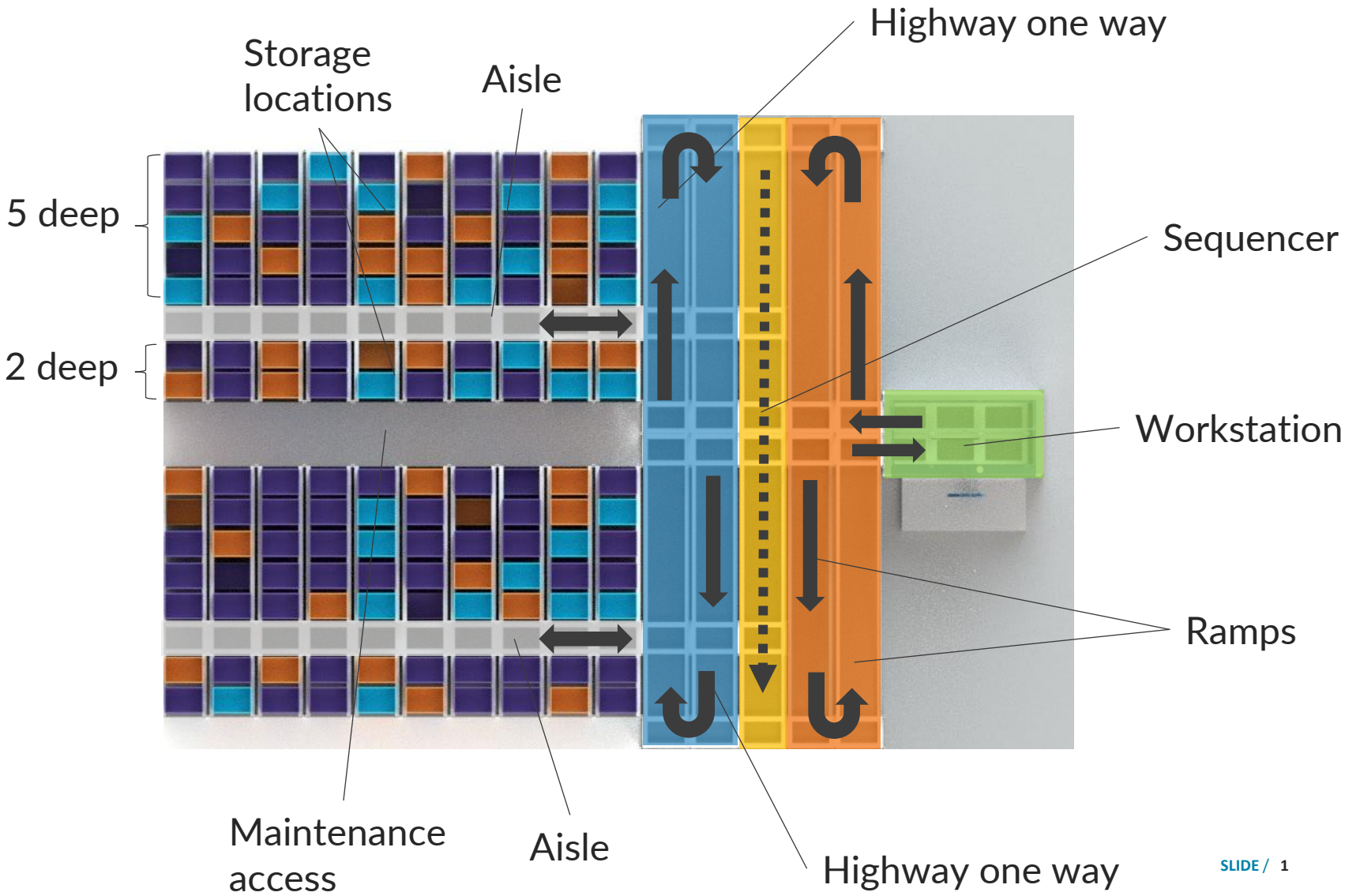
stow e.scala® 3D

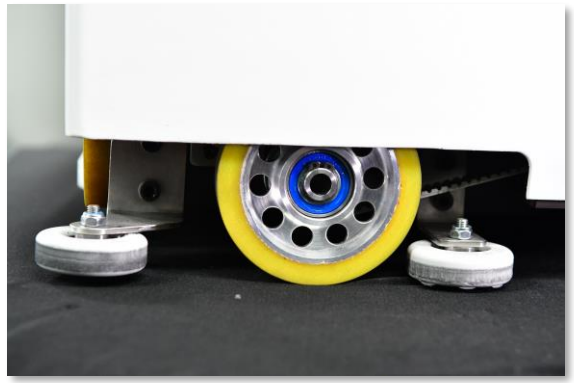
Material flow

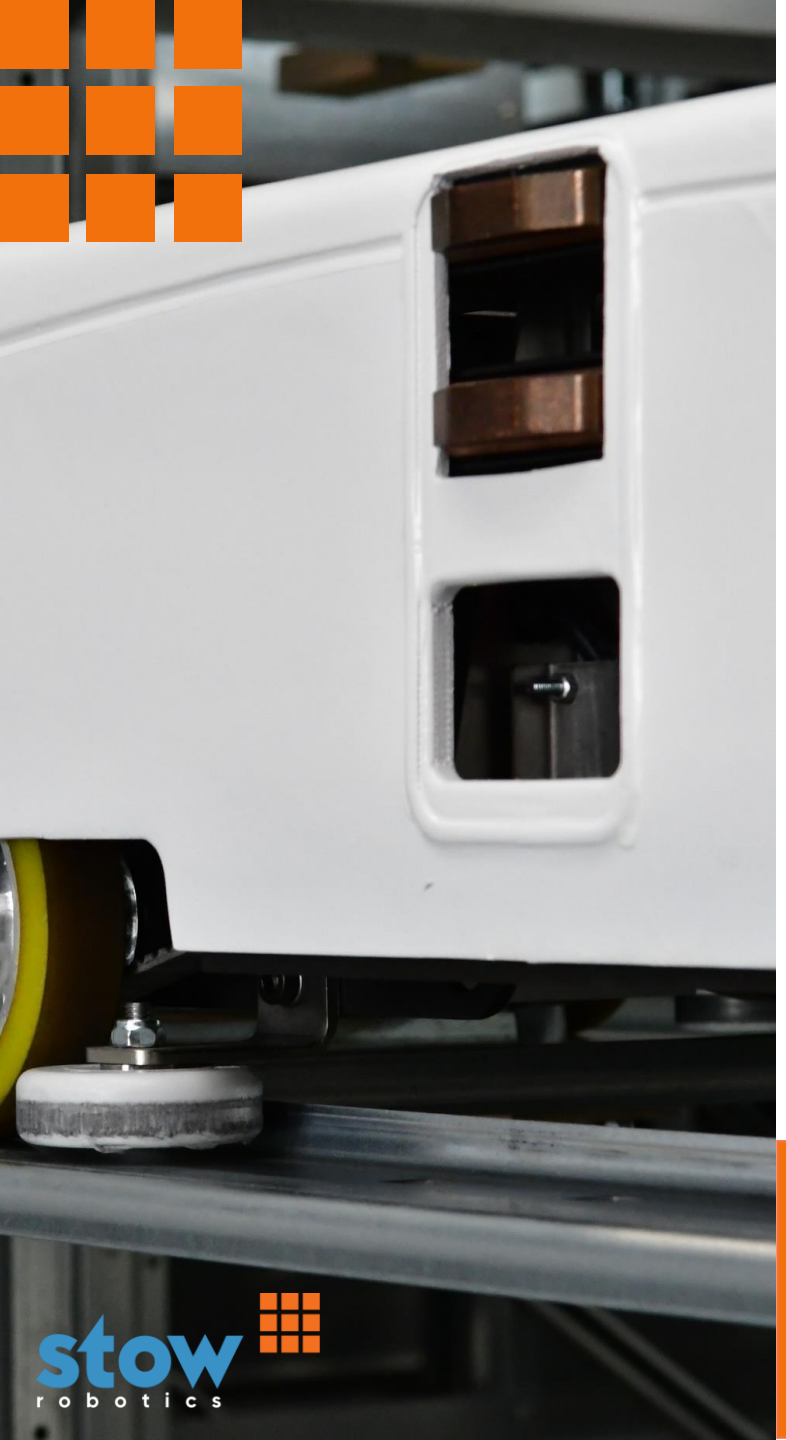


stow e.scala® 3D

Mechanical design

- drive in ramp (4WD) 1 m/s and 0.5m/s²
- drive in storage aisle direction (2WD) 3m/s and 1.5m/s²
- Guiding wheels in both directions for guiding the vehicle on the main and lane rails
- On crossings the wheel-set can be changed
- Electromechanical spindle system makes the shuttle flat beneath the tote and allows lifting the table & the wheel-set with the same motor (Pat. Pending)
- Easy access for service and maintenance by removing the cover





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Electrical design

Travelling motors	1 BLDC-motor integrated drive and gearbox
Lifting motor	1 BLDC-motor integrated drive
Charging on the fly	Supercaps Energy Pack
PLC	Industrial PLC with safe WIFI
Sensors	Laser for aligning robot and detecting totes – RFID for absolute positioning (no reference drives necessary only next crossing)
Connectivity	stow STC Stationary IPC communicates with e.scala through safe WIFI
WCS interface	stow standard interface available
Remote access	Remote diagnostics and software upload
Remote control	Safe WIFI terminal

Integrate drive and brake

Controller embedded PC

Innovative Lithium Titanate technology

stow standard interface

Remote diagnostics

stow robotics

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Dimensions