

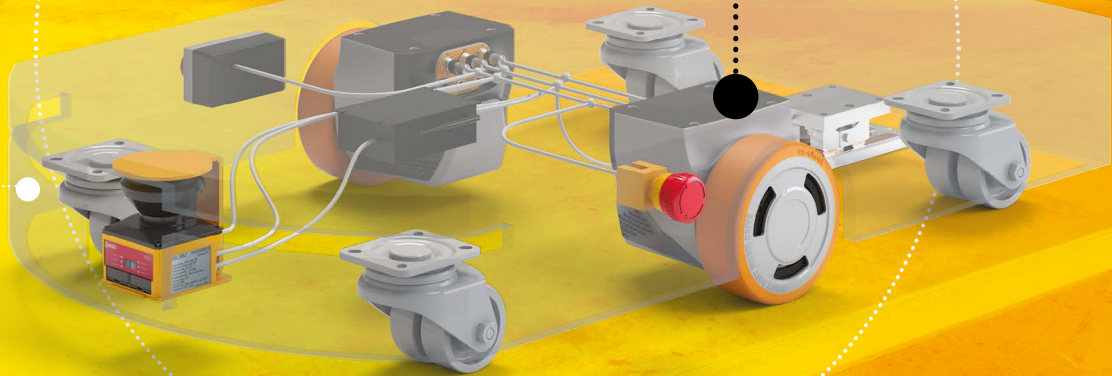
easier &amp; safer

# SAFETY<sub>ON</sub> BOARD

  
**SWD**  
Safety Wheel Drive **ez-wheel**  
The Electric Wheel

# THE SIMPLEST MOBILE ROBOT SETUP EVER

SWD® technology disrupts AGVs and AMRs  
architecture thanks to its unique level of integration



## **COST REDUCTION**

- Up to 50% less components
- Simpler and faster assembly



## **TIME SAVING**

- Shorter engineering time
- Simplified certification process



## **FIRST-CLASS SAFETY**

- Suitable for collaborative applications
- ISO 3691-4 compliance



## **MODULAR ARCHITECTURE**

- Freedom of integration
- Flexible and scalable



Optional built-in battery  
Li-ion 24 VDC high power



Autonomy and ease  
of integration



Safe motor control and  
safety encoder integrated



Heavy-duty  
Cast iron frame



Up to 700 kg of vertical load  
Up to 2 100 kg of load moved

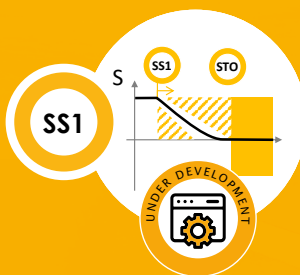


Interfaces  
**CANopen**  
safety

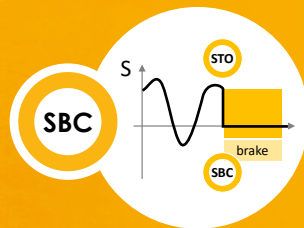
4 programmable safety inputs  
2 STO inputs



**Safe motor disconnection**  
when a stop is requested  
STO up to SIL3/PLd



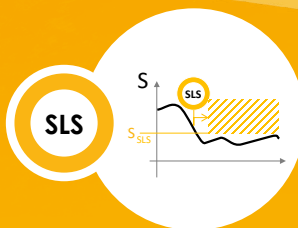
**Safe stop monitoring**  
to ensure a controlled stop  
SS1 up to SIL2/PLd



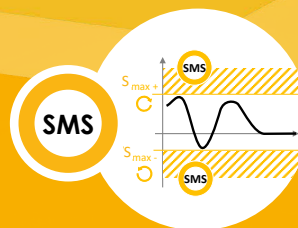
**Safe brake control**  
to ensure a lockout  
SBC or SBU (unlock) up to SIL2/PLd



**Safe direction control**  
in case of collision risk  
SDI up to SIL2/PLd



**Safely limited speed**  
to prevent hazardous situations  
SLS (8 levels) or SLSa (asymmetric)  
up to SIL2/PLd



**Safe maximum speed**  
to secure operating range  
SMS up to SIL2/PLd



**SAFETY WHEEL DRIVES**

**NAVIGATION PC**

**SAFETY LASER SCANNER**

**E-STOPS**

**VS**

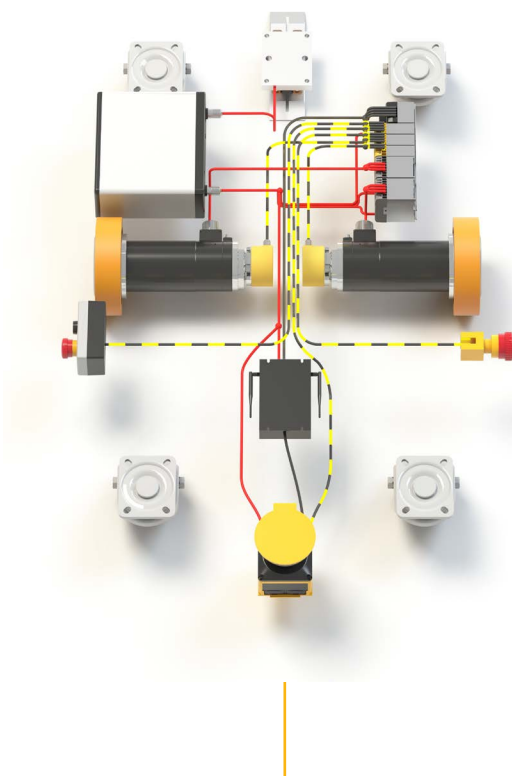
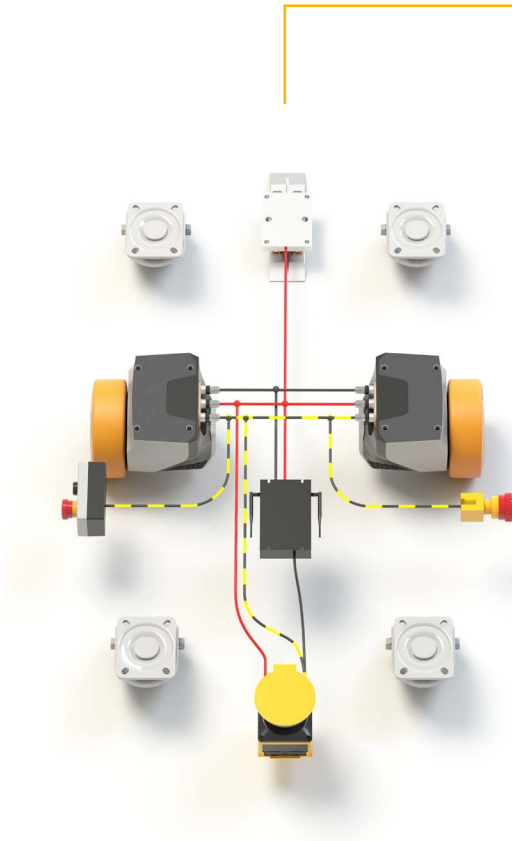
## **CONVENTIONAL SOLUTION**

**WHEELS  
GEARBOXES  
MOTORS  
SAFETY ENCODERS**

**PLC  
SAFETY PLC  
RELAYS  
MOTOR DRIVERS**

**BATTERY  
CIRCUIT BREAKERS**

**NAVIGATION PC  
SAFETY LASER SCANNER  
E-STOPS**





INDUSTRY



AUTOMOTIVE



E-COMMERCE / RETAIL



CONTROLLED ENVIRONMENTS

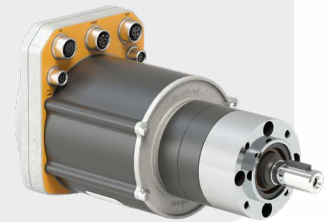
# UNIQUE TECHNOLOGICAL BRICK FOR ALL INTRALOGISTICS NEEDS

Drives and Wheel Drives with integrated safety

## SWD® Core for safe multi-axis movements

The SWD® Core is a safety integrated gearmotor able to lift, convey, transfer or rotate any load.

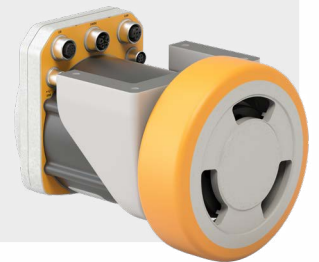
- High torque up to 37 Nm
- Flexible gear ratio from 4:1 to 100:1, or without gearbox
- Versatile design fitting multiple applications



## SWD® 125 for light weight or medium duty intralogistics

The SWD® 125 is an extremely compact wheel drive designed to address the functional safety requirements of mobile robots.

- Ø 125 mm
- 250 kg max. vertical load per wheel
- For medium payload robots up to 1500 kg
- 4:1 and 14:1 gear ratio available
- Extremely compact footprint



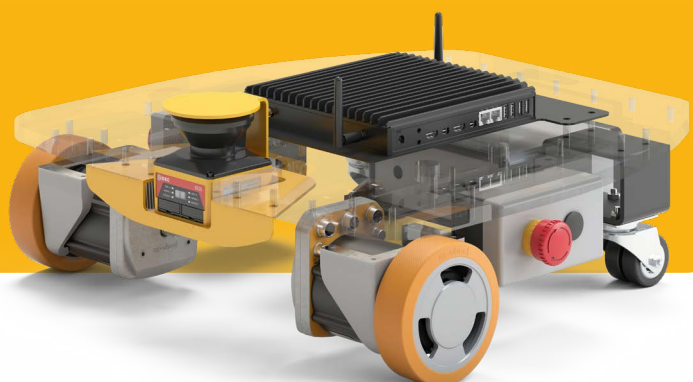
## SWD® 150 for heavy duty intralogistics automation

The SWD® 150 is a compact, robust, and safety-compliant wheel drive designed to automate the transport of heavy loads in a production area.

- Ø 150 mm
- 700 kg max. vertical load per wheel
- For heavy duty robots from 1 to several tons
- 14:1 and 25:1 gear ratio available
- Robust cast iron housing



Discover datasheets, manuals, product options, software support and our pre-packaged kits to accelerate the development of your mobile robot and much more!







**22** FACTORIES



MORE THAN **75** YEARS OF EXPERIENCE



**3,100** EMPLOYEES WORLDWIDE



**100 000 +** REFERENCES

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### BENELUX

Belgicastraat 7/1  
1930 ZAVENTEM  
Belgium  
BEL: (+32) 27 25 05 00  
NL: (+31) (70) 799 91 51  
[be.sales@apem.com](mailto:be.sales@apem.com)

### FRANCE

55, avenue Edouard Herriot  
BP1  
82303 CAUSSADE Cedex  
(+33) 5 63 93 14 98  
[fr.commercial@apem.com](mailto:fr.commercial@apem.com)

### GERMANY

Gewerbehof Giesing  
Paulsdorfferstr. 34, 2. OG  
D-81549 MUNICH  
MUNICH: (+49) 89 45 99 11 0  
HAMBURG: (+49) 40 253054 0  
[de.info@apem.com](mailto:de.info@apem.com)

### ITALY

Via Savigliano 6/B  
12062 CHERASCO  
(Fraz. Roreto di Cherasco)  
Tel: (+39) 0172 74 31 70  
[apem.italia@apem.com](mailto:apem.italia@apem.com)

### SWEDEN

Torshamnsgatan 39  
S-16440 KISTA  
(+46) 8 626 38 00  
[se.info@apem.com](mailto:se.info@apem.com)

### UNITED KINGDOM

Drakes Drive  
LONG CRENDON,  
Bucks HP18 9BA  
England  
(+44) 1 844 202400  
[uk.sales@apem.com](mailto:uk.sales@apem.com)

[www.ez-wheel.com](http://www.ez-wheel.com)



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