



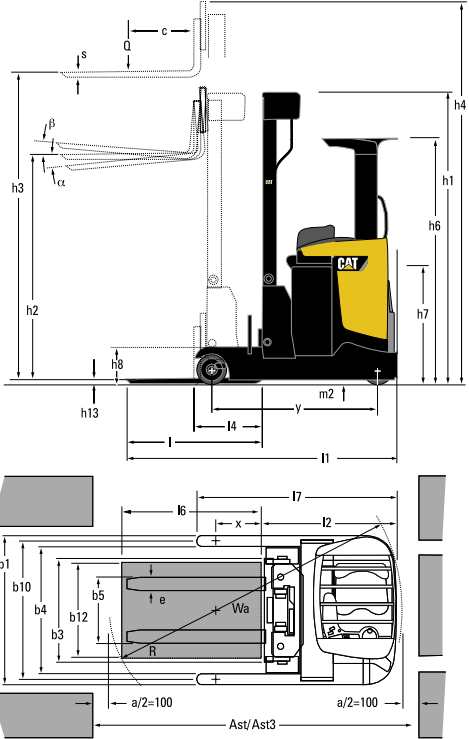
**NR14N - NR14NH - NR16N - NR16NHC  
NR16NC - NR16NS - NR16NH - NR16NHS  
NR20NH - NR25NH**

Specifications

**Reach trucks**

1.4 - 2.5 tonnes

| Characteristics     |                                                                                       |                |  |                 |                 |                 |                 |                 |  |  |                 |                 |                 |                 |                 |
|---------------------|---------------------------------------------------------------------------------------|----------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|--|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1.01                | Manufacturer (abbreviation)                                                           |                |  | Cat Lift Trucks | Cat Lift Trucks | Cat Lift Trucks | Cat Lift Trucks | Cat Lift Trucks |  |  | Cat Lift Trucks | Cat Lift Trucks | Cat Lift Trucks | Cat Lift Trucks | Cat Lift Trucks |
| 1.02                | Manufacturer's model designation                                                      |                |  | NR14N           | NR14NH          | NR16N           | NR16NH          | NR16NS          |  |  | NR16NHS         | NR16NC          | NR16NHC         | NR20NH          | NR25NH          |
| 1.03                | Power source: (battery, diesel, LP gas, petrol)                                       |                |  | Battery         | Battery         | Battery         | Battery         | Battery         |  |  | Battery         | Battery         | Battery         | Battery         | Battery         |
| 1.04                | Operator type: pedestrian, (operator)-standing, -seated                               |                |  | Seated          | Seated          | Seated          | Seated          | Seated          |  |  | Seated          | Seated          | Seated          | Seated          | Seated          |
| 1.05                | Load capacity                                                                         | Q (kg)         |  | 1400            | 1400            | 1600            | 1600            | 1600            |  |  | 1600            | 1600            | 1600            | 2000            | 2500            |
| 1.06                | Load centre distance                                                                  | c (mm)         |  | 600             | 600             | 600             | 600             | 600             |  |  | 600             | 600             | 600             | 600             | 600             |
| 1.08                | Load wheel axle to fork face (forks lowered)                                          | x (mm)         |  | See Table       | See Table       | See Table       | See Table       | See Table       |  |  | See Table       | See Table       | See Table       | See Table       | See Table       |
| 1.09                | Wheelbase                                                                             | y (mm)         |  | 1300            | 1300            | 1350            | 1350            | 1400            |  |  | 1400            | 1400            | 1400            | 1500            | 1500            |
| Weight              |                                                                                       |                |  |                 |                 |                 |                 |                 |  |  |                 |                 |                 |                 |                 |
| 2.01                | Truck weight with nominal load & maximum battery weight                               | kg             |  | 4925            | 5652            | 5399            | 6126            | 5147            |  |  | 5852            | 5063            | 5793            | 6324            | 6910            |
| 2.03                | Axle loadings without load & with maximum battery weight, drive/load side             | kg             |  | 2065/1460       | 2348/1904       | 2135/1665       | 2415/2111       | 2065/1481       |  |  | 2348/1904       | 1980/1484       | 2254/1940       | 2337/1986       | 2371/2040       |
| 2.04                | Axle loading, mast forward, with nominal load, drive/load side (lowest lift height)   |                |  | 745/4180        | 844/4808        | 756/4643        | 859/5267        | 730/4417        |  |  | 808/5044        | 650/4413        | 754/5039        | 816/5508        | 580/6330        |
| 2.05                | Axle loading, mast retracted, with nominal load, drive/load side (lowest lift height) |                |  | 1730/3195       | 2013/3639       | 1766/3633       | 2046/4080       | 1710/3437       |  |  | 2077/3775       | 1624/3440       | 1899/3895       | 1923/4401       | 1852/5058       |
| Wheels, Drive Train |                                                                                       |                |  |                 |                 |                 |                 |                 |  |  |                 |                 |                 |                 |                 |
| 3.01                | Tyres: PT=Power Thane, Vul=Vulkollan, drive/load side                                 |                |  | Vul/Vul         | Vul/Vul         | Vul/Vul         | Vul/Vul         | Vul/Vul         |  |  | Vul/Vul         | Vul/Vul         | Vul/Vul         | Vul/Vul         | Vul/Vul         |
| 3.02                | Tyre dimensions, drive side                                                           | (mm)           |  | 360x140         | 360x140         | 360x140         | 360x140         | 360x140         |  |  | 360x140         | 360x140         | 360x140         | 360x140         | 360x140         |
| 3.03                | Tyre dimensions, load side                                                            | (mm)           |  | 285x75          | 285x75          | 285x130         | 285x130         | 285x75          |  |  | 285x75          | 285x75          | 285x75          | 285x130         | 285x130         |
| 3.05                | Number of wheels, drive/load side (x=driven)                                          |                |  | 2/1x            | 2/1x            | 2/1x            | 2/1x            | 2/1x            |  |  | 2/1x            | 2/1x            | 2/1x            | 2/1x            | 2/1x            |
| 3.07                | Track width (centre of tyres), load side                                              | b11 (mm)       |  | 1195            | 1195            | 1140            | 1140            | 1195            |  |  | 1195            | 1025            | 1025            | 1140            | 1310            |
| Dimensions          |                                                                                       |                |  |                 |                 |                 |                 |                 |  |  |                 |                 |                 |                 |                 |
| 4.01                | Fork tilt, forwards / backwards                                                       | α/β °          |  | 2/4             | 2/4             | 2/4             | 2/4             | 2/4             |  |  | 2/4             | 2/4             | 2/4             | 2/4             | 2/4             |
| 4.02                | Height with mast lowered (see tables)                                                 | h1 (mm)        |  | See Table       | See Table       | See Table       | See Table       | See Table       |  |  | See Table       | See Table       | See Table       | See Table       | See Table       |
| 4.03                | Free lift (see tables)                                                                | h2 (mm)        |  | See Table       | See Table       | See Table       | See Table       | See Table       |  |  | See Table       | See Table       | See Table       | See Table       | See Table       |
| 4.04                | Lift height (see tables)                                                              | h3 (mm)        |  | See Table       | See Table       | See Table       | See Table       | See Table       |  |  | See Table       | See Table       | See Table       | See Table       | See Table       |
| 4.05                | Overall height with mast raised                                                       | h4 (mm)        |  | See Table       | See Table       | See Table       | See Table       | See Table       |  |  | See Table       | See Table       | See Table       | See Table       | See Table       |
| 4.07                | Height to top of overhead guard                                                       | h6 (mm)        |  | 2200            | 2200            | 2200            | 2200            | 2200            |  |  | 2200            | 2200            | 2200            | 2200            | 2200            |
| 4.08                | Seat- or stand height                                                                 | h7 (mm)        |  | 1100            | 1100            | 1100            | 1100            | 1100            |  |  | 1100            | 1100            | 1100            | 1100            | 1100            |
| 4.10                | Height of load legs                                                                   | h8 (mm)        |  | 360             | 360             | 360             | 360             | 360             |  |  | 360             | 360             | 360             | 360             | 360             |
| 4.15                | Fork height, fully lowered                                                            | h13 (mm)       |  | 50              | 50              | 50              | 50              | 50              |  |  | 50              | 50              | 50              | 60              | 60              |
| 4.19                | Overall length                                                                        | l1 (mm)        |  | See Table       | See Table       | See Table       | See Table       | See Table       |  |  | See Table       | See Table       | See Table       | See Table       | See Table       |
| 4.20                | Length to fork face (includes fork thickness)                                         | l2 (mm)        |  | See Table       | See Table       | See Table       | See Table       | See Table       |  |  | See Table       | See Table       | See Table       | See Table       | See Table       |
| 4.21                | Overall width                                                                         | b1/b2 (mm)     |  | 1270            | 1270            | 1270            | 1270            | 1270            |  |  | 1270            | 1100            | 1100            | 1270            | 1440            |
| 4.22                | Fork dimensions (thickness, width, length)                                            | s / e / l (mm) |  | 40/100          | 40/100          | 40/100          | 40/100          | 40/100          |  |  | 40/100          | 40/100          | 40/100          | 50/100          | 50/100          |
| 4.23                | Fork carriage to DIN 15 173 A/B/no                                                    |                |  | FEM 2A          | FEM 2A          | FEM 2A          | FEM 2A          | FEM 2A          |  |  | FEM 2A          | FEM 2A          | FEM 2A          | FEM 2A          | FEM 2A          |
| 4.24                | Fork carriage width                                                                   | b3 (mm)        |  | 720             | 720             | 720             | 720             | 720             |  |  | 720             | 720             | 720             | 720             | 720             |
| 4.25                | Outside width over forks (minimum/maximum)                                            | b5 (mm)        |  | 315-710         | 315-710         | 315-710         | 315-710         | 315-710         |  |  | 315-710         | 315-710         | 315-710         | 315-710         | 315-710         |
| 4.26                | Innerwidth of load legs                                                               | b4 (mm)        |  | 1070            | 1070            | 900             | 900             | 1070            |  |  | 1070            | 900             | 900             | 900             | 1070            |
| 4.28                | Mast reach                                                                            | l4 (mm)        |  | See Table       | See Table       | See Table       | See Table       | See Table       |  |  | See Table       | See Table       | See Table       | See Table       | See Table       |
| 4.32                | Ground clearance at centre of wheelbase, (forks lowered)                              | m2 (mm)        |  | 75              | 75              | 75              | 75              | 75              |  |  | 75              | 75              | 75              | 75              | 75              |
| 4.33a               | Working aisle width (Ast) with 1000 x1200 mm pallets, load crosswise                  | Ast (mm)       |  | See Table       | See Table       | See Table       | See Table       | See Table       |  |  | See Table       | See Table       | See Table       | See Table       | See Table       |
| 4.34a               | Working aisle width (Ast) with 800 x1200 mm pallets, load lengthwise                  | Ast (mm)       |  | See Table       | See Table       | See Table       | See Table       | See Table       |  |  | See Table       | See Table       | See Table       | See Table       | See Table       |
| 4.35                | Turning circle radius                                                                 | Wa (mm)        |  | 1547            | 1547            | 1594            | 1594            | 1640            |  |  | 1547            | 1629            | 1629            | 1735            | 1749            |
| 4.37                | Truck length over load legs                                                           | l7 (mm)        |  | 1693            | 1693            | 1743            | 1743            | 1793            |  |  | 1693            | 1793            | 1793            | 1893            | 1893            |
| Performance         |                                                                                       |                |  |                 |                 |                 |                 |                 |  |  |                 |                 |                 |                 |                 |
| 5.01                | Travel speed, with/without load                                                       | km/h           |  | 10/10           | 12/12           | 10/10           | 12/12           | 10/10           |  |  | 12/12           | 10/10           | 12/12           | 12/12           | 12/12           |
| 5.02                | Lifting speed, with/without load                                                      | m/s            |  | 0.35/0.55       | 0.44/0.65       | 0.35/0.55       | 0.40/0.65       | 0.35/0.55       |  |  | 0.40/0.65       | 0.35/0.55       | 0.40/0.65       | 0.35/0.65       | 0.30/0.65       |
| 5.03                | Lowering speed, with/without load                                                     | m/s            |  | 0.55/0.50       | 0.55/0.50       | 0.55/0.50       | 0.55/0.50       | 0.55/0.50       |  |  | 0.55/0.50       | 0.55/0.50       | 0.55/0.50       | 0.55/0.50       | 0.55/0.50       |
| 5.04                | Reach speed. with/without load                                                        | m/s            |  | 0.20/0.20       | 0.20/0.20       | 0.20/0.20       | 0.20/0.20       | 0.20/0.20       |  |  | 0.20/0.20       | 0.20/0.20       | 0.20/0.20       | 0.20/0.20       | 0.20/0.20       |
| 5.08                | Maximum gradeability, with/without load                                               | %              |  | 10/15           | 10/15           | 10/15           | 8/12            | 10/15           |  |  | 10/15           | 10/15           | 10/15           | 8/12            | 7/12            |
| 5.09                | Acceleration time (10 metres) with/without load                                       | s              |  | 5.0/4.5         | 5.0/4.5         | 5.0/4.5         | 5.4/4.7         | 5.0/4.5         |  |  | 5.0/4.5         | 5.0/4.5         | 5.0/4.5         | 5.6/4.7         | 5.9/4.7         |
| 5.10                | Service brakes (mechanical/hydraulic/electric/pneumatic)                              |                |  | Electric        | Electric        | Electric        | Electric        | Electric        |  |  | Electric        | Electric        | Electric        | Electric        | Electric        |
| Electric motors     |                                                                                       |                |  |                 |                 |                 |                 |                 |  |  |                 |                 |                 |                 |                 |
| 6.01                | Drive motor capacity (60 min. short duty)                                             | kW             |  | 7.5             | 7.5             | 7.5             | 7.5             | 7.5             |  |  | 7.5             | 7.5             | 7.5             | 7.5             | 7.5             |
| 6.02                | Lift motor output at 15% duty factor                                                  | kW             |  | 10              | 14              | 10              | 14              | 10              |  |  | 14              | 10              | 14              | 14              | 14              |
| 6.04                | Battery voltage/capacity at 5-hour discharge                                          | V/Ah           |  | 48/465,620,775  | 48/620,775      | 48/465,620,775  | 48/620,775      | 48/465,620,775  |  |  | 48/620,775      | 48/465,620      | 48/620          | 48/620,775,930  | 48/620,775,930  |
| 6.05                | Battery weight                                                                        | kg             |  | 700,900,1100    | 900,1100        | 700,900,1100    | 900,1100        | 700,900,1100    |  |  | 900,1100        | 700,900         | 900             | 900,1100,1300   | 900,1100,1300   |
| Miscellaneous       |                                                                                       |                |  |                 |                 |                 |                 |                 |  |  |                 |                 |                 |                 |                 |
| 8.01                | Type of drive control                                                                 |                |  | Stepless        | Stepless        | Stepless        | Stepless        | Stepless        |  |  | Stepless        | Stepless        | Stepless        | Stepless        | Stepless        |
| 8.04                | Noise level, mean value at operator's ear (EN 12053)                                  | dB(A)          |  | 67              | 71              | 67              | 71              | 67              |  |  | 71              | 67              | 71              | 71              | 71              |



Ast = Working aisle width  
Wa = Turning radius  
a = Safety clearance = 2 x 100 mm

$$R = \sqrt{(l6 - x)^2 + (b12 / 2)^2}$$
l6 = Pallet length  
b12 = Pallet width

### Lower Cost of Ownership

- Easy access to all components, pumps and the controller, combined with all the inherent benefits of AC power and a doubling of the maintenance interval to 600 hours, keeps the trucks working far longer than ever before between planned service visits.

### Unmatched Productivity

- Class leading capacity retention at maximum working heights combined with excellent visibility through the PoweRamic mast, fork carriage and overhead guard make these trucks top performers in any warehouse application.

### Safety and Ergonomics

- Improved chassis rigidity, a host of driver safety features and programmable mast damping make the NR-N reach trucks safe and productive without reducing performance.
- Standard battery rollers and the optional battery changing device make changing the battery a fast and safe procedure, without having to move the truck.
- By constantly monitoring drive speed, acceleration and traction the truck detects and takes action to prevent slipping of the drive wheel. This results in slip-free operation even on a wet surface.

### Options

- Working lights
- Special Chassis colour
- Radio/CD player and loudspeakers
- Options bar
- Rear view mirror
- List bracket
- PC support
- Overhead guard with mesh or plexi-glass
- Key switch
- Cooling fan
- Lowering stop
- Extra hydraulic valve and hosing to the fork carriage
- Fork positioner
- Camera on forks with monitor
- Telescopic forks
- Side shift and tilt function centering
- Load weight scale
- Power hook-up 12V 4.4 Amp
- Battery connector and cables
- Alarm for driving, lifting and lowering
- Quick battery locking system
- Battery changing device
- Cold store modification
- Cold store cabin
- High temperatures modification



# Cat® Lift Trucks.

## Your partner in materials handling.

| NR14N - NR16N - NR16NS - NR16NC |                  |      |                  |                  |
|---------------------------------|------------------|------|------------------|------------------|
| Mast Type                       | h3 <sup>1)</sup> | h1   | h2 <sup>1)</sup> | h4 <sup>2)</sup> |
|                                 | mm               | mm   | mm               | mm               |
| T                               | 4800             | 2210 | 1560             | 5630             |
|                                 | 5400             | 2410 | 1760             | 6230             |
|                                 | 5700             | 2510 | 1860             | 6530             |
|                                 | 5900             | 2577 | 1927             | 6730             |
|                                 | 6300             | 2710 | 2060             | 7130             |
|                                 | 7000             | 2943 | 2293             | 7830             |
|                                 | 7500             | 3110 | 2460             | 8330             |

### Mast Performance and Capacity

- T Triplex PowerRamic mast  
h1 Height with mast lowered  
h2 Standard free lift  
h3 Lift height  
h4 Height with mast raised  
h5 Full free lift  
Q Lifting capacity, rated load  
c Load centre (distance)

| NR14NH - NR16NHC - NR16NHS |                  |      |                  |                  |
|----------------------------|------------------|------|------------------|------------------|
| Mast Type                  | h3 <sup>1)</sup> | h1   | h2 <sup>1)</sup> | h4 <sup>2)</sup> |
|                            | mm               | mm   | mm               | mm               |
| T                          | 8000             | 3297 | 2647             | 8830             |
|                            | 8500             | 3463 | 2813             | 9330             |
|                            | 9000             | 3785 | 3135             | 9830             |
|                            |                  |      |                  |                  |

| NR16NH    |                  |      |                  |                  |
|-----------|------------------|------|------------------|------------------|
| Mast Type | h3 <sup>1)</sup> | h1   | h2 <sup>1)</sup> | h4 <sup>2)</sup> |
|           | mm               | mm   | mm               | mm               |
| T         | 8000             | 3297 | 2647             | 8830             |
|           | 8500             | 3463 | 2813             | 9330             |
|           | 9000             | 3785 | 3135             | 9830             |
|           | 9500             | 3952 | 3302             | 10330            |
|           | 10000            | 4118 | 3468             | 10830            |
|           | 10500            | 4285 | 3635             | 11330            |
|           | 11000            | 4452 | 3802             | 11830            |
|           | 11500            | 4618 | 3968             | 12330            |
|           |                  |      |                  |                  |

| NR20NH - NR25NH |                  |      |                  |                  |
|-----------------|------------------|------|------------------|------------------|
| Mast Type       | h3 <sup>1)</sup> | h1   | h2 <sup>1)</sup> | h4 <sup>2)</sup> |
|                 | mm               | mm   | mm               | mm               |
| T               | 4800             | 2230 | 1580             | 5630             |
|                 | 5400             | 2430 | 1780             | 6230             |
|                 | 5700             | 2530 | 1880             | 6530             |
|                 | 5900             | 2597 | 1947             | 6730             |
|                 | 6300             | 2730 | 2080             | 7130             |
|                 | 7000             | 2963 | 2313             | 7830             |
|                 | 7500             | 3130 | 2480             | 8330             |
|                 | 8000             | 3297 | 2647             | 8830             |
|                 | 8500             | 3463 | 2813             | 9330             |
|                 | 9000             | 3785 | 3135             | 9830             |
|                 | 9500             | 3952 | 3302             | 10330            |
|                 | 10000            | 4118 | 3468             | 10830            |
|                 | 10500            | 4285 | 3635             | 11330            |
|                 | 11000            | 4452 | 3802             | 11830            |
|                 | 11500            | 4618 | 3968             | 12330            |

- 1) Fork height is 50 mm or 60 mm higher, depending on lowered fork height (h13)  
2) Including load backrest

| Model   | Battery Capacity (Ah) | Battery Weight (kg) | Ast <sup>6)</sup> (mm) | Ast3 <sup>4)</sup> (mm) | Ast <sup>5)</sup> (mm) | Ast3 <sup>4)</sup> (mm) | L4 (mm) | L2 (mm) | L1 <sup>3)</sup> (mm) | x (mm) |
|---------|-----------------------|---------------------|------------------------|-------------------------|------------------------|-------------------------|---------|---------|-----------------------|--------|
| Line    | 6.4                   | 6.5                 | 4.33                   | 4.33                    | 4.34                   | 4.34                    | 4.28    | 4.20    | 4.19                  | 1.8    |
| NR14N   | 465                   | 700                 | 2684                   | 2466                    | 2750                   | 2666                    | 463     | 1254    | 2404                  | 281    |
|         | 620                   | 900                 | 2740                   | 2538                    | 2816                   | 2738                    | 391     | 1326    | 2476                  | 209    |
|         | 775                   | 1100                | 2798                   | 2610                    | 2883                   | 2810                    | 319     | 1398    | 2548                  | 137    |
| NR14NH  | 620                   | 900                 | 2748                   | 2548                    | 2825                   | 2748                    | 382     | 1336    | 2486                  | 199    |
|         | 775                   | 1100                | 2806                   | 2620                    | 2892                   | 2820                    | 310     | 1408    | 2558                  | 127    |
| NR16N   | 465                   | 700                 | 2693                   | 2463                    | 2751                   | 2663                    | 513     | 1254    | 2404                  | 331    |
|         | 620                   | 900                 | 2748                   | 2535                    | 2817                   | 2735                    | 441     | 1326    | 2476                  | 259    |
|         | 775                   | 1100                | 2804                   | 2607                    | 2883                   | 2807                    | 369     | 1398    | 2548                  | 187    |
| NR16NH  | 620                   | 900                 | 2755                   | 2545                    | 2826                   | 2745                    | 432     | 1336    | 2486                  | 249    |
|         | 775                   | 1100                | 2813                   | 2617                    | 2892                   | 2817                    | 360     | 1408    | 2558                  | 177    |
| NR16NS  | 465                   | 700                 | 2702                   | 2459                    | 2752                   | 2659                    | 563     | 1254    | 2404                  | 381    |
|         | 620                   | 900                 | 2755                   | 2531                    | 2817                   | 2731                    | 491     | 1326    | 2476                  | 309    |
|         | 775                   | 1100                | 2811                   | 2603                    | 2883                   | 2803                    | 419     | 1398    | 2548                  | 237    |
| NR16NHS | 620                   | 900                 | 2748                   | 2548                    | 2825                   | 2748                    | 382     | 1336    | 2486                  | 199    |
|         | 775                   | 1100                | 2806                   | 2620                    | 2892                   | 2820                    | 310     | 1408    | 2558                  | 127    |
| NR16NC  | 465                   | 700                 | 2731                   | 2502                    | 2789                   | 2702                    | 510     | 1308    | 2458                  | 327    |
|         | 620                   | 900                 | 2800                   | 2592                    | 2872                   | 2792                    | 420     | 1398    | 2548                  | 237    |
| NR16NHC | 620                   | 900                 | 2807                   | 2602                    | 2881                   | 2802                    | 410     | 1408    | 2558                  | 228    |
| NR20NH  | 620                   | 900                 | 2784                   | 2536                    | 2830                   | 2736                    | 582     | 1336    | 2486                  | 399    |
|         | 775                   | 1100                | 2837                   | 2608                    | 2895                   | 2808                    | 510     | 1408    | 2558                  | 327    |
|         | 930                   | 1300                | 2892                   | 2680                    | 2961                   | 2880                    | 438     | 1480    | 2630                  | 255    |
| NR25NH  | 620                   | 900                 | 2805                   | 2560                    | 2853                   | 2760                    | 572     | 1346    | 2496                  | 389    |
|         | 775                   | 1100                | 2858                   | 2632                    | 2918                   | 2832                    | 500     | 1418    | 2568                  | 317    |
|         | 930                   | 1300                | 2913                   | 2704                    | 2984                   | 2904                    | 428     | 1490    | 2640                  | 245    |

- 3) With forklift length 1150 mm  
4) AST3 does not take the load diagonal into account. Only to be used for intrusive stacking  
5) Ast according to VDI 2198 (800 x 1200mm) load lengthwise  
6) Ast according to VDI 2198 (1000 x 1200mm) load crosswise

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NOTE: Performance specifications may vary depending on standard manufacturing tolerances, vehicle condition, types of tyres, floor or surface conditions, applications, or operating environment. Trucks may be shown with non-standard options. Specific performance requirements and locally available configurations should be discussed with your Cat lift trucks Dealer. Cat Lift Trucks follows a policy of continual product improvement. For this reason, some materials, options and specifications could change without notice.

**CAT**® Lift Trucks