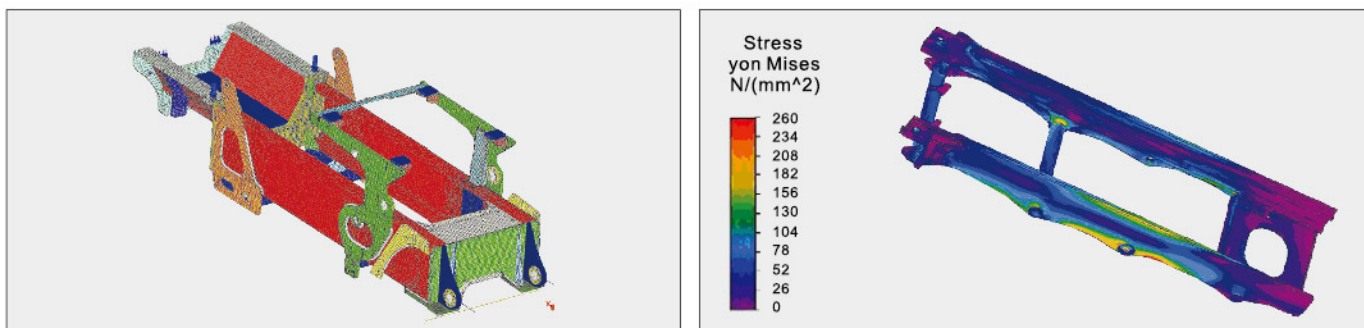




车身有限元分析 Chassis Finite Element Analysis

门架有限元分析 Mast Finite Element Analysis

## CPCD140-180 FORKLIFT'S Advantage

- ▶ Cummins Diesel engine, comply to EPA standards on None-road application, with genuine attached parts to guarantee the normal use and maintenance.
- ▶ ZF Transmission system. This transmission system integrated various control software in one controller, easy to handle. It can also be diagnosed easily with the diagnostic machine interface.
- ▶ Kessler Front Axle. This Axle has high load capacity and brake torque to be safe and reliable enough. Wet type brake is water-resistant and dust-resistant and maintenance free.
- ▶ Rexroth Main Hydraulic system. Using hydraulic oil pressure feedback various pump system to realize the continuous oil supplying and reduce the overflow losses and increase the efficiency to save the energy and reduce the oil temperature.
- ▶ Using prior-steering strategy Pre-open valve on Multi-control Valve to separate the operation level and control valve to realize remote control. It can be operated with comfort and safety and release the tension of the driver.

## CPCD200-320 FORKLIFT'S Advantage

- ▶ VOLVO Diesel engine, comply to EPA standards on None-road application, with genuine attached parts to guarantee the normal use and maintenance.
- ▶ ZF Transmission system. This transmission system integrated various control software in one controller, easy to handle. It can also be diagnosed easily with the diagnostic machine interface.
- ▶ Kessler Front Axle. This Axle has high load capacity and brake torque to be safe and reliable enough. Wet type brake is water-resistant and dust-resistant and maintenance free.
- ▶ Parker Main Hydraulic system. Using prior-steering strategy Pre-open valve on Multi-control Valve to separate the operation level and control valve to realize remote control. It can be operated with comfort and safety and release the tension of the driver.
- ▶ The mast is very strong and durable, and with integral side-shifting fork positioner. It's unnecessary to fit additional side shift.

## CPCD420-460 FORKLIFT'S Advantage

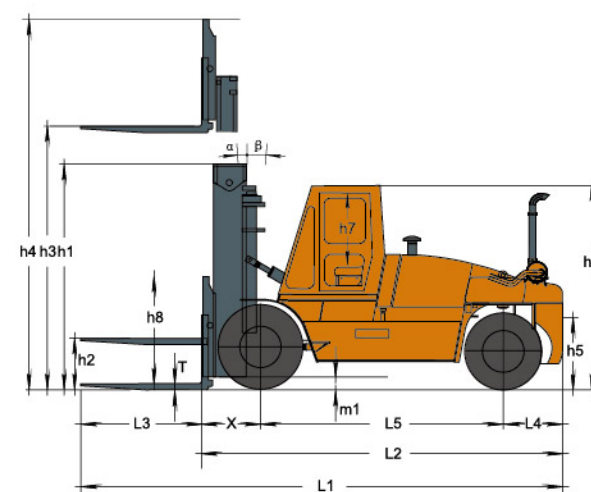
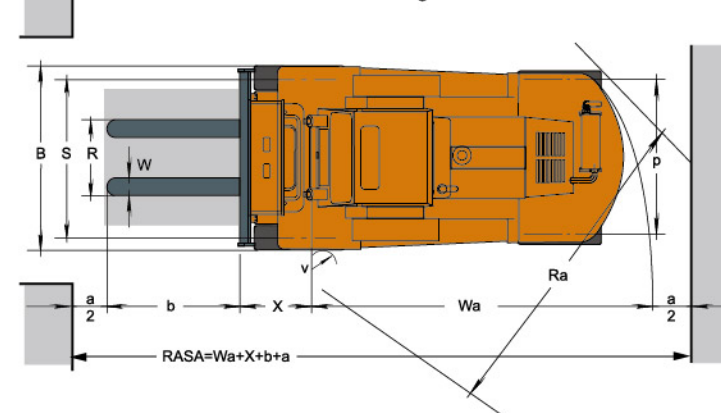
- ▶ VOLVO Diesel engine, comply to EPA standards on None-road application, with genuine attached parts to guarantee the normal use and maintenance.
- ▶ DANA Transmission system. This transmission system integrated various control software in one controller, easy to handle. It can also be diagnosed easily with the diagnostic machine interface.
- ▶ Kessler Front Axle. This Axle has high load capacity and brake torque to be safe and reliable enough. Wet type brake is water-resistant and dust-resistant and maintenance free.
- ▶ Parker Main Hydraulic system. Using hydraulic oil pressure feedback various pump system to realize the continuous oil supplying and reduce the overflow losses and increase the efficiency to save the energy and reduce the oil temperature.
- ▶ The mast is very strong and durable, and with integral side-shifting fork positioner. It's unnecessary to fit additional side shift.



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RASA:直角堆垛通道宽度 Right-Angle Store Aisle  
a:间隙Clearance  
b:载荷长度Length of load



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## CPCD 140-460 内燃平衡重式叉车 COUNTERBALANCED INTERNAL COMBUSTION FORKLIFT TRUCK



**HELI**  
中国合力 提升未来

## G SERIE FORKLIFT CPCD 140-460



## CPCD140-180型叉车优点

- ▶ 发动机选用符合欧美非公路机动设备环保排放标准的Cummins柴油机。发动机的附件为专用件，保证发动机的正常使用与维护。
- ▶ 变速箱选用德国ZF公司的变速箱。该变速箱采用多种控制程序集成于一体控制部件，能轻易实现各种控制操纵，并带有故障诊断仪，大大简化了维护与保养。
- ▶ 驱动桥选用德国Kessler公司的驱动桥。该桥桥荷、制动扭矩大，安全可靠；制动器为多片式湿式制动器，防尘防水性好，免维护。
- ▶ 液压系统主要选用德国力士乐公司的产品，整个系统采用全液压负荷传感变量系统，从而实现液压系统的无级供油，系统无溢流损失，系统效率高，实现了节能，降低了油温。
- ▶ 多路阀为带有优先转向的先导控制的多路换向阀，操纵手柄与多路阀分开，可实现远距离控制，操纵轻便省力舒适，安全性能好，减轻司机的操作疲劳强度。

## CPCD200-320型叉车优点

- ▶ 发动机选用符合欧美非公路机动设备环保排放标准的VOLVO柴油机。发动机的附件为专用件，保证发动机的正常使用与维护。
- ▶ 变速箱选用德国ZF公司的变速箱。该变速箱采用多种控制程序集成于一体控制部件，能轻易实现各种控制操纵，并带有故障诊断仪，大大简化了维护与保养。
- ▶ 驱动桥选用德国KESSLER公司的驱动桥。该桥桥荷与制动扭矩大，安全可靠；制动器为多片全封闭式湿式制动器，防尘防水性好，免维护。
- ▶ 液压系统的主要部件选用PARKER的产品。多路阀为带有优先转向的先导控制的多路换向阀，操纵手柄与多路阀分开，可实现远距离控制，操纵轻便省力舒适，安全性能好，减轻司机的操纵疲劳强度。
- ▶ 门架坚固耐用，复合式侧移调距叉，无需另配侧移器。

## CPCD420-460型叉车优点

- ▶ 发动机选用符合欧美非公路机动设备环保排放标准的VOLVO柴油机。发动机的附件为专用件，保证发动机的正常使用与维护。
- ▶ 变速箱选用DANA公司的变速箱。该变速箱采用多种控制程序集成于一体控制部件，能轻易实现各种控制操纵，并带有故障诊断仪，大大简化了维护与保养。
- ▶ 驱动桥选用德国KESSLER公司的驱动桥。该桥桥荷与制动扭矩大，安全可靠；制动器为多片全封闭式湿式制动器，防尘防水性好，免维护。
- ▶ 液压系统的主要部件选用PARKER的产品。整个系统采用全液压负荷传感变量系统，从而实现液压系统的无级供油，系统无溢流损失，系统效率高，实现了节能，降低了油温。
- ▶ 门架坚固耐用，复合式侧移调距叉，无需另配侧移器。



G SERIE FORKLIFT

CPCD 140-460

| 性能参数 Performance specifications |                                          |    |             |             |             |             |  |             |                                         |                                         |                             |                             |                             |                   |                   |
|---------------------------------|------------------------------------------|----|-------------|-------------|-------------|-------------|--|-------------|-----------------------------------------|-----------------------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------|-------------------|
| 型号                              | Model                                    |    | CPCD140-Cu3 | CPCD150-Cu3 | CPCD160-Cu3 | CPCD160-Cu4 |  | CPCD180-Cu2 | CPCD200-VZ-12 II<br>(CPCD200-VZ-12 III) | CPCD250-VZ-12 II<br>(CPCD250-VZ-12 III) | CPCD280-Vo<br>(CPCD280H-Vo) | CPCD300-Vo<br>(CPCD300H-Vo) | CPCD320-Vo<br>(CPCD320H-Vo) | CPCD420-VD-12 III | CPCD460-VD-12 III |
| 货叉起升时高度                         | Overall Height Fork Raised               | h4 | 4840        | 4840        | 4840        | 4840        |  | 5840        | 5840                                    | 5995                                    | 6120                        | 6120                        | 6120                        | 6830              | 6830              |
| 标准起升高度                          | Lifting Height                           | h3 | 3000        | 3000        | 3000        | 3000        |  | 4000        | 4000                                    | 4000                                    | 4000                        | 4000                        | 4000                        | 4000              | 4000              |
| 货叉落地时全高(门架垂直)                   | Overall Height Fork Lowered(Upright)     | h1 | 3340        | 3340        | 3340        | 3340        |  | 3840        | 3840                                    | 3995                                    | 4120                        | 4120                        | 4120                        | 4830              | 4830              |
| 货叉厚度                            | Fork Thickness                           | T  | 90          | 90          | 90          | 90          |  | 90          | 90                                      | 110                                     | 112                         | 112                         | 112                         | 145               | 145               |
| 全长(含货叉)                         | Overall Length(with Forks)               | L1 | 7410        | 7410        | 7410        | 8380        |  | 8380        | 8380                                    | 8782                                    | 9200                        | 9200                        | 9200                        | 10370             | 10370             |
| 货叉长度                            | Fork Length                              | L3 | 1820        | 1820        | 1820        | 2440        |  | 2440        | 2440                                    | 2440                                    | 2440                        | 2440                        | 2440                        | 2440              | 2440              |
| 轴距                              | Wheel Base                               | L5 | 3650        | 3650        | 3650        | 4000        |  | 4000        | 4000                                    | 4250                                    | 4650                        | 4650                        | 4650                        | 5500              | 5500              |
| 全高(驾驶室)                         | Overall Height(Cab)                      | h6 | 3260        | 3260        | 3260        | 3260        |  | 3260        | 3260                                    | 3875                                    | 3930                        | 3930                        | 3930                        | 4220              | 4220              |
| 全宽                              | Overall Width                            | B  | 2560        | 2560        | 2560        | 2560        |  | 2560        | 2560                                    | 3040                                    | 3460                        | 3460                        | 3460                        | 4120              | 4120              |
| 货叉调节范围(货叉外侧)                    | Lateral Fork Adjustment(Outside of Fork) | R  | 900-2150    | 900-2150    | 900-2150    | 900-2150    |  | 900-2150    | 900-2150                                | 820-2700                                | 920-2850                    | 920-2850                    | 920-2850                    | 1250-2850         | 1250-2850         |
| 最大侧移量(mm)                       | Max Side Shift Distance                  |    | ±312.5      | ±312.5      | ±312.5      | ±312.5      |  | ±312.5      | ±312.5                                  | ±470                                    | ±482.5                      | ±482.5                      | ±482.5                      | ±400              | ±400              |
| 货叉宽度                            | Fork Width                               | W  | 250         | 250         | 250         | 250         |  | 250         | 250                                     | 250                                     | 300                         | 300                         | 300                         | 300               | 300               |
| 最小转弯半径                          | Min.Turning Radius                       | Wa | 4970        | 4970        | 4970        | 5600        |  | 5600        | 5600                                    | 5920                                    | 6395                        | 6395                        | 6395                        | 7518              | 7518              |

| 性能参数 Performance specifications |                                               |        |                             |               |               |               |  |               |                                         |                                         |                             |                             |                             |                             |                   |
|---------------------------------|-----------------------------------------------|--------|-----------------------------|---------------|---------------|---------------|--|---------------|-----------------------------------------|-----------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------|
| 型号                              | Model                                         |        | CPCD140-Cu3                 | CPCD150-Cu3   | CPCD160-Cu3   | CPCD160-Cu4   |  | CPCD180-Cu2   | CPCD200-VZ-12 II<br>(CPCD200-VZ-12 III) | CPCD250-VZ-12 II<br>(CPCD250-VZ-12 III) | CPCD280-Vo<br>(CPCD280H-Vo) | CPCD300-Vo<br>(CPCD300H-Vo) | CPCD320-Vo<br>(CPCD320H-Vo) | CPCD420-VD-12 III           | CPCD460-VD-12 III |
| 额定起重量                           | Load Capacity                                 | Kg     | 14000                       | 15000         | 16000         | 16000         |  | 18000         | 20000                                   | 25000                                   | 28000                       | 30000                       | 32000                       | 42000                       | 46000             |
| 载荷中心距                           | Load Center                                   | mm     | 900                         | 900           | 900           | 1200          |  | 1200          | 1200                                    | 1200                                    | 1200                        | 1200                        | 1200                        | 1200                        | 1200              |
| 动力形式                            | Power Type                                    |        | 柴油 Diesel oil               | 柴油 Diesel oil | 柴油 Diesel oil | 柴油 Diesel oil |  | 柴油 Diesel oil | 柴油 Diesel oil                           | 柴油 Diesel oil                           | 柴油 Diesel oil               | 柴油 Diesel oil               | 柴油 Diesel oil               | 柴油 Diesel oil               | 柴油 Diesel oil     |
| 车轮(前/后) x=驱动轮                   | Wheel (Front/rear) X=Driving Wheel            |        | 4X/2                        | 4X/2          | 4X/2          | 4X/2          |  | 4X/2          | 4X/2                                    | 4X/2                                    | 4X/2                        | 4X/2                        | 4X/2                        | 4X/2                        | 4X/2              |
| 轮胎(前/后)                         | Tire(Front/Rear)                              |        | 12.00-24-20PR/12.00-20-20PR |               |               |               |  |               | 14.00-24-28PR/14.00-24-28PR             |                                         |                             | 16.00-25-32PR/16.00-25-32PR |                             | 18.00-25-40PR/18.00-25-40PR |                   |
| 发动机型号                           | Internal Combustion Engine                    |        | Cummins QSB6.7              |               |               |               |  |               | VOLVO TAD721VE ( VOLVO TAD750VE )       |                                         |                             |                             |                             | VOLVO TAD952VE              |                   |
| 发动机形式                           | Internal Combustion Engine Number of Cylinder |        | 6-102X120                   |               |               |               |  |               | 6-108X130 ( 6-108X130 )                 |                                         |                             |                             |                             | 6-120X138                   |                   |
| 发动机额定功率/额定转速                    | Internal Combustion Engine Rate Horsepower    | kw/rpm | 142/2400                    |               |               |               |  |               | 195/2300(181/2300)                      |                                         |                             |                             |                             | 252/1900                    |                   |
| 发动机额定扭矩/转速                      | Internal Combustion Engine Rate Torque        | Nm/rpm | 930/1500                    |               |               |               |  |               | 900/1400(1050/1500)                     |                                         |                             |                             |                             | 1700/1300                   |                   |
| 排放标准                            | EPA Standards                                 |        | 欧 III EPA III               |               |               |               |  |               | 欧 II EPA II ( 欧 III EPA III )           |                                         |                             |                             |                             | 欧 III EPA III               |                   |
| 变速箱挡数(前/后)                      | Transmission Number of Speed (Fwd/Rvs)        |        | 3/3                         |               |               |               |  |               | 3/3                                     |                                         |                             |                             |                             | 4/4                         |                   |

注：括号内车型与发动机——对应      Note: The forklift types are matchable with engines

| CPCD140-160 基本型门架 Wide view mast |                                   |                                |                   |         |               |                                |                           |
|----------------------------------|-----------------------------------|--------------------------------|-------------------|---------|---------------|--------------------------------|---------------------------|
| 门架类型<br>Mast name                | 最大起升高度<br>Max.fork Height<br>(mm) | 门架全高<br>Overall height<br>(mm) | 起重量 Capacity (kg) |         |               | 倾角(前/后)<br>Tilt angle<br>(F/B) | 备 注<br>Remarks            |
|                                  |                                   |                                | CPCD140           | CPCD160 | CPCD160(1200) |                                |                           |
| M300                             | 3000                              | 3340                           | 14000             | 16000   | 16000         | 6°/12°                         | 标准型<br>standard equipment |
| M350                             | 3500                              | 3590                           | 14000             | 16000   | 16000         | 6°/12°                         |                           |
| M400                             | 4000                              | 3840                           | 14000             | 16000   | 16000         | 6°/12°                         |                           |
| M450                             | 4500                              | 4090                           | 14000             | 16000   | 16000         | 6°/12°                         |                           |
| M500                             | 5000                              | 4390                           | 14000             | 16000   | 16000         | 6°/6°                          |                           |
| M550                             | 5500                              | 4640                           | 13000             | 15000   | 15000         | 3°/6°                          |                           |
| M600                             | 6000                              | 4940                           | 12000             | 14000   | 14000         | 3°/6°                          |                           |
| M650                             | 6500                              | 5190                           | 11000             | 13000   | 13000         | 3°/6°                          |                           |

| CPCD200-250 基本型门架 Wide view mast |                                   |                                |                                |                           |
|----------------------------------|-----------------------------------|--------------------------------|--------------------------------|---------------------------|
| 门架类型<br>Mast name                | 最大起升高度<br>Max.fork Height<br>(mm) | 门架全高<br>Overall height<br>(mm) | 倾角(前/后)<br>Tilt angle<br>(F/B) | 备 注<br>Remarks            |
| M400                             | 4000                              | 3995                           | 6°/10°                         | 标准型<br>standard equipment |
| M450                             | 4500                              | 4245                           | 6°/10°                         |                           |
| M500                             | 5000                              | 4495                           | 6°/10°                         |                           |
| M550                             | 5500                              | 4745                           | 6°/10°                         |                           |
| M600                             | 6000                              | 4995                           | 6°/10°                         |                           |
| M650                             | 6500                              | 5245                           | 6°/10°                         |                           |
| M700                             | 7000                              | 5495                           | 6°/10°                         |                           |
| M750                             | 7500                              | 5745                           | 6°/10°                         |                           |
| M800                             | 8000                              | 5995                           | 6°/10°                         |                           |

| CPCD280-320 基本型门架 Wide view mast |                                   |                                |                                |                           |
|----------------------------------|-----------------------------------|--------------------------------|--------------------------------|---------------------------|
| 门架类型<br>Mast name                | 最大起升高度<br>Max.fork Height<br>(mm) | 门架全高<br>Overall height<br>(mm) | 倾角(前/后)<br>Tilt angle<br>(F/B) | 备 注<br>Remarks            |
| M400                             | 4000                              | 4120                           | 6°/10°                         | 标准型<br>standard equipment |
| M450                             | 4500                              | 4370                           | 6°/10°                         |                           |
| M500                             | 5000                              | 4620                           | 6°/10°                         |                           |
| M550                             | 5500                              | 4870                           | 6°/10°                         |                           |
| M600                             | 6000                              | 5120                           | 6°/10°                         |                           |
| M650                             | 6500                              | 5370                           | 6°/10°                         |                           |
| M700                             | 7000                              | 5620                           | 6°/10°                         |                           |
| M750                             | 7500                              | 5870                           | 6°/10°                         |                           |
| M800                             | 8000                              | 6120                           | 6°/10°                         |                           |

| CPCD420-460 基本型门架 Wide view mast |                                   |                                |                                |                           |
|----------------------------------|-----------------------------------|--------------------------------|--------------------------------|---------------------------|
| 门架类型<br>Mast name                | 最大起升高度<br>Max.fork Height<br>(mm) | 门架全高<br>Overall height<br>(mm) | 倾角(前/后)<br>Tilt angle<br>(F/B) | 备 注<br>Remarks            |
| M400                             | 4000                              | 4830                           | 6°/10°                         | 标准型<br>standard equipment |
| M450                             | 4500                              | 5080                           | 6°/10°                         |                           |
| M500                             | 5000                              | 5330                           | 6°/10°                         |                           |
| M550                             | 5500                              | 5580                           | 6°/10°                         |                           |
| M600                             | 6000                              | 5830                           | 6°/10°                         |                           |
| M650                             | 6500                              | 6080                           | 6°/10°                         |                           |
| M700                             | 7000                              | 6330                           | 6°/10°                         |                           |
| M750                             | 7500                              | 6580                           | 6°/10°                         |                           |
| M800                             | 8000                              | 6830                           | 6°/10°                         |                           |

注：门架可选配二级全自由门架      Note: Duplex full free mast is optional



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| 标准配置 Standard distrivution |                               |          |                                 |
|----------------------------|-------------------------------|----------|---------------------------------|
| 前大灯                        | Head Light                    | 变矩器油标尺   | Torque Converter Dipstick       |
| 前组合灯                       | Front Combination Light       | 宽视野门架    | Wideview Mast                   |
| 小时表                        | Hour Gauge                    | 多路阀      | Control Valve                   |
| 水温表                        | Water Temperature Gauge       | 侧移调距叉    | Side-shifting Fork Positioner   |
| 燃油表                        | Fuel Gauge                    | 标准货叉     | Standard Forks                  |
| 电喇叭                        | Horn                          | 起升油路限速阀  | Lifting Hydraulic Regulator     |
| 倒车蜂鸣器                      | Back-up Alarm                 | 全液压动力转向  | Hydraulic Power Steering        |
| 灯护架                        | Light Bracket                 | 倾斜油路自锁阀  | Tilting Lock Valve              |
| 先导手柄                       | Pilot Valve Handle            | 倾斜可调转向管柱 | Steering Column Tilt Adjustment |
| 充电指示                       | Charge Indicator              | 驾驶室      | Cab                             |
| 油压报警                       | Engine Oil Pressure Indicator | 空调       | Air Conditioner                 |
| 预热指示                       | Preheating Indicator          | 倒车镜      | Rearview mirrow                 |
| 发动机自动预热系统                  | Engine Glow Plug System       | 牵引销      | Draw Pin                        |
| 发动机钥匙熄火                    | Engine Key Flameout           | 空气滤清器    | Air Cleaner                     |
| 液位镜                        | Hydraulic Oil Level Mirror    | 随车工具     | Tools                           |

| 选用装置和附件 Optional device |                         |
|-------------------------|-------------------------|
| 实心轮胎                    | Solid Tire              |
| 后视系统                    | Backsight system        |
| 用户指定颜色                  | Customer referred color |

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