

Appearance

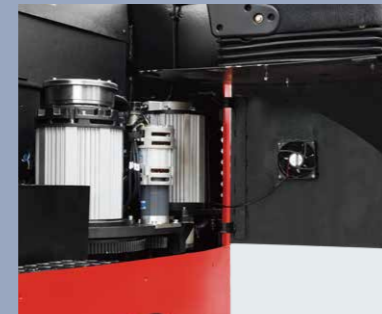
/ The worldwide popular, great-circle, streamlined surface modeling is applied, with smooth, beautiful, and elegant appearance.



Wider view OHG

Stability

/ The broad and solid chassis and steady reach mechanism, as well as the drive unit that is fixed at center, realize low gravity center, and guarantee sufficient stability of the truck.



High-performance motor

Flexibility

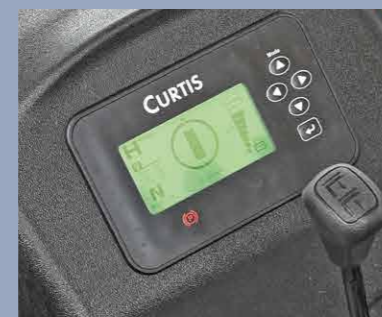
/ The driving system that is located at rear part of chassis uses EPS (Electric Power Steering) technology, features low-speed and large torque. The 180-degree steering mode of standard configuration, make the truck flexible and convenient, and allow it turn easily even in confined space.



Comfortable and convenient seat

Comfort

- / Operating levers of ergonomic design, integrated console, all important operating parts are within the reach of your hands.
- / The mast of optimized design with wide view avoids blocking the sight of the operator, and large size of the fork shelf offers wider view.
- / The seat can be adjusted forward and backward, also with the function of vibration reduction.
- / The truck body with increased width and height offers larger operating space for hands and legs of the operator.
- / The new designed overhead guard structure allows the operator to observe the movement of load more clearly.



Instrument can display the steering angle and direction Synchronously

Maintenance

- / The fully-opened cover provides easy maintenance for motor, controller and transmission, braking, and hydraulic systems.
- / The battery compartment can be removed forward, so replacement or maintenance is very easy.



The steering wheel is extensible, so the operator can choose the best driving position



Hangcha Europe GmbH

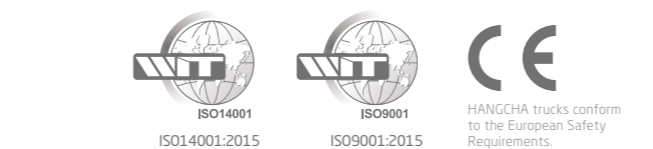
Mariechen-Graulich-Straße 12a,
65439 Flörsheim am Main,
Germany

Administration
Tel: 0049-61453769188
E-mail: admin@hangchaeurope.com

Sales Management
Thomas Dittrich
Mob: 0049-16096548808
E-mail: thomas.dittrich@hangchaeurope.com

Technical Support
Thomas Pannke
Mob: 0049-01759284213
E-mail: thomas.pannke@hangchaeurope.com

www.hangchaeurope.com



HANGCHA Group Co., LTD behält sich das Recht vor, Änderungen bezgl. Farbe, Spezifikationen, Ausstattung und sonstige Details, dieser Broschüre ohne Vorankündigung vorzunehmen. Fahrzeugfarben können von den Farben in dieser Broschüre abweichen.

2024 VERSION 1.COPYRIGHT 2024/03



A Series Reach Truck

with capacities of 1,200 to 2,000kg

The World of Hangcha



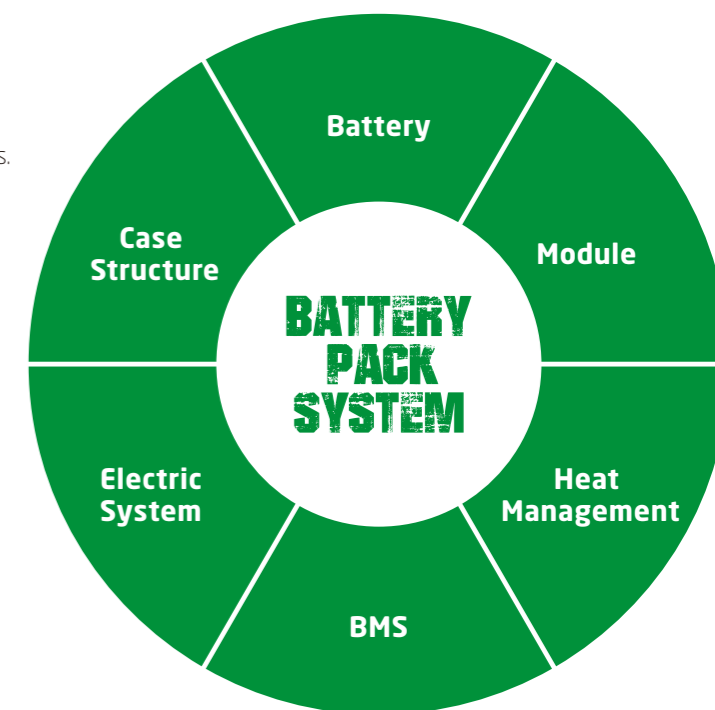
LET THE LITHIUM POWER BE REVEALED



INNOVATIVE SOLUTIONS NEW POWER NOW

Innovative, reliable lithium-ion technology (Lithium Iron-Phosphate), which are developed jointly by HANGCHA and CATL. Battery cells and modules are from CATL, with reliable quality, exclusively for HANGCHA.

- / We use square lithium iron phosphate batteries and modules used in large quantities by commercial vehicles in mature economies.
- / The module uses an aluminum alloy frame which is sturdy, lightweight and with excellent heat dissipation.
- / Safe and effective: Charging efficiency as high as 98%, thermal runaway temperature 600 °C or above.
- / Adapted to low temperatures: Comes standard with an electrical heating feature, ensuring normal operation in low temperatures.
- / Quick charging: 2 hours full charge, economic use of each break.
- / Long-working: 4000 charging cycles, capacity retention greater than 80%.
- / Maintenance-free: Battery does not require manual maintenance.
- / Green and clean: Pollution-free, zero emissions.



Li-Ion
2 hours
100%

Lead-acid batteries
8-10 hours 100%

Rapid charging and opportunity charging ensure continuous availability of vehicles.

Li-Ion powered forklifts are always available. They allow for fast full charging or boost charging (100 % charge in 2 hours). They are maintenance free and do not require a battery change when used for multi-shift operations.

Li-Ion Battery Pack specification

| Type | | CQD16-AC5-I* | CQD18-AC5-I* | CQD20-AC5-I* |
|----------------|------|--------------|--------------|--------------|
| Li-Ion battery | V/Ah | 80/302 | 80/302 | 80/302 |
| Titans charger | | SLC-80100 | SLC-80100 | SLC-80100 |

Note: * CE model



HANGCHA provides Li-Ion battery (LiFePO4) with 6 years or 12000 hours warranty.

**6 YEARS
WARRANTY**

A Series Reach Truck

The reach truck is suitable for working in narrow passageway and confined space, with high lifting and load capacity, and is the ideal tool for loading, unloading, handling, and stacking in warehouse, supermarket, and workshop.

**Environment/
Efficiency/
Economy**



Reliability & Safety

- / Major electrical components such as controller, contactor, and power plug are all of foreign famous brands.
- / As a standard configuration, the emergency power off switch complies with European safety standards.
- / Electronic and hydraulic overload protection, power-failure lock up of fork(optional), and safe pedal.

Benefits of the AC Power System

- / The AC power system has high efficiency, full protection functions, powerful acceleration performance, sensitive and fast steering.
- / The brushless, maintenance-free AC motor has longer service life, and lower maintenance cost.

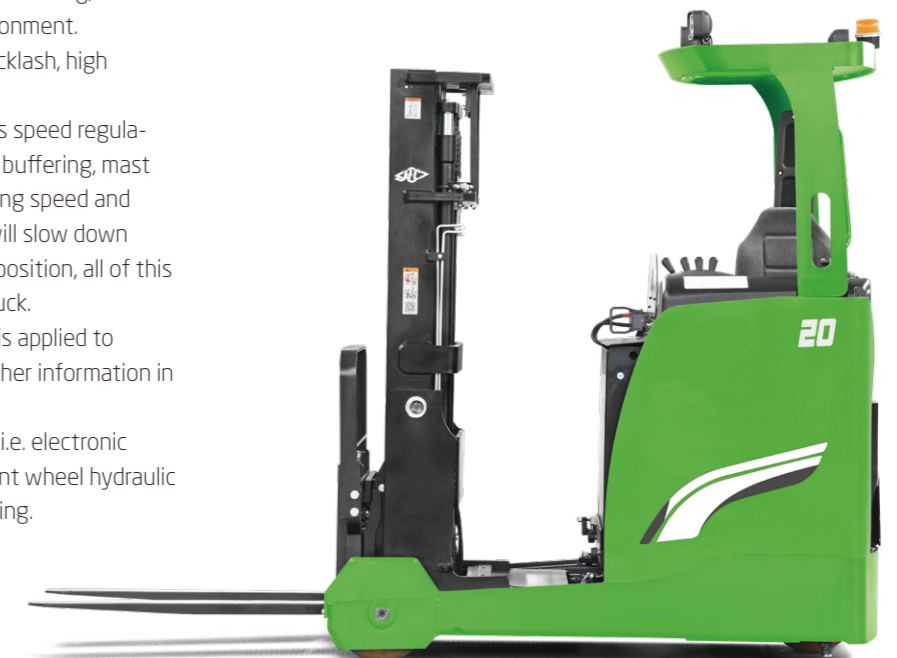
Advance

- / Three-phase AC technology is applied for driving and steering, AC technologies are available for lifting. Full AC power system has higher efficiency, and is free maintenance.
- / The MOSFET integrated controller guarantees smooth and accurate control on driving, steering and lifting, as well as superior speed regulation performance, with regenerative braking, reverse braking, anti-slipping on slope and other functions, resulting in more efficient, safer operations.
- / The LCD battery condition meter, timer, fault self-diagnosis meter, and display can not only display most important operating data, driving direction and location of driving wheels that are interactive with steering, but also realize accurate display in harsh environment.
- / The full AC truck is equipped with non-backlash, high pressure resistant, silent gear pump.
- / The full AC truck is equipped with stepless speed regulation for lifting operation, the mast lift top buffering, mast move forward/backward buffering, travelling speed and speed of mast move forward/backward will slow down automatically when the mast lifting high position, all of this can greatly improve the stability of the truck.
- / The CANBUS communication technology is applied to monitor motor speed, temperature, and other information in real time, realizing closed-loop control.
- / The truck has a triple braking mechanism, i.e. electronic braking (reverse regenerative braking), front wheel hydraulic braking, and electromagnetic parking braking.



High-performance Mast

- / The operator has wider view in the load direction.
- / Built-in sideshifter and fork tilting are standard configuration.
- / The mast made with imported steel channels and compact structural design has a maximum lifting height: 12500mm.
- / Height monitoring and lifting height limitation system are optional.





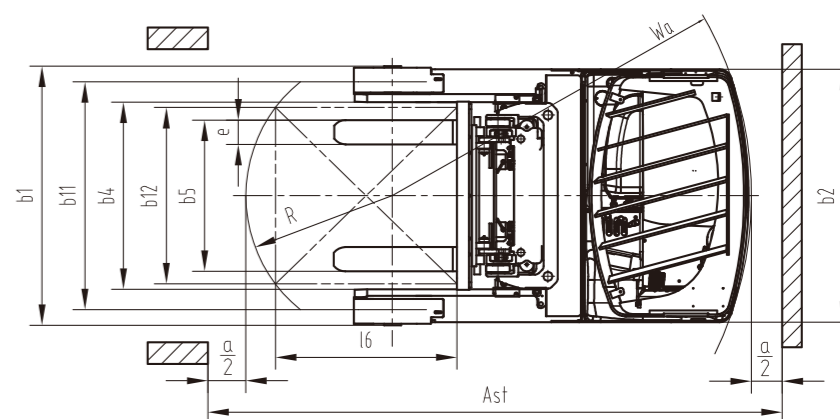
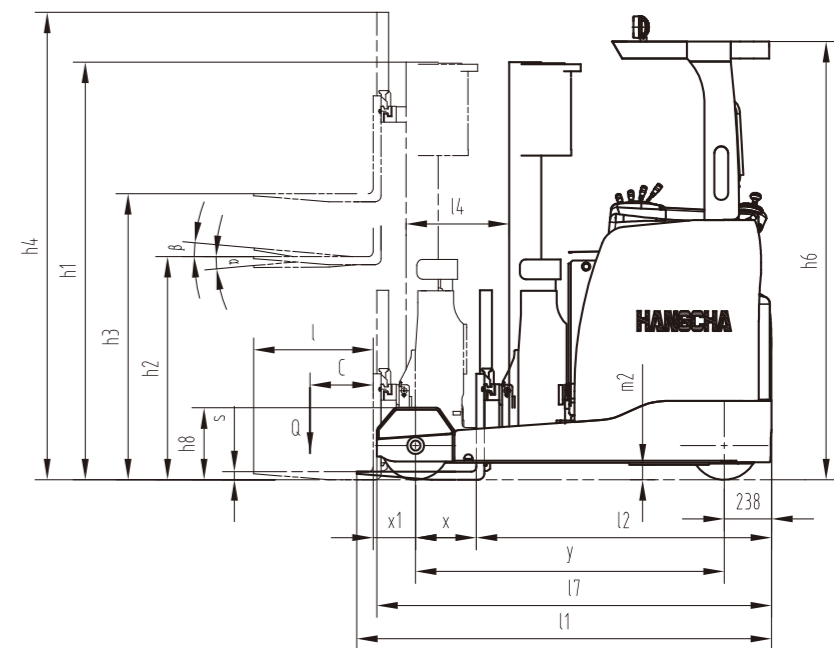
Battery can be removed forward, easy for maintenance

Traction device

A Series Reach Truck

| Distinguishing mark | HANGCHA GROUP CO.,LTD. | | | | | | |
|---------------------|---|------------|-----------------------------------|--------------|--------------|--------------|--------------|
| | 1.1 | 1.2 | CQD12-AC5* | CQD14-AC5* | CQD16-AC5* | CQD18-AC5* | CQD20-AC5* |
| 1.2 | Manufacturer's type designation | | CQD12-AD6* | CQD14-AD6* | CQD16-AD6* | CQD18-AD6* | CQD20-AD6* |
| 1.3 | Drive: electric (battery or mains), diesel, petrol, fuel gas | | electric | electric | electric | electric | electric |
| 1.5 | Rated capacity/rated load | Q (kg) | 1200 | 1400 | 1600 | 1800 | 2000 |
| 1.6 | Load centre distance | c (mm) | 600 | 600 | 600 | 600 | 600 |
| 1.8 | Load distance, centre of drive axle to fork | x (mm) | 325 | 325 | 235 | 235 | 305 |
| 1.8.1 | Load distance, centre of drive axle to fork, mast reached forward | x1 (mm) | 203 | 203 | 203 | 233 | 233 |
| 1.9 | Wheelbase | y (mm) | 1480 | 1480 | 1480 | 1480 | 1550 |
| 2.1 | Service weight (including battery) | Kg | 3130 | 3130 | 3320 | 3330 | 3340 |
| 3.1 | Tyres: solid rubber, superelastic, pneumatic, polyurethane | | polyurethane | polyurethane | polyurethane | polyurethane | polyurethane |
| 3.2 | Tyre size, front | mm | Ø343×114 | Ø343×114 | Ø343×114 | Ø343×135 | Ø343×135 |
| 3.3 | Tyre size, rear ×2 | mm | Ø285×100 | Ø285×100 | Ø285×100 | Ø343×108 | Ø343×108 |
| 3.5 | Wheels, number front/rear (= driven wheels) | | 1x/2 | 1x/2 | 1x/2 | 1x/2 | 1x/2 |
| 3.7 | Tread width, rear | b11 (mm) | 1136 | 1136 | 1136 | 1144 | 1144 |
| 4.1 | Tilt of mast/fork carriage forward/backward | α/β(°) | 2/4 | 2/4 | 2/4 | 2/4 | 2/4 |
| 4.2 | Height, mast lowered | h1 (mm) | 2100 | 2100 | 2100 | 2100 | 2100 |
| 4.4 | Lift | h3 (mm) | 3000 | 3000 | 3000 | 3000 | 3000 |
| 4.7 | Height of overhead guard | h6 (mm) | 2200 | 2200 | 2200 | 2200 | 2200 |
| 4.10 | Height of support arms | h6 (mm) | 305 | 305 | 305 | 361 | 361 |
| 4.19 | Overall length | l1 (mm) | 2463 | 2463 | 2553 | 2553 | 2553 |
| 4.20 | Length to face of forks | l2 (mm) | 1393 | 1393 | 1483 | 1483 | 1483 |
| 4.21 | Overall width | b1/b2 (mm) | 1270/1270 | 1270/1270 | 1270/1270 | 1286/1270 | 1286/1270 |
| 4.22 | Fork dimensions ISO | s/e/l (mm) | 40×122×1070 | 40×122×1070 | 40×122×1070 | 40×122×1070 | 40×122×1070 |
| 4.25 | Distance between fork-arms | bs (mm) | 244-882 | 244-882 | 244-882 | 244-882 | 244-882 |
| 4.28 | Reach distance | la (mm) | 528 | 528 | 438 | 468 | 538 |
| 4.34.1 | Aisle width for pallets 1000 x 1200 crossways | Ast (mm) | 2838 | 2838 | 2907 | 2907 | 2922 |
| 4.34.2 | Aisle width for pallets 800 x 1200 lengthways | Ast (mm) | 2897 | 2897 | 2980 | 2980 | 2984 |
| 4.35 | Turning radius | Wa (mm) | 1735 | 1735 | 1735 | 1735 | 1804 |
| 4.37 | Length across wheel arms | lr (mm) | 1883 | 1883 | 1883 | 1913 | 1983 |
| 5.1 | Travel speed, laden/unladen | Km/h | 10.2/10.2 | 10.2/10.2 | 10.2/10.2 | 10.2/10.2 | 10.2/10.2 |
| 5.2 | Lift speed, laden/unladen | m/s | 0.400/0.530 | 0.390/0.530 | 0.370/0.530 | 0.340/0.530 | 0.310/0.530 |
| 5.3 | Lowering speed, laden/unladen | m/s | 0.420/0.480 | 0.420/0.480 | 0.420/0.480 | 0.420/0.480 | 0.420/0.480 |
| 5.8 | Max. gradeability, laden/unladen | % | 12/15 | 12/15 | 11/15 | 10/15 | 10/15 |
| 6.1 | Drive motor rating S2 60 min | kW | AC 6.5 | AC 6.5 | AC 6.5 | AC 6.5 | AC 6.5 |
| 6.2 | Lift motor rating at S3 15% | kW | AC 12.8 | AC 12.8 | AC 12.8 | AC 12.8 | AC 12.8 |
| | Steering motor | kW | AC 0.67 | AC 0.67 | AC 0.67 | AC 0.67 | AC 0.67 |
| 6.4 | Battery voltage, nominal capacity K5 | V/Ah | 48/400 | 48/400 | 48/500 | 48/500 | 48/500 |
| 6.5 | Battery weight | kg | 666 | 666 | 855 | 855 | 855 |
| 8.1 | Type of drive control | | CURTIS Full AC / INMOTION Full AC | | | | |
| 10.1 | Operating pressure for attachments | bar | 140 | 140 | 165 | 185 | 210 |
| 10.7 | Sound level at the driver's ear according to EN / DIN 12 053 | dB (A) | <75 | <75 | <75 | <75 | <70 |

Note: * CE model



$$Ast = Wa + R + a = Wa + \sqrt{(l_6 - x)^2 + \left(\frac{b_{12}}{2}\right)^2} + a$$

Standard Specification

- / PU (polyurethane) driving wheel and load wheels
- / High-capacity battery
- / 4 spools control valves
- / Stepless speed regulation for lifting operation
- / Arm cushion, and impact-proof head cushion
- / 3m duplex mast
- / Adjustable steering wheel
- / Front wheel protection hood
- / Safety pedal
- / 180-degree steering mode
- / Sideshifter
- / Fork tilting (2°/4°)
- / Lift top buffering (Triplex mast)
- / Mast move forward/backward buffering
- / Full AC control
- / Automatic speed reduction when the mast lifting high position (Triplex mast)
- / EPS (Electric Power Steering)
- / Automatic speed reduction at the corner

Options

- / 2.7-5.0m duplex mast
- / 4.3-12.5m full-free triplex mast
- / Various fork lengths
- / Imported high-performance battery
- / Optional large capacity battery 420Ah, 560Ah
- / Full automatic high-frequency charger
- / Other attachments
- / Height monitoring system
- / Alarm lamp, rear headlamp or other lamps

1.2t-2.0t Mast specification

| Type | Model | Lifting height h3 | Mast lowered h1 | Mast extended h4 | | Free lifting height h2 | | Tilting range | | Load center@600mm | | | | | | |
|-----------------------|-------|------------------------|------------------------|------------------|---------------|------------------------|---------------|---------------|----------|-------------------|------|------|------|------|------|------|
| | | | | Without backrest | With backrest | Without backrest | With backrest | Forward | Backward | 1.2t | 1.4t | 1.6t | 1.8t | 2.0t | | |
| | | mm | mm | mm | mm | mm | mm | (°) | (°) | kg | kg | kg | kg | kg | | |
| Wide view duplex mast | QAZ0B | 2700 | 1950 | 3355 | 3665 | 340 | 340 | 2 | 4 | 1200 | 1400 | 1600 | 1800 | 2000 | | |
| | | 3000 | 2100 | 3655 | 3965 | 340 | 340 | 2 | 4 | 1200 | 1400 | 1600 | 1800 | 2000 | | |
| | | 3300 | 2250 | 3955 | 4265 | 340 | 340 | 2 | 4 | 1200 | 1400 | 1600 | 1800 | 2000 | | |
| | | 3500 | 2350 | 4155 | 4465 | 340 | 340 | 2 | 4 | 1200 | 1400 | 1600 | 1800 | 2000 | | |
| | | 3600 | 2400 | 4255 | 4565 | 340 | 340 | 2 | 4 | 1200 | 1400 | 1600 | 1800 | 2000 | | |
| | | 4000 | 2650 | 4655 | 4965 | 340 | 340 | 2 | 4 | 1200 | 1400 | 1600 | 1800 | 2000 | | |
| | | 4300 | 2790 | 4955 | 5265 | 340 | 340 | 2 | 4 | 1200 | 1400 | 1600 | 1800 | 2000 | | |
| | | 4500 | 2900 | 5155 | 5465 | 340 | 340 | 2 | 4 | 1200 | 1400 | 1600 | 1800 | 2000 | | |
| | | 4800 | 3095 | 5495 | 5765 | 340 | 340 | 2 | 4 | 1200 | 1400 | 1600 | 1800 | 2000 | | |
| | | 5000 | 3195 | 5695 | 5965 | 340 | 340 | 2 | 4 | 1200 | 1400 | 1600 | 1800 | 2000 | | |
| | | Full free triplex mast | QAZ0V (imported steel) | 4300 | 2085 | 4987 | 5265 | 1376 | 1120 | 2 | 4 | 1200 | 1400 | 1600 | 1800 | 2000 |
| | | | | 4500 | 2165 | 5170 | 5465 | 1495 | 1200 | 2 | 4 | 1200 | 1400 | 1600 | 1800 | 2000 |
| 4800 | 2265 | | | 5470 | 5765 | 1595 | 1300 | 2 | 4 | 1200 | 1400 | 1600 | 1800 | 2000 | | |
| 5000 | 2315 | | | 5670 | 5965 | 1596 | 1350 | 2 | 4 | 1200 | 1400 | 1600 | 1800 | 2000 | | |
| 5500 | 2490 | | | 6170 | 6465 | 1796 | 1525 | 2 | 4 | 1200 | 1350 | 1550 | 1750 | 1950 | | |
| 6000 | 2665 | | | 6670 | 6965 | 1995 | 1700 | 2 | 4 | 1200 | 1250 | 1450 | 1650 | 1850 | | |
| 6500 | 2835 | | | 7170 | 7465 | 2136 | 1870 | 2 | 4 | 1100 | 1150 | 1350 | 1550 | 1750 | | |
| 7000 | 3020 | | | 7670 | 7965 | 2350 | 2055 | 2 | 4 | 1000 | 1050 | 1250 | 1450 | 1650 | | |
| 7500 | 3180 | | | 8170 | 8465 | 2510 | 2215 | 2 | 4 | 900 | 950 | 1150 | 1350 | 1550 | | |
| 8000 | 3350 | | | 8670 | 8965 | 2680 | 2385 | 2 | 4 | 850 | 900 | 1100 | 1300 | 1500 | | |
| 8500 | 3580 | | | 9170 | 9465 | 2910 | 2615 | 2 | 4 | 750 | 800 | 1000 | 1200 | 1400 | | |
| 9000 | 3800 | | | 9670 | 9965 | 3130 | 2835 | 2 | 4 | 650 | 700 | 900 | 1100 | 1300 | | |
| 9500 | 3970 | | | 10170 | 10465 | 3300 | 3005 | 2 | 4 | 550 | 600 | 800 | 1000 | 1200 | | |
| 10000 | 4100 | | | 10670 | 10965 | 3430 | 3135 | 2 | 4 | 450 | 500 | 700 | 900 | 1100 | | |
| 10500 | 4250 | | | 11170 | 11465 | 3580 | 3285 | 2 | 4 | 400 | 450 | 650 | 850 | 1050 | | |
| 11000 | 4450 | | | 11670 | 11965 | 3780 | 3485 | 2 | 4 | 300 | 350 | 550 | 750 | 950 | | |
| 11500 | 4700 | | | 12170 | 12465 | 4030 | 3735 | 2 | 4 | 150 | 200 | 400 | 600 | 800 | | |
| 12000 | 4900 | | | 12670 | 12965 | 4230 | 3935 | 2 | 4 | 50 | 100 | 300 | 500 | 700 | | |
| | 12500 | 5150 | 13170 | 13465 | 4480 | 4185 | 2 | 4 | \ | \ | 150 | 350 | 550 | | | |

