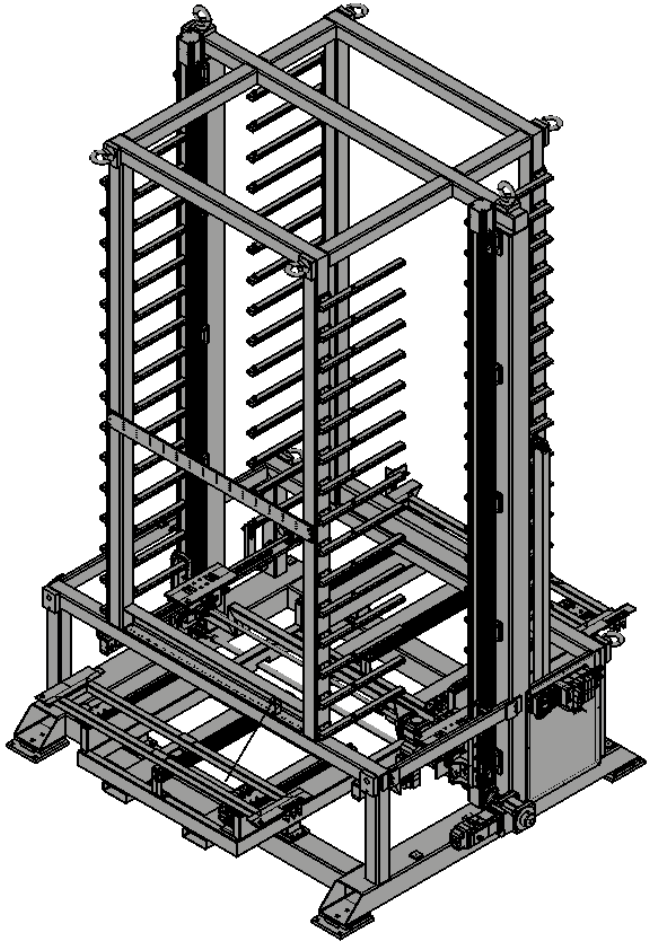
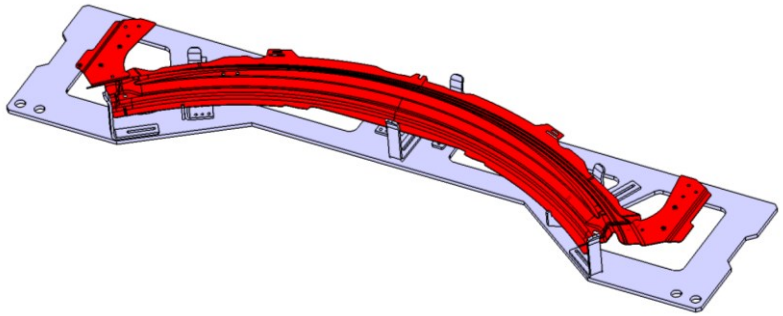
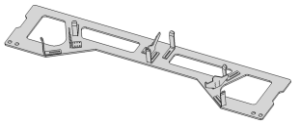


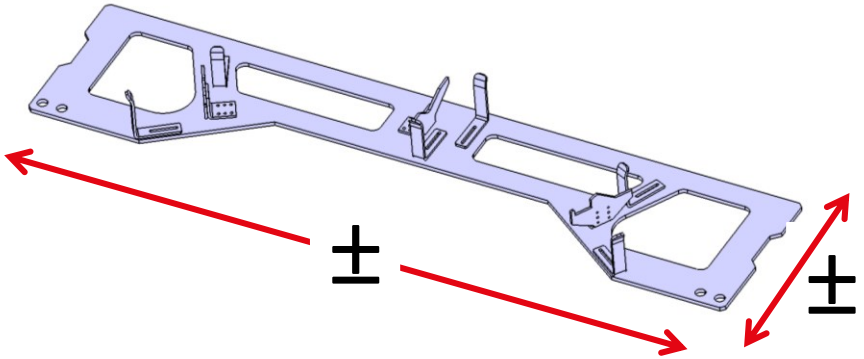
STRUTTURA

+

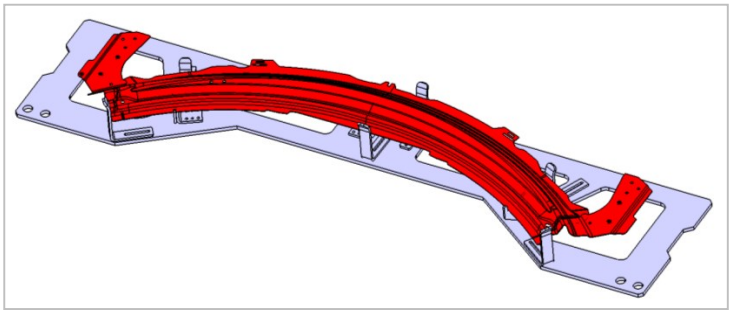


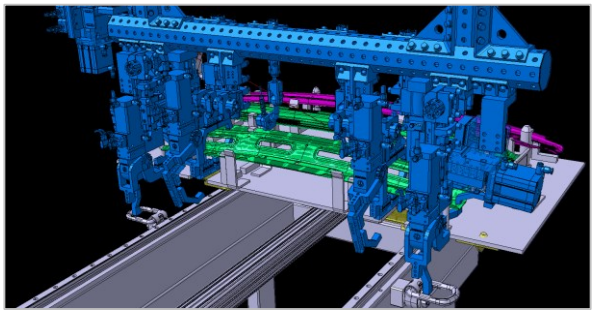
VASSOIO



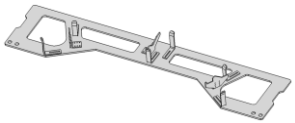


Design flessibile

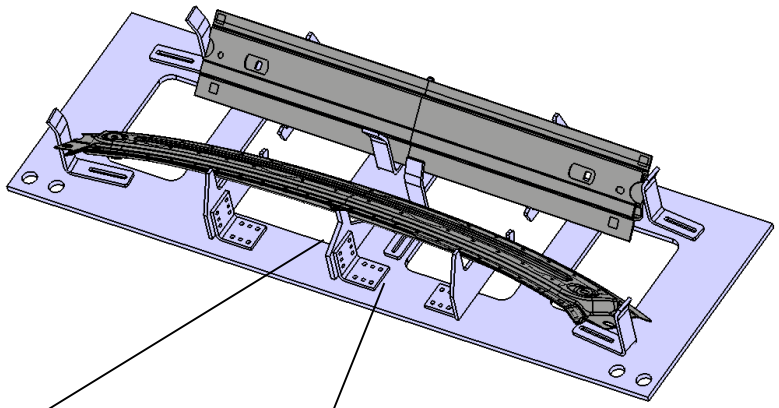


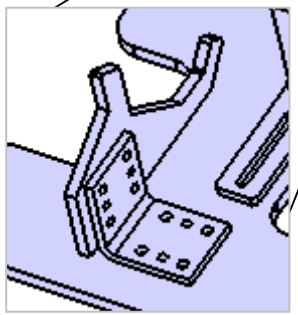


Vassoio progettato in base all'elemento e al gripper



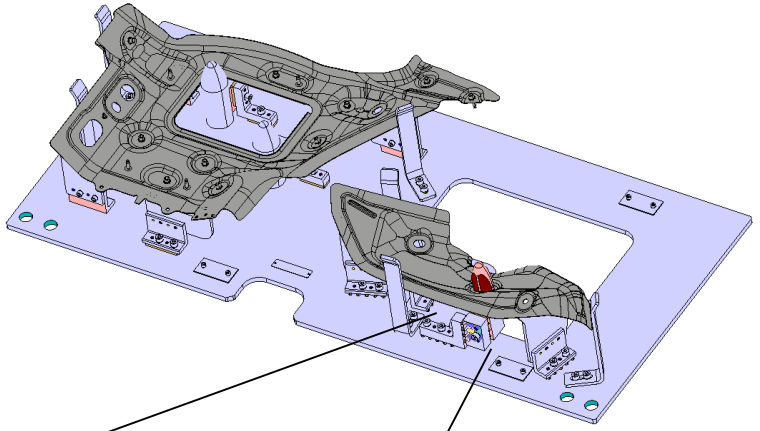
Vassoio di manipolazione

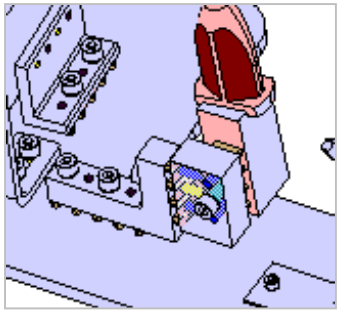




Gli elementi sono riferiti tramite inviti

Vassoio di geometria





Gli elementi sono riferiti tramite tasselli e perni regolabili

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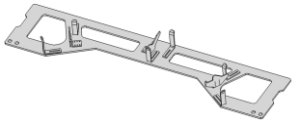
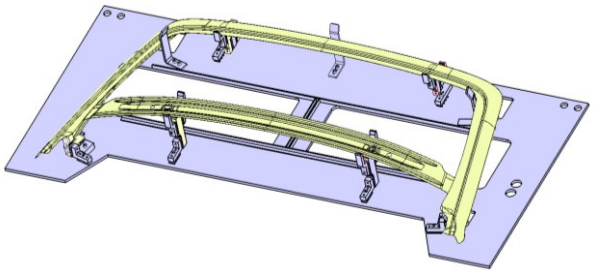
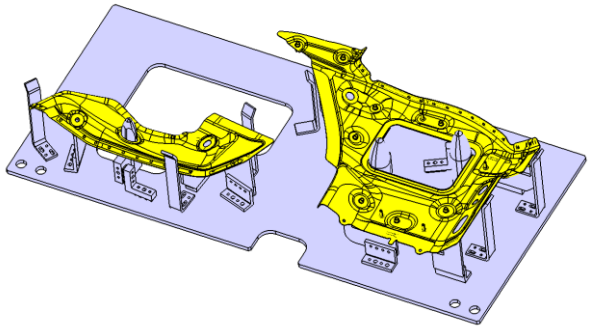
Il Vassoio

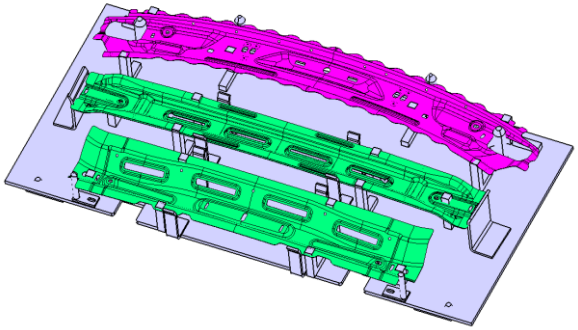




1 Elemento



2 Elementi



3 Elementi

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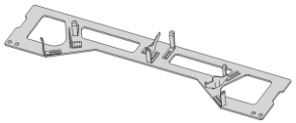
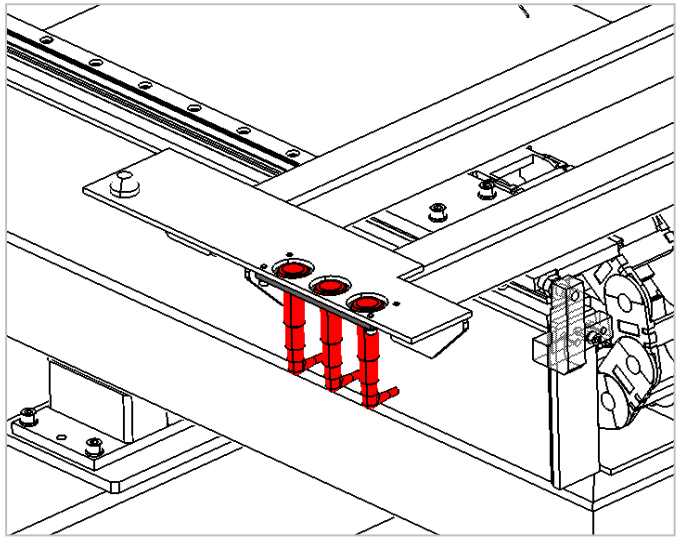
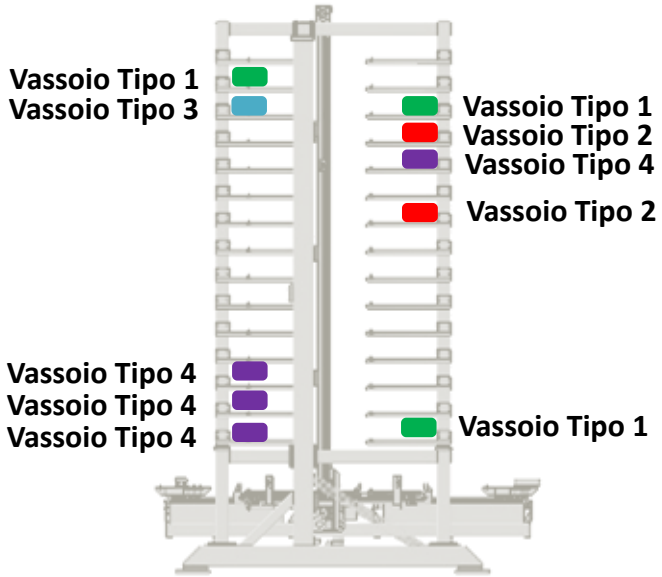
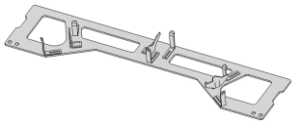


I vassoi sono codificati
tramite n°3 sensori

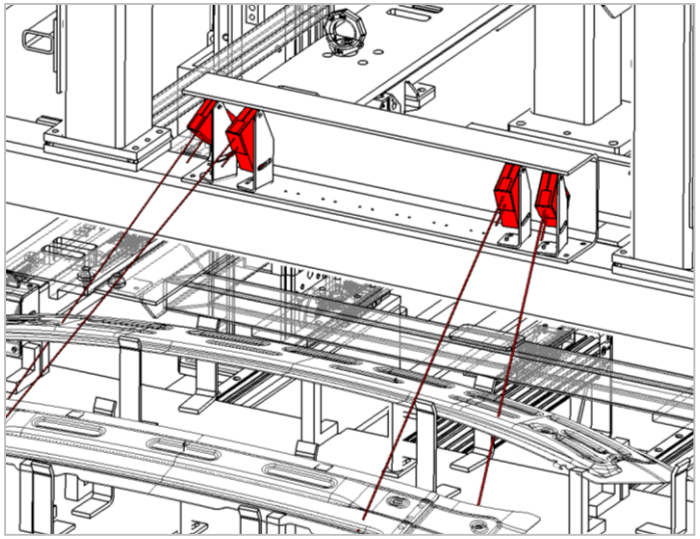


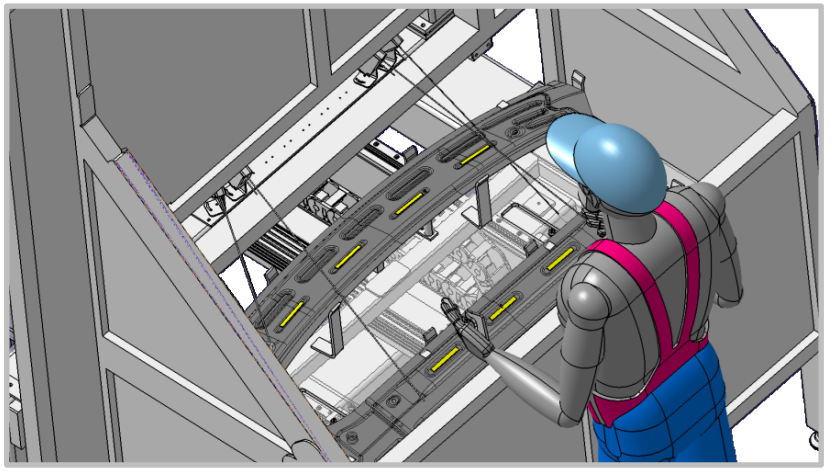
All’interno del magazzino possono essere immagazzinati fino a 7 tipi di vassoi diversi





La presenza degli elementi sul vassoio viene controllata da sensori laser





Zona di carico è disegnata secondo le norme di ergonomia

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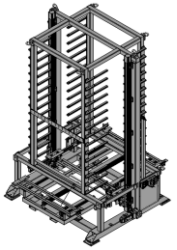
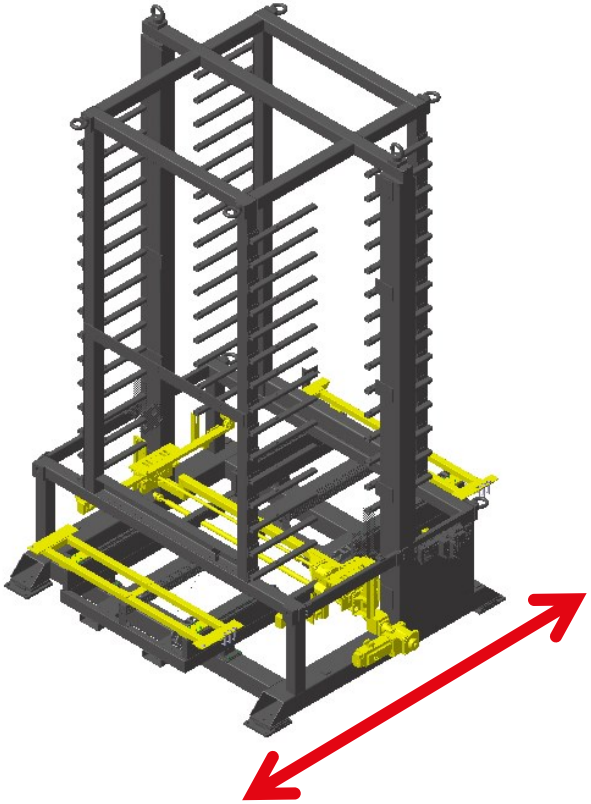
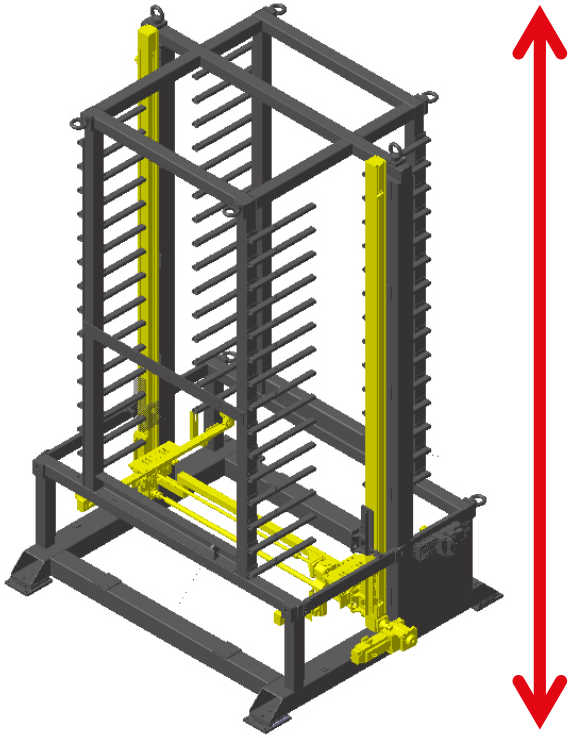




Asse orizzontale



Asse verticale

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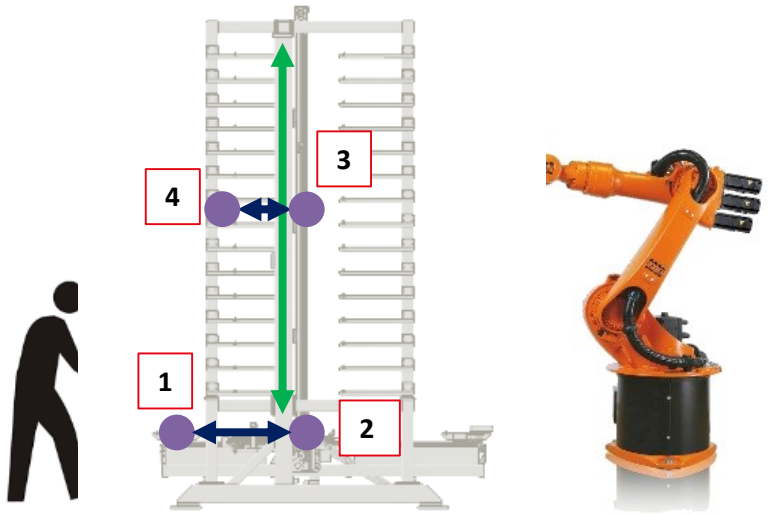
CICLO DI RIEMPIMENTO/CARICO

1. L’ elemento con il vassoio viene posizionato nella zona di carico
2. Spostamento orizzontale dell’elemento col vassoio fino al centro del magazzino
3. Spostamento verticale dell’elemento col vassoio fino alla baia desiderata
4. Spostamento orizzontale dell’elemento fino alla posizione di immagazzinamento



Elemento

Spostamento orizzontale

Spostamento verticale

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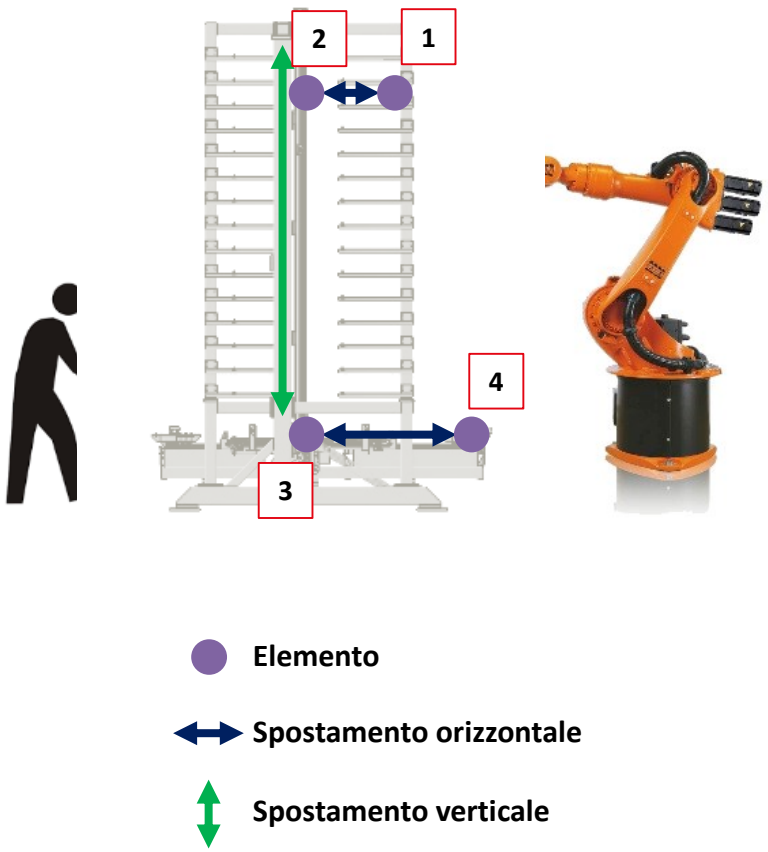
CICLO DI SVUOTAMENTO/SCARICO

1. L’ elemento con il vassoio viene prelevato nella zona di immagazzinamento
2. Spostamento orizzontale dell’elemento col vassoio fino al centro del magazzino
3. Spostamento verticale dell’elemento col vassoio fino alla base del magazzino
4. Spostamento orizzontale dell’elemento col vassoio fino alla posizione di prelievo



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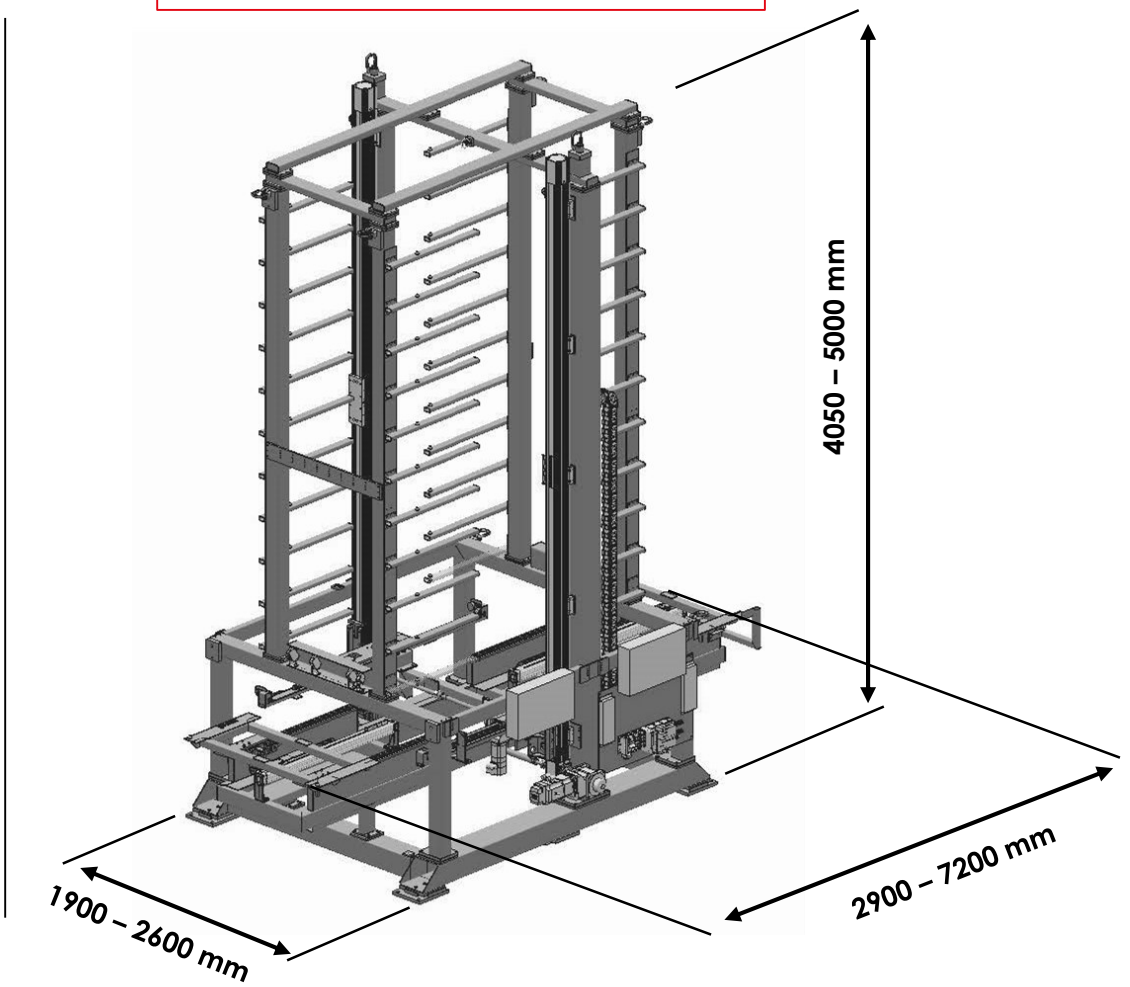
Le dimensioni esterne dipendono da:

- quantità dei vassoi
- dimensioni dei vassoi



Tempo ciclo: 40 sec.

Tempo di spostamento dalla zona di carico alla posizione più alta e ritorno, per un magazzino a 30 posti

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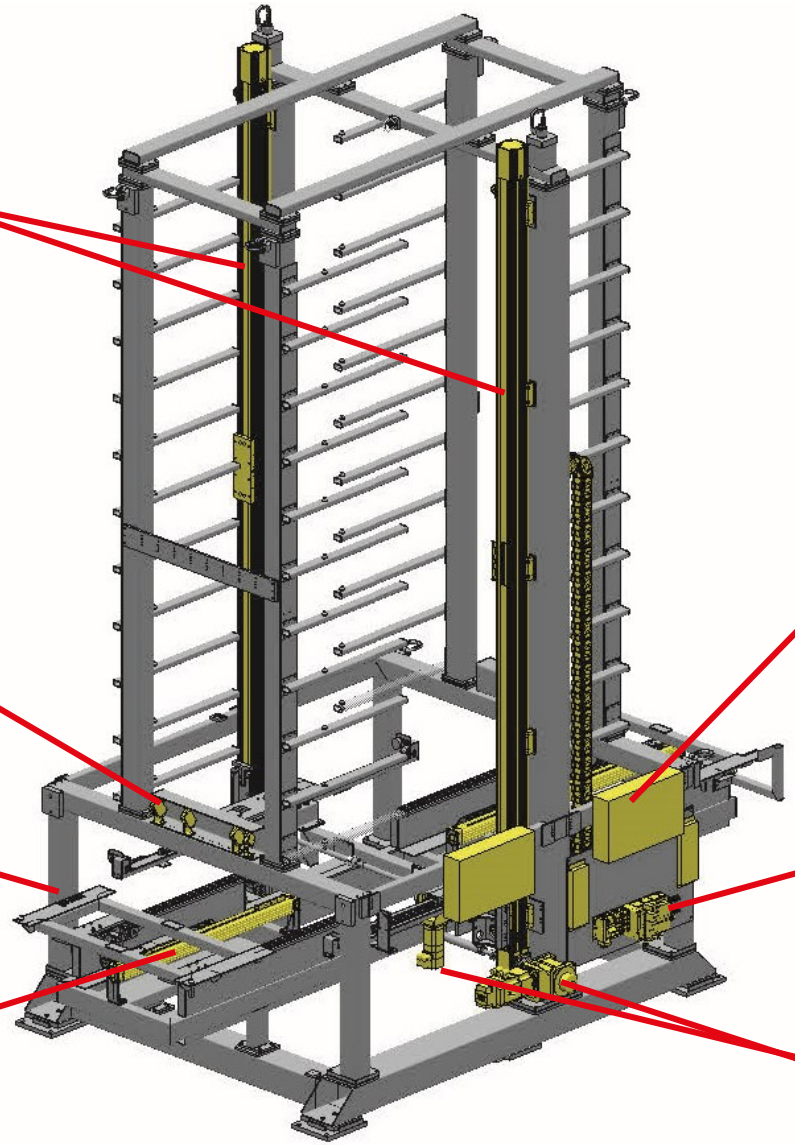

Guide lineari
(Bosch)

Impianti elettropneumatici
fino al pacco valvole

Sensori laser
(Sick)

Azionamento
(SEW)

Sensori induttivi
(Balluff)

Pacco valvole
(Festo)

Attuatori
(Festo)

Motori
(SEW)

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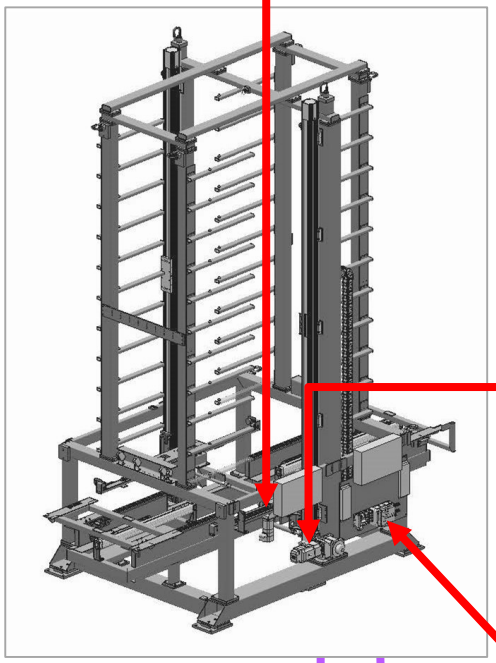
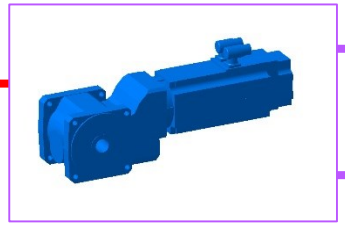
Collegamenti



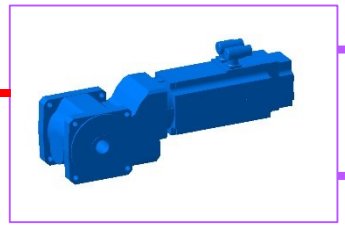


Motor

Resolver cable

Motor cable

Inverter



Motor

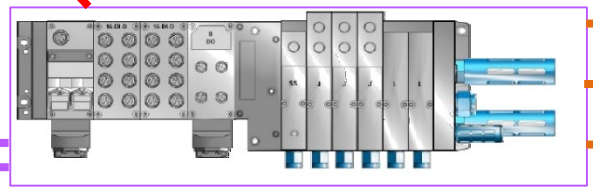
Resolver cable

Motor cable

Inverter

Air

I/O



Valve Terminal

Air

BUS

24V

Volume CUBO

Volume Cliente

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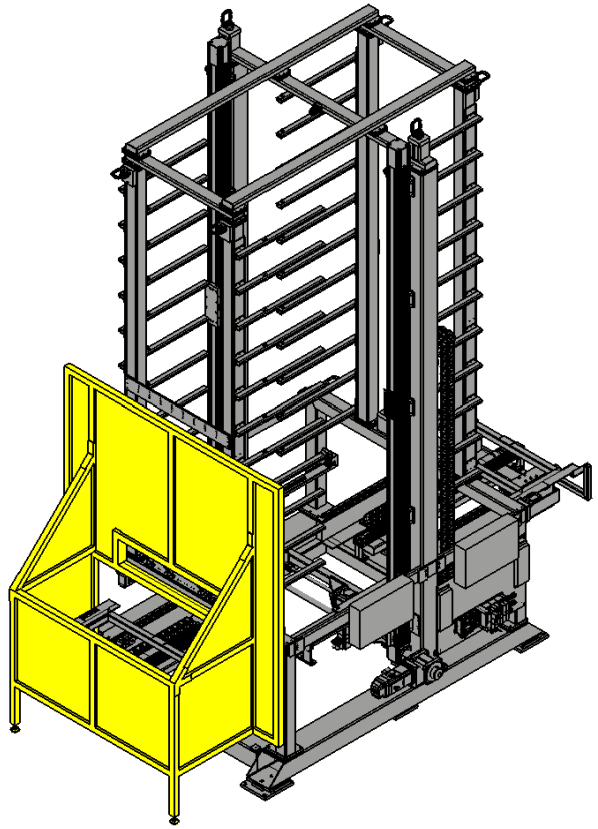
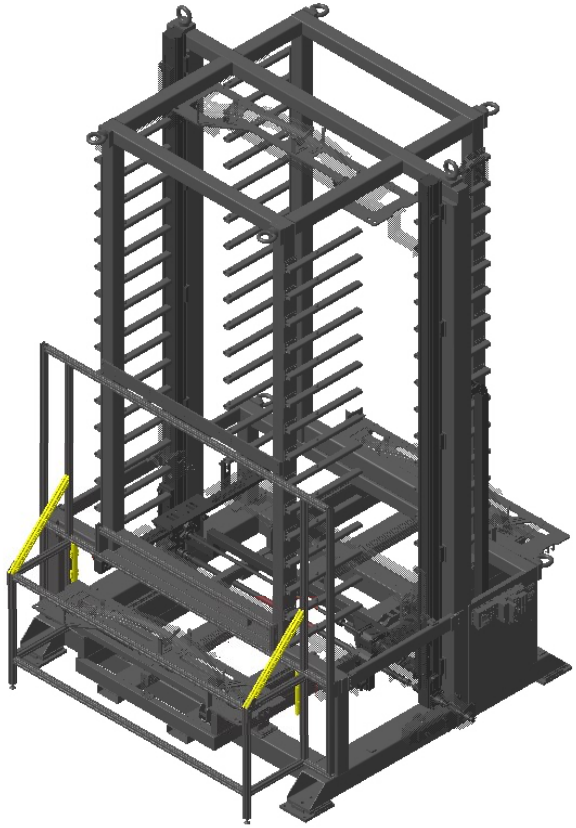


Recinzioni



Fotocellule

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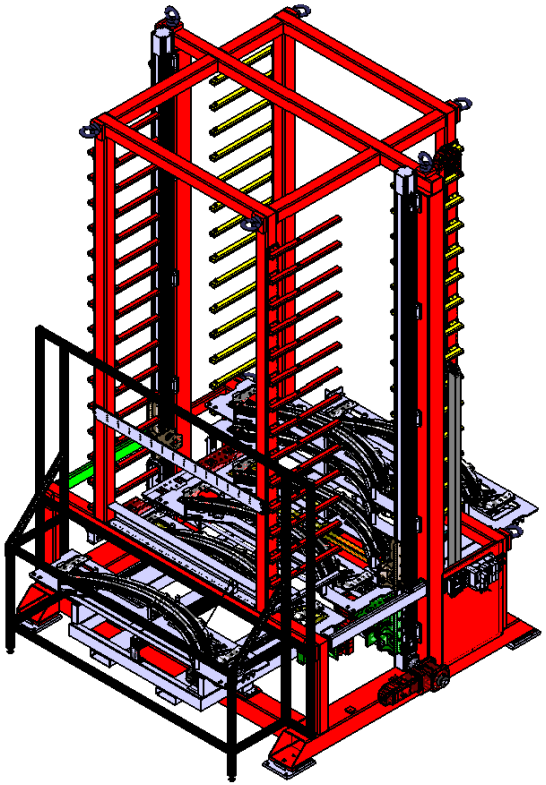

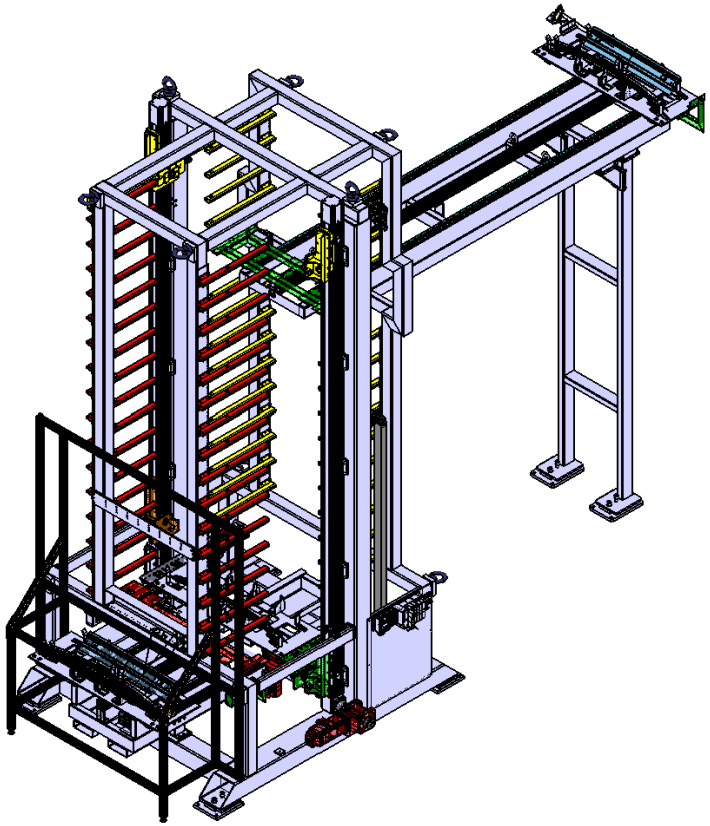

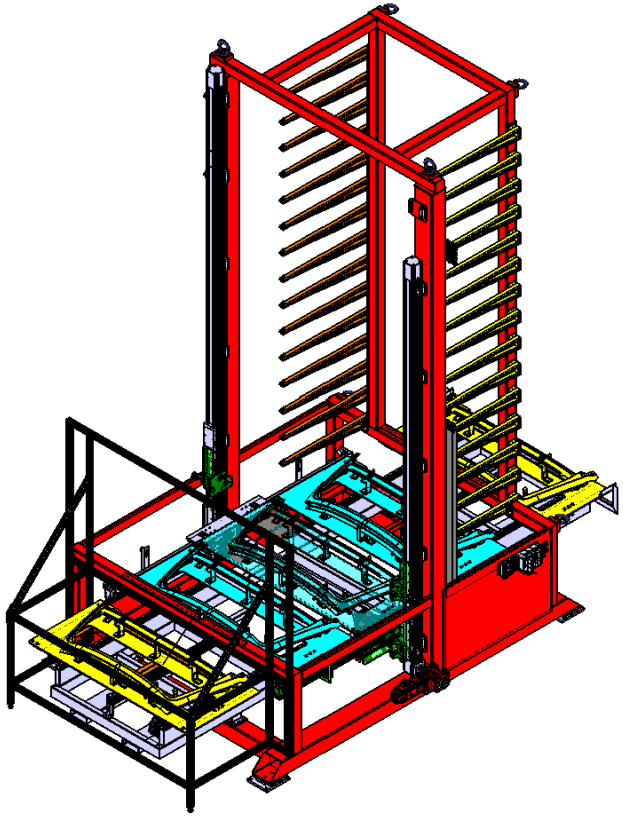

VALIANT TMS®

project PORSCHE

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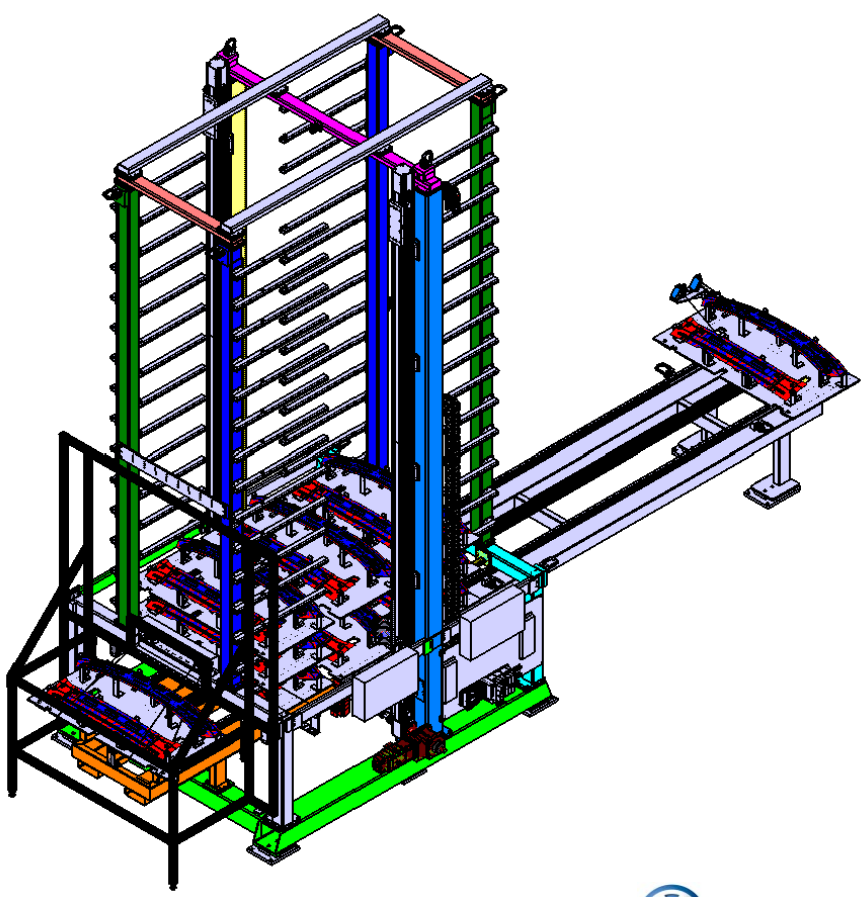

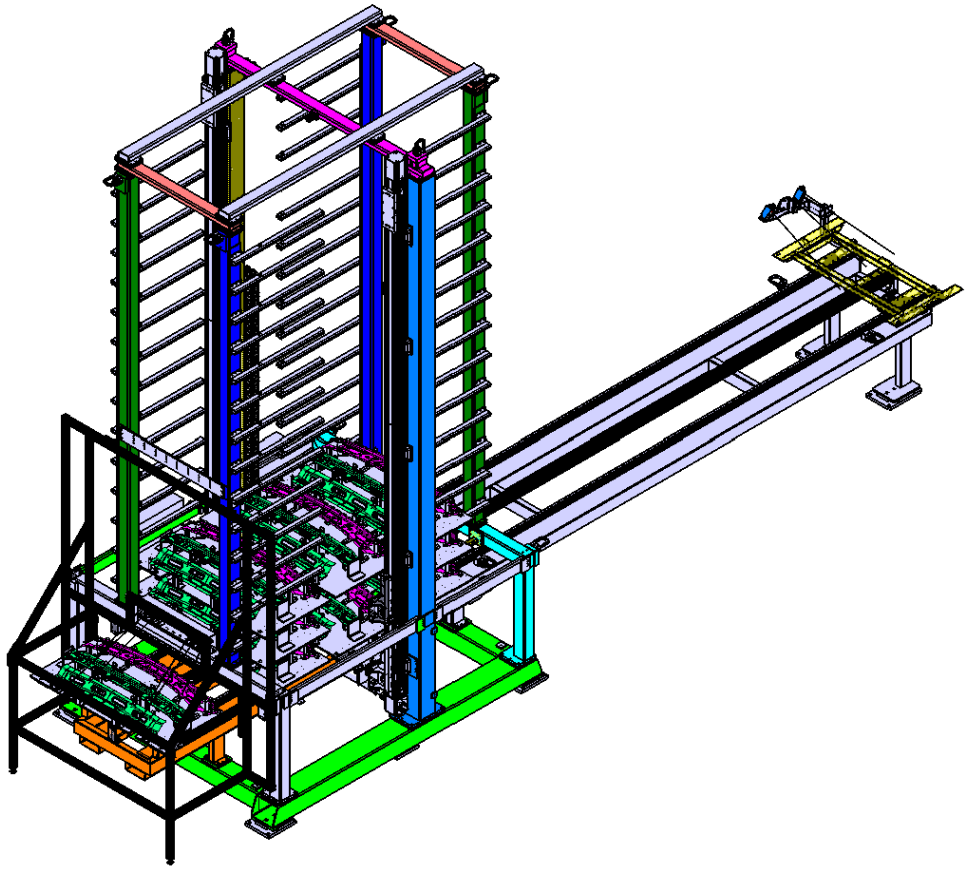

VOLKSWAGEN
project PORSCHE

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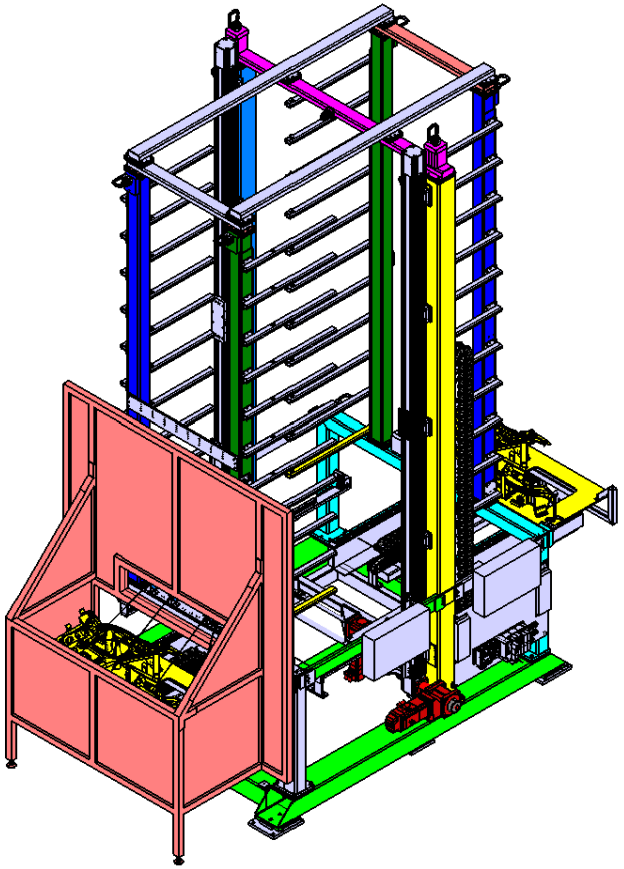
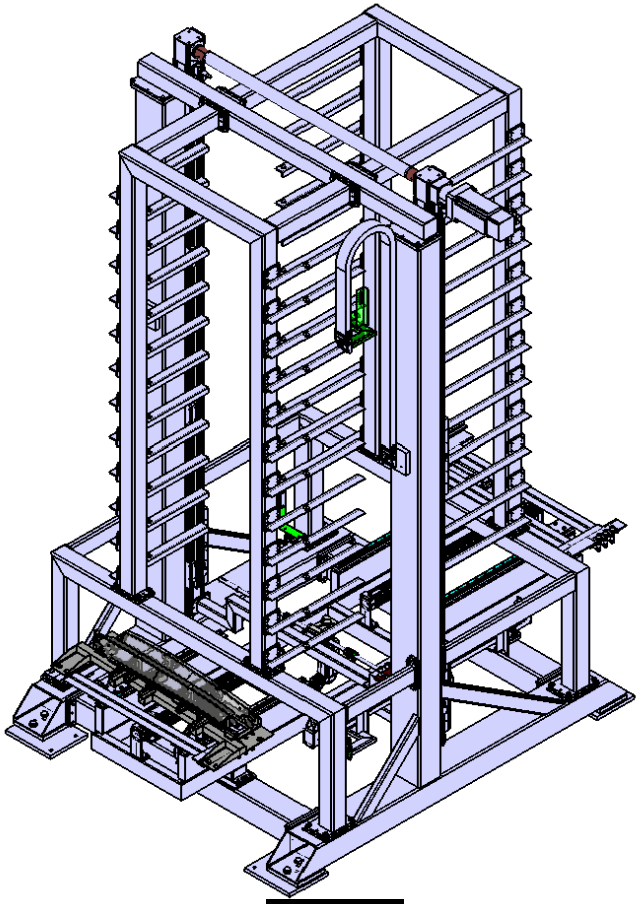
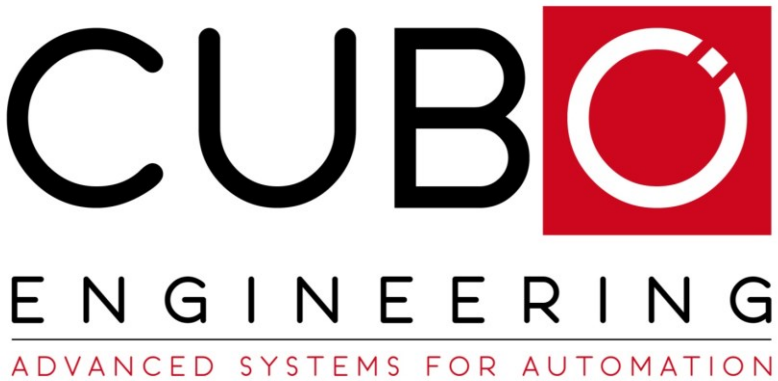


thyssenkrupp

project



Ferrari



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