

MANITOU
GROUP

EP Novice Presentation

Industry - 12/2019





1 EP range

2 Exploded view

3 Machine features

1

EP range

Exploded view

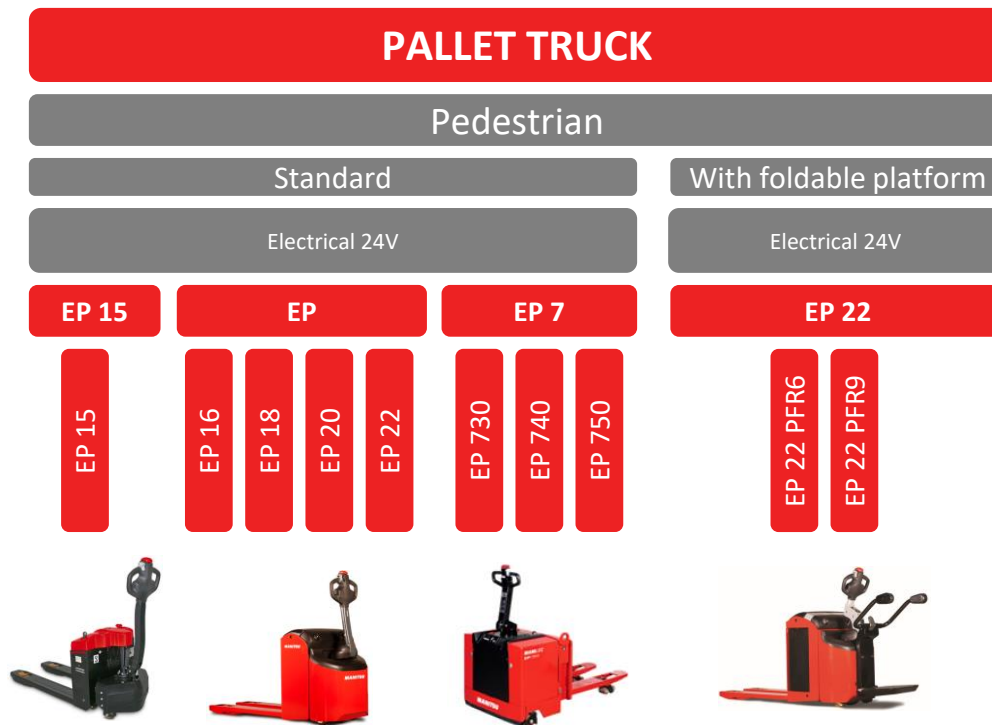
Machine
features

Glossary

 EP range



1.1 Machines - Pallet truck 2019



EP - Applications



Used indoor or outdoor, the **EP** is dedicated to pallet movements over short distances, as well as loads and unloading trucks.

There is **10** models which can lift **1.5** to **5** tons pallets.



- EP 15
- EP 16
- EP 18
- EP 20
- EP 22
- EP 22 PFR 6
- EP 22 PFR 9
- EP 730
- EP 740
- EP 750

Capacity
750 → 5T

Platform

Km/h



Electric pallet trucks

- Pedestrian or ride-on
- Curtis or Zapi controller
- Battery: 24V



- Compact
- Easy to use in tight spaces
- Ergonomic tiller head
- Low maintenance required
- Precise handling

EP - Product range

EP 15

- Pedestrian
- 6 km/h
- 70Ah
- Small daily handlings



EP 16

- Pedestrian
- 6 km/h
- 172Ah
- Folded forks
- Parcel services, confined spaces, light handling



EP 18-20

- Pedestrian
- 6 km/h
- 180-250Ah
- Welded steel forks
- Horizontal transport, loading / unloading



EP 22

- Pedestrian
- 6 km/h
- 270-375Ah
- Heavy industry, loading / unloading



EP 22 PFR

- Ride on
- 6 km/h
- 230-375Ah
- Long distance load displacement



EP 7 30-40-50

- Pedestrian
- 6 km/h
- 240-315Ah
- Heavy duty load transfer



2

EP range

Exploded view

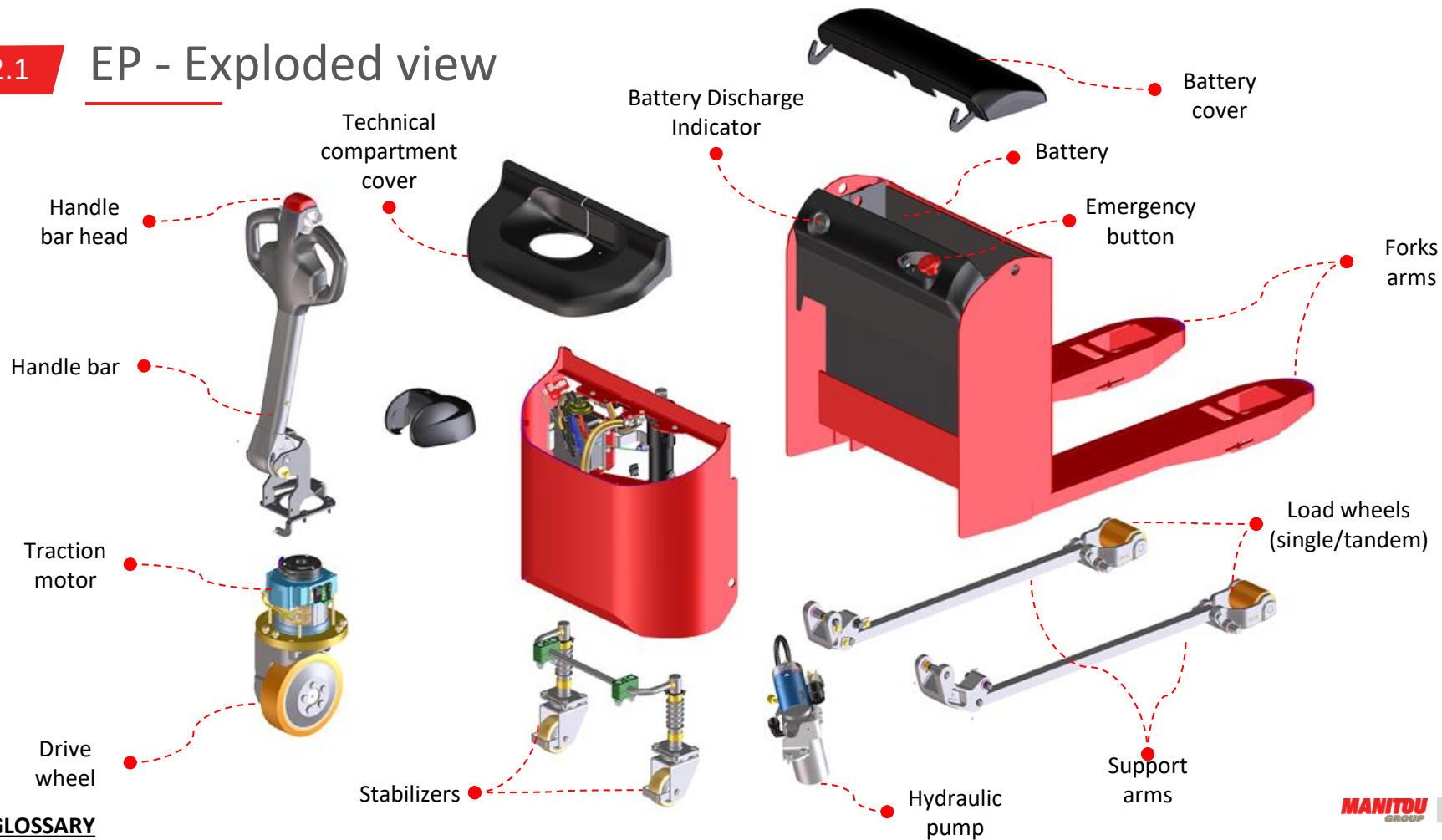
Machine
features

Glossary

/ Exploded view



EP - Exploded view



3 Machine features

EP range

Exploded view

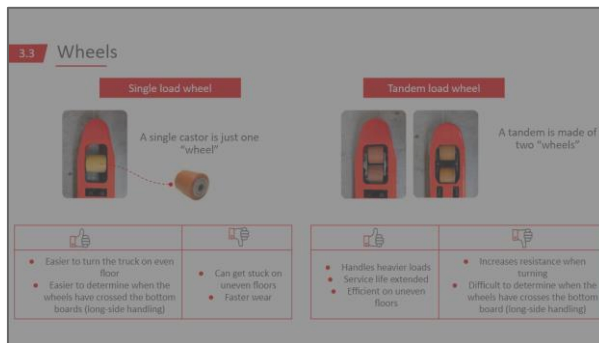
Machine features

Glossary

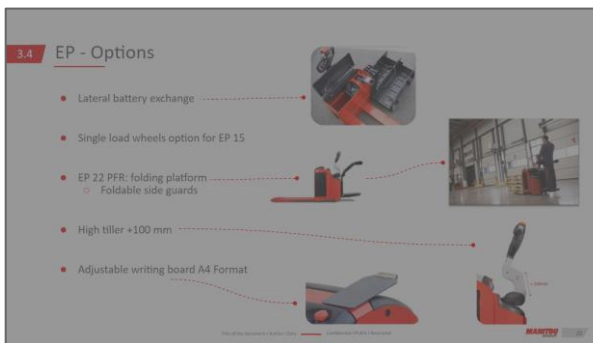
Tiller arm



Indicators



Wheels



Options

Turtle button



Forward / Backward
function

Belly switch

Klaxon

Lift / Low
function



- **Turtle Button**

- Reduces temporarily the speed of the machine to 3km/h
- Allows driving the pallet truck with the tiller arm in vertical position
- Creep speed



- Useful when the driver moves in a storage with many people
- Essential function for handling fragile goods
- Convenient in confined spaces (e.g. : in a lorry)

- **Ergonomic tiller arm**

- Centered: better in the axis, better driving position
- On the side: cheaper, directly on the drive head, attached to the engine

- **Belly Switch**

- This red button guaranties a safer use of the machine
- Avoids being caught between the machine and an obstacle

3 Machine features

EP range

Exploded view

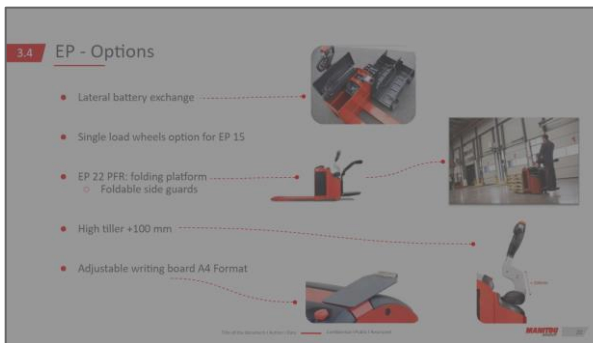
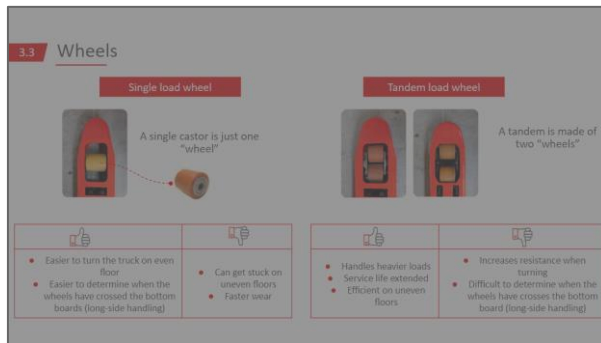
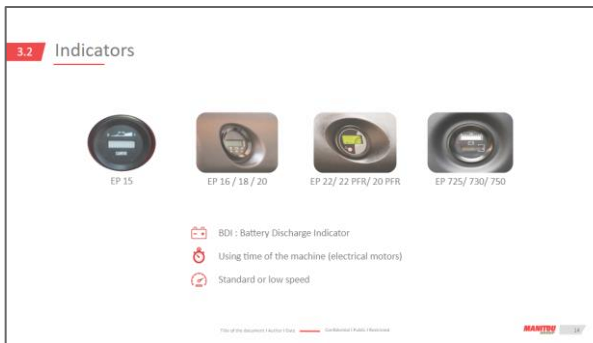
Machine features

Glossary

Tiller arm



Indicators



Wheels

Options



EP 15



EP 16 / 18 / 20



EP 22/ 22 PFR/ 20 PFR



EP 725/ 730/ 750



BDI : Battery Discharge Indicator



Using time of the machine (electrical motors)



Standard or low speed

3 Machine features

EP range

Exploded view

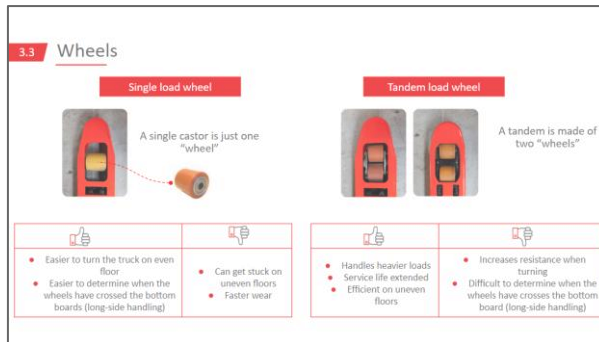
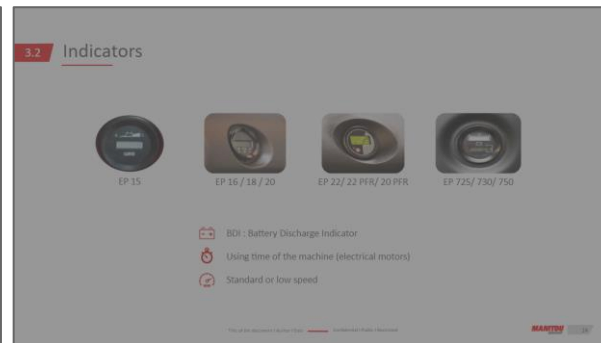
Machine features

Glossary

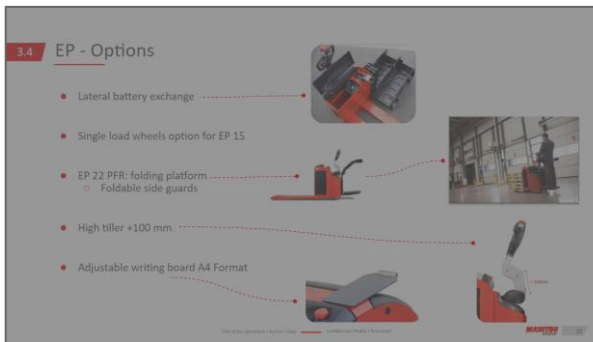
Tiller arm



Indicators

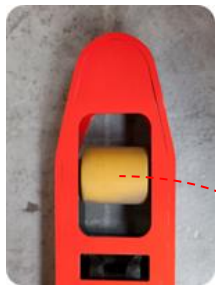


Wheels



Options

Single load wheel



A single castor is just one “wheel”



Tandem load wheel



A tandem is made of two “wheels”



- Easier to turn the truck on even floor
- Easier to determine when the wheels have crossed the bottom boards (long-side handling)



- Can get stuck on uneven floors
- Faster wear



- Handles heavier loads
- Service life extended
- Efficient on uneven floors



- Increases resistance when turning
- Difficult to determine when the wheels have crossed the bottom board (long-side handling)

3.3

Wheels

- Single and tandem load wheel exist in different material in order to be adapted to the customer's floor
 - Polyurethane
 - No marking solid tyres (treated, smooth)
 - Cushion tyres (rubber smooth)
 - Anti-static belt

*Shore: wheel hardness measure unit

- EP 16** : Entry roller wheel include to get a better entrance into pallets

Polyurethane driving wheel - Std



Hardness 92 shore*

- Heavy load
- Intensive use







Hardness 75 shore*

- Soft wheel
- Less noise
- Better grip
- Shorter lifetime



EP - Wheels

	EP 15	EP 16	EP 18	EP 20	EP 22	EP 7
Drive wheel						
 Polyurethane 92 shore	✓	✓	✓	✓	✓	✓
 Polyurethane 75 shore	✓	✓	✓	✓	✓	✗
Load wheel						
 Single polyurethane load wheel	✓	✓	✓	✓	✗	✗
 Tandem load wheel with anti-thread system	✓	✓	✓	✓	✓	✓
 Stainless steel bearings and axes for tandem	✗	✗	✓	✓	✓	✗
 Stainless steel bearings and axes for single	✗	✗	✓	✗	✗	✗

3 Machine features

EP range

Exploded view

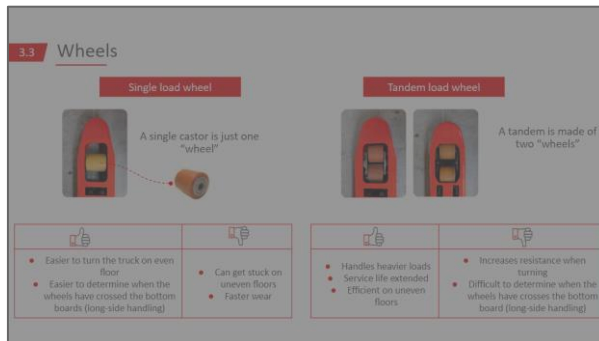
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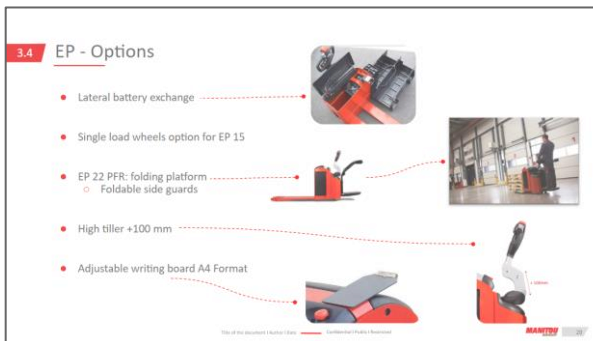
Tiller arm



Indicators



Wheels



Options

EP - Options

- Lateral battery exchange



- Single load wheels option for EP 15

- EP 22 PFR: folding platform



Foldable side guards



- High tiller +100 mm

- Adjustable writing board A4 Format



EP - Battery

It's important to make sure that you have the right battery depending of different criteria :

	Lead acid	Gel	Lithium
Maintenance	★ ★	★ ★	★ ★ ★
Lifetime	★	★ ★ ★	★ ★ ★
Number of charges	★	★ ★ ★	★ ★ ★
Price	★ ★ ★	★ ★	★



(The most used)



EP - Battery options

- Battery:
 - 2 brands: Exide (GNB) and EnerSys (Hawker)
 - Integrated charger (for EP 16, 18 and 20)
 - 👍 → Easy charging and no obligation to move the battery
 - Gel battery
 - 👍 → Waterless system, no maintenance
 - Lateral or vertical battery exchange
 - Central filling system

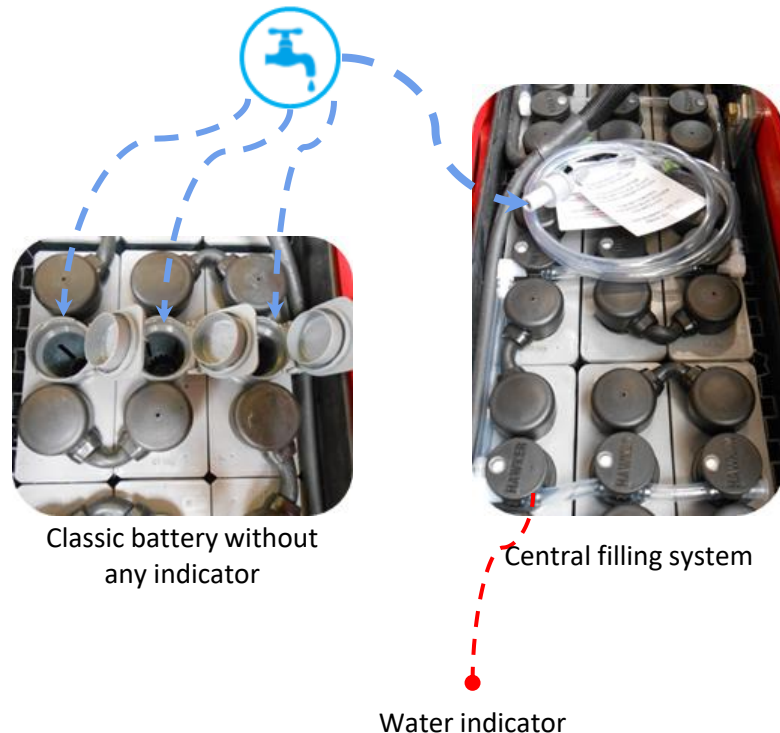


EXIDE
TECHNOLOGIES

EnerSys
Power/Full Solutions

Central filling system for battery with tank:

- **Characteristics :**
 - To recharge battery with only one point of refill (with water)
 - Indicator on the top of every battery plug
- **Benefits:**
 - Faster & easier refill
 - Very simple to check the water situation in the battery
 - Maintenance uncomplicated and without confusion



4 General glossary

- AC: Alternating Current
- BDI: Battery Discharge Indicator
- CACES: Certificat d'Aptitude à la Conduite En Sécurité
- CoG: Center of Gravity
- DC: Direct Current
- DL: Double Lift
- EL: Ergonomic Lift
- FLD: Free Lift Duplex
- FLQ: Free Lift Quadruplex
- FLT: Free Lift Triplex
- FR : Wrapover Forks (Fourches Recouvrantes)
- FVD: Full Visibility Duplex
- FVT: Full Visibility Triplex
- GPF: Counterbalanced stacker (Gerbeur porte-à-faux)
- HD: Heavy Duty
- HL: High Lift
- HF: High Frequency
- LI: Initial Lift (Levée Initiale)
- LE: Straddle Legs (Longerons Encadrants)
- PPS: Pneus Plein Souple
- PU: Polyurethane
- SL: Lateral Battery Exchange (Sortie Latérale)
- VNA: Very Narrow Aisle

