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HANGCHA trucks conform  
to the European Safety  
Requirements.

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## A Series Premium Version Reach Truck

with capacities of 1,200 to 2,000kg



The World of Hangcha  
SINCE 1956





## REACH TRUCK ADVANTAGES



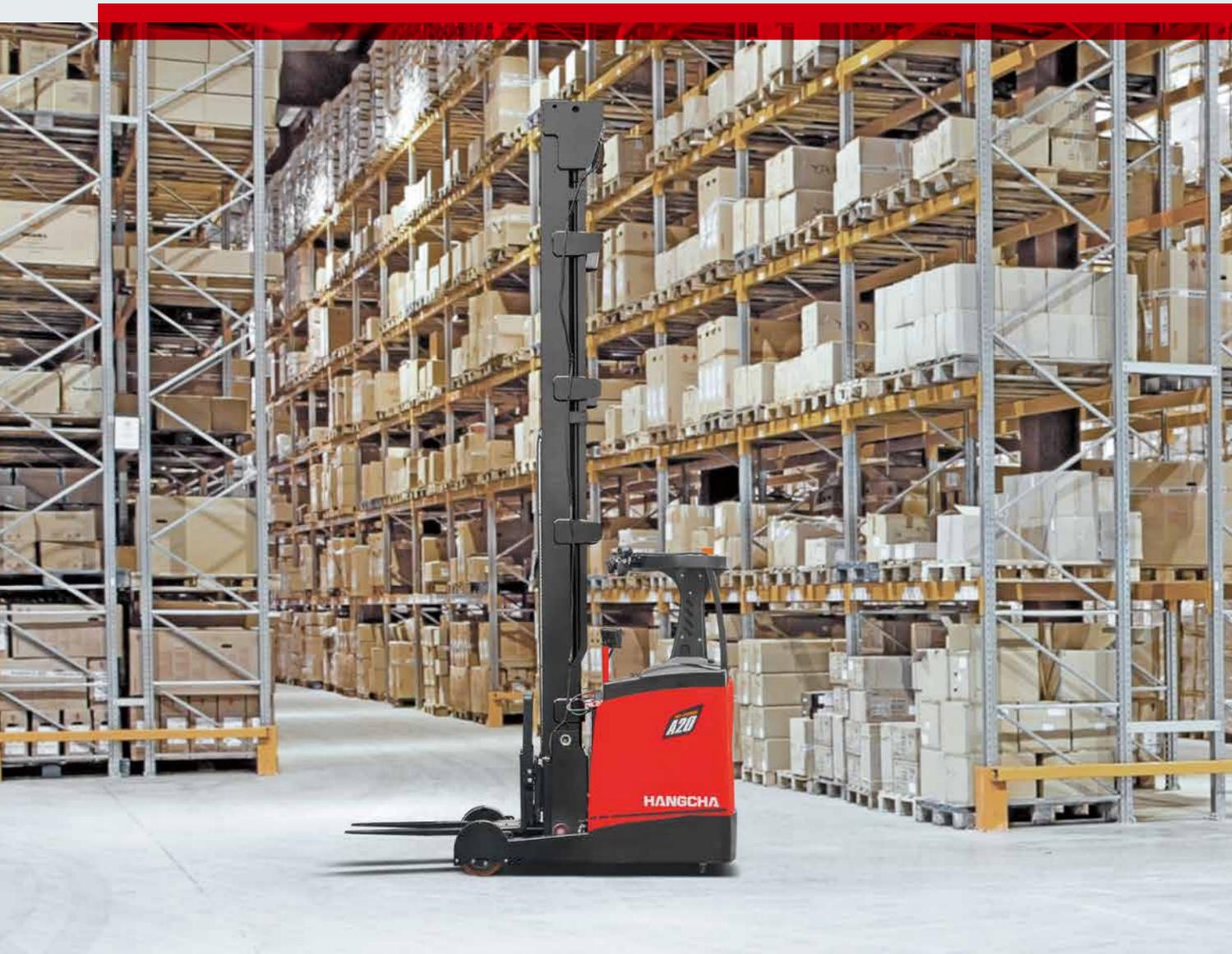
# 10 reasons choose A series reach truck

- ▶ **APPEARANCE-** Beautiful / Compact / Ergonomic
- ▶ **HIGH PERFORMANCE-** Transmission system / Motor
- ▶ **RENEWABLE ENERGY TECHNOLOGIES-** Hydraulic system
- ▶ **PERFECT RESIDUAL LOAD CAPACITY-** Mast system
- ▶ **FLEXIBILITY-** Steering system
- ▶ **EXCELLENT ERGONOMIC & COMFORT-** Fingertip system
- ▶ **ADVANCE-** ZAPI control system
- ▶ **VISIBILITY-** Overhead guard
- ▶ **RELIABILITY-** Plastic oil tank / Braking system
- ▶ **MAINTENANCE-** Battery side roll-out



## A SERIES PREMIUM VERSION REACH TRUCK

After 2 years of design, development, and manufacturing, Hangcha launched a new product lately –the A Series Premium Version Reach Truck: CQD12/14/16/20-AZ4H. This truck is mainly used in multi-level warehouse. CQD20-AZ4H rated load capacity is 2 tons, maximum lifting height is 12.5m, and the load capacity can reach 1100kg at the maximum lifting height. Its technical parameters and configuration are close to that of similar products of international manufacturers including Crown, Linde, Jungheinrich, and Hyster. This product (A series premium version reach truck) together with standard reach truck and mini reach truck constitute the entire family of A Series reach truck of Hangcha. These products supplement with each other in rated tonnage, cover different prices together, and can satisfy different demands in prices, functions, and configuration from various users.



## APPEARANCE

Top appearance design teams from Europe and China are engaged to carry out brand-new optimized design for this product. It features beautiful appearance and European design elements, excellent ergonomics and man-computer interaction functions, and inherits appearance elements of A Series electric trucks.



Overall Ergonomic Design



Overall Appearance Design

## HIGH PERFORMANCE

The drive system includes the ZF® gearbox imported from Germany with original packaging, the imported Schabmuller® AC drive motor, and the Schabmuller® electric steering motor, with excellent performance, as well as drive system, AC motor, EPS (Electric Power Steering) system, and electromagnetic braking system of same configuration as that of imported brands such as Jungheinrich, Hyster, and other leading manufacturers.

*All core parts are ZF products imported from Germany.*



## RENEWABLE ENERGY TECHNOLOGIES

The truck has a cutting-edge hydraulic system, which can be equipped with domestic silent gear pump or Garman Eckerle two-way oil pump system. Intelligent potential energy recovery (the function of battery energy recovery can

extend working hours by **16%** is optional for the mast system, and the potential energy recovery system can be switched on and switched off manually by the operator.



Energy recovery

CQD: Extend 16%

Other series

*Domestic AC oil pump motor + joint-venture brand silent gear pump (imported internal gearing two-way pump is optional)*



## GRAPHIC SMART DISPLAY



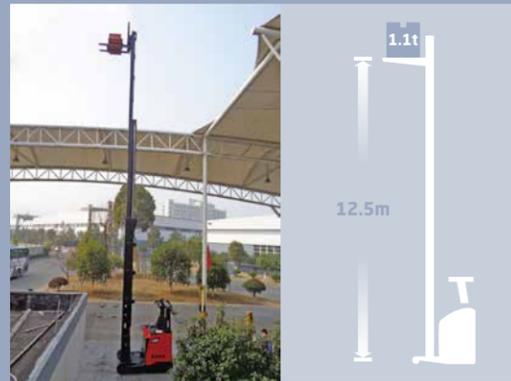
Number key for setting different target height.

- 1 Low voltage indicator
- 2 Fault indicator
- 3 Oil temperature indicator (spare use)
- 4 OPS indicator
- 5 Electric Parking Brake indicator
- 6 Seat belt switch indicator (spare use)
- 7 Automatic placement/Up
- 8 Performance selecting button (down)
- 9 Automatic picking/Decrease/Changing
- 10 Increase/Changing, character code of target height change
- 11 Exit
- 12 Enter

## PERFECT RESIDUAL LOAD CAPACITY

The mast system is made of imported steel channels, and new optimized design is applied for the carriage system, which thoroughly eliminates the problem of shaking and large gap that are detected in previous home-made masts, effectively improves residual load capacity, and increases load capacity reducing height. Maximum lifting height is 12.5m, and load capacity can reach 1100kg at the maximum height (2.0t without battery side roll out).

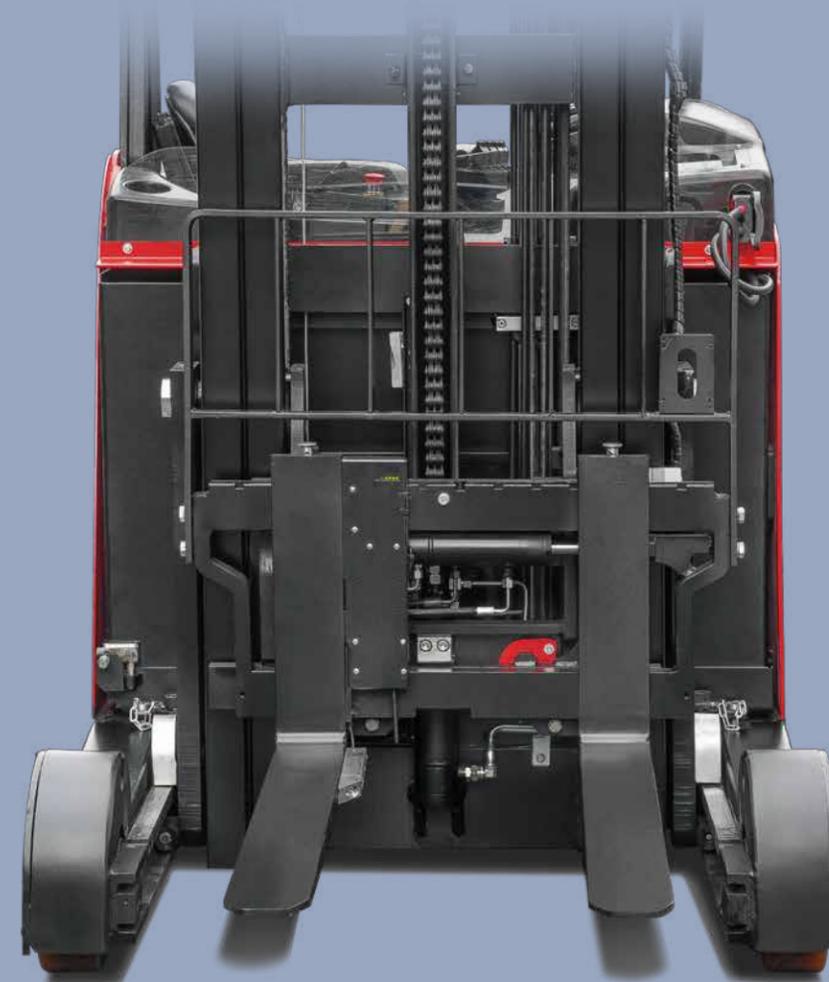
Automatic select height level function is also optional for the mast system, which can pre-select height automatically according to height of the user's shelf, and the forks lifting will slow down and stop when required height is reached. It is very convenient for stacking work, and can reduce labor intensity and psychological burden of the operator significantly.



Maximum 12.5m, lifting 1.1t



Optional: Preset level selection function



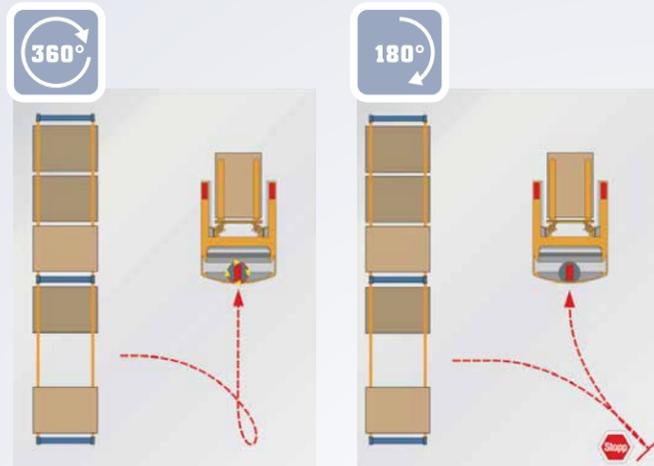
### Optional: Camera system

The user can choose camera system and height indicator to facilitate operations at elevated location.



## FLEXIBILITY

Electric Power Steering(EPS) system is a standard configuration, which can be switched between 360-degree and 180-degree operations according to habit of the user. The upgraded EPS system effectively avoids the impact of hydraulic control, can reduce fatigue of the operator, and its minimum steering force can reach 3N (that of regular forklift is about 10N).



In the mode of 360-degree steering, when steering exceeds 270 degree, the reverse is switched to forward director, no reversing is required, and the truck is switched to advance automatically, no parking is required, with higher efficiency.

In the mode of 180-degree steering, the truck must be reversed until it stops completely, and the direction must be switched before the truck can travel forward, with lower efficiency.



Whichever of above two modes the operator wants to select, there has a button for switching operation to activate the mode required, which can be selected freely by the operator according to his/her habit. The electric steering wheel is small and light. The operator can adjust it by moving backward or forward to find a suitable position. The steering wheel have built-in damper, with reliable signal transmission of stepping motor.



- ▶ Drive wheel automatic centering function
- ▶ Automatic limit on speed and accelerated speed when steering



## EXCELLENT ERGONOMIC & COMFORT

Fingertip system is a standard feature for the truck (with imported SAUER-DANFOSS hydraulic valve), with four finger control functions of lifting/lowering, mast forward and backward movement, tilt, and sideshift, and seven major functions including direction switching, emergency power off and horn. It offers comfortable operation for operator, with soft armrest. The fingertip system communicate by CAN Bus system, which is reliable and fast. The armrest can be adjusted forward and backward, fingertip system enables more accurate control than mechanical valve.



Fingertip system integrated control system, with good man-machine function



Cutting-edge SAUER-DANFOSS electromagnetic multi-way valve imported from Germany (with potential energy recovery switching function)

## ADVANCE

The truck is equipped with 4 ZAPI controllers, drive controller, oil pump controller, steering controller and valve controller, all controllers communicate by CAN Bus system. Controllers have advanced program and outstanding control strategy (same as that of imported trucks). All core parts are imported or of joint-venture brands, with reliable quality. The entire truck is equipped with waterproof connectors.



Fully-open pedal structure, electrical parts are fully exposed, which is convenient for maintenance



## VISIBILITY

The overhead guard enables panoramic visibility. There are two pieces of tempered glass of 25mm thickness on top of the overhead guard, which is infilled with glue, offering excellent impact resistance. The visibility above the operator is incomparable and excellent, with reduced psychological burden for the operator.



*Optional: Overhead guard with panoramic glass offers excellent visibility for elevated location.*

## RELIABILITY

The LLD PE plastic oil tank, which increases quality and cleanness of oil effectively, together with hydraulic filter element from German HYDAC, providing much higher cleanness of entire hydraulic system. The oil tank features large volume, fast heat exchange, together with electronic fan within the housing, achieving thermal equilibrium quickly of hydraulic oil at most suitable working temperature.

The reach truck is equipped with electromagnetic braking system, including three separate brakes, two sets of MARTIX electronic drive brake imported from UK, and one set of INTORQ Electric Parking Brake system from Germany. Braking force is proportional to depth of electronic pedal, the braking performance is gentle and reliable.



## MAINTENANCE

DIN standard battery is a standard configuration with capacity up to 48V/ 600Ah, and the maximum capacity available as an option is 775Ah, with powerful endurance. Battery side roll-out is a standard feature, which is convenient for maintenance.



*Standard configuration: Battery side roll-out + trolley(optional)*



## Options

- / 5.0~12.5M full free triplex mast is made of imported steel channels
- / Blue spot
- / Camera system
- / Height level selection/ Fork height display
- / OPS system
- / Panoramic glazed overhead guard
- / Big capacity battery according DIN STD
- / Various length forks
- / Drive in rack overhead guard
- / GRAMMER MSG531 seat
- / Energy saving regenerative lowering

## Standard specification

- / SCHABMULLER AC traction motor
- / SCHABMULLER AC steering motor
- / HEPU AC pump motor
- / Electric Parking Brake (EPB) system
- / Load wheel adopts electromagnetic proportional braking technology
- / ZAPI control system
- / Real-time shifting between 360°steering mode and 180°steering mode
- / Electric Power Steering (EPS) system
- / GRAMMER Fingertip system
- / PU tyre
- / LED headlamp
- / Alarm lamp
- / 4 modes power selection

- / 5M full free triplex mast
- / SAUER-DANFOSS 4 spools control valve
- / Load backrest
- / PE LLD material oil tank
- / Imported lower noise gear pump
- / Energy regenerating during deceleration
- / Battery side roll-out
- / Buffering on lifting limit
- / Soft landing system
- / Automatic limit on speed and accelerated speed when steering

## BATTERY OPTION

	460Ah	500Ah	560Ah	600Ah	620Ah	750Ah	775Ah
1.2-1.4t	●	○	○	○	○	x	x
1.6t	●	○	○	○	○	x	x
2.0t	x	x	x	●	○	○	○

Note: ● Standard ○ Optional x Can not choose

