CHD SERIES
DOUBLE GIRDER OVERHEAD CRANE

Max. Load: 100,000Kg

CLESCRANE

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Clescrane retains the rights to change on product design and specs. at any time. When purchase and delivery, subject to our actual products.
ABOUT

With the target of "technology-driven, quality seize the market", Cleescrane was established as a systems engineering company in the field of material handling in the year of 2012. Our services cover a wide range of industries, which includes manufacturing industry, processing industry, energy regeneration and so on.

We have been working with the international well-known electrical companies in order to look for cooperation of intelligence hoisting machinery equipment. At the same time, our technical engineers are constantly providing customized designs to meet our customers’ needs. Our equipment supervision team ensures the best quality of equipment for our customers. Our professional technical service team will provide zero-distance service to our customers. Cleescrane is just on your side to help enhance your business and get sustainable development.

Technology is Cleescrane survival principle, quality is the basic foundation of Cleescrane survival. Depending on our own technology strength and supervision team, Cleescrane has the professional sub-contractor who can provide us the good quality crane parts and control the whole cost in the competitive level. Cleescrane intends to create an innovative lifting equipment export service companies and provide customers with the best solution and high-quality manufacturing products. With spirit of "customer first" business philosophy, Cleescrane strategic objectives are not for the short-term interests instead of sacrificing the future. CLES people will wholeheartedly provide dedicated service for worldwide customers. When you choose Cleescrane, you also increase security and efficiency for your business development at the same time.
**Series Double Girder Overhead Crane**

- **Lifting Capacity:** 1~100t
- **Span:** 7.5m~35.5m
- **Lifting Height:** 6m, 9m, 12m, 15m, 18m
- **Working Class:** A5, A6

**THIS SERIES OF PRODUCT IS MATCHED WITH CH SERIES ELECTRIC HOIST**

1. Design is based on FEM1.001 and CMAA70 standards.
2. Finite element optimization design for steel structure, to achieve a lighter weight.
3. Modular design of end beam and wheel set.
4. Wheel group with adjustable structure, to prevent from rail gnawing.
5. The main girders with bias-rail and box structure, square steel rail, easy to manufacture.
6. Modular platform and railings, to realize free swapping.
7. Complete safety precautions, equipped with overload limiter, height limiter, stroke limiter, photoelectric limiter and other security measures, crane black box with recorded analysis functions can be added based on customers' requirements.
8. Lifting capacity: 1~100 t, customized cranes can be produced.
ADVANTAGE

CHD series double girder overhead crane is featured by light weight, low headroom and wheel pressure, significantly saving the investment on plant.

The variable frequency control of trolley and crane makes operation reliable, safe and stable.

The reasonable structure design ensures good running and minimizes wear and maintenance of equipment during service.

Since the hook rises to between the two main beams, its lifting height can be substantially increased.

The installation of service platform and trolley platform, can not only facilitate the maintenance of cranes, but also help maintenance personnel to quickly access other facilities in the plant, such as lighting, heating or power lines, etc.

As an option, you can also choose maintenance cage for the operator to maintain the slide wire easily.

CRANE

European standard (DIN/FEM) optimized design, light dead weight, small wheel load, small volume.

Max. lifting capacity: 100t

Flexible solutions for all lifting needs.

Excellent driving properties, frequency control of motor speed, smooth moving.
HOISTING MECHANISM

1. Pole changing double-speed motor for hoisting with three-in-one structure, stable and reliable operation, small volume.
2. Highly efficient electric motor with hard tooth surface reducer, to achieve the low energy consumption and large output torque.
3. The electromagnetic brake can adjust itself automatically with high precision, to achieve fast and reliable braking with low noise.
4. The steel wire rope with high strength and high flexibility, to achieve greater and safer lifting.
5. High strength nylon rope guide and ductile cast iron pulley, its self-lubricating helps to achieve a longer service life of the steel wire rope.
6. High strength alloy wheel group, to achieve a long service life for the wheels.
7. Modular design to realize the flexible combination.
8. Maximum lifting capacity can reach to 100t.

Lifting Drive Unit
High-performance, large driving force and compact structure. Various components are running efficiently to ensure high efficiency. Low energy consumption, low noise and eco-friendly design. Smooth running, low impact, safe and reliable. No-wear design, long service life. Electrical convection sustained rate is up to 60% to meet the demands of the high frequency lifting. Service life Asbestos-free brake can be up to one million times. High protection grade of brake can meet the requirements of severe environment.

Wire Rope Drum & Wire Rope
Wire Rope Drum: Use the Q345-type seamless steel tube as raw material and process it by numbers of working procedure. Advanced processing methods to ensure concentricity of the drum. The depth of rope groove is in compliance with the FEM standard. High-strength pressing plates and bolts are fastened on the end of the wire rope to ensure the safety of lifting.
Wire Rope: The imported wire rope of high-performance with tensile strength up to 2160MPa. The surface with galvanized processing for corrosion prevention effectively. With good flexibility to ensure wear resistance of the wire rope and prolong its service life.

Trolley Drive Unit
Trinity of high-performance motor, reduction gearbox and brake. Compact structure, excellent performance. Low energy consumption, low noise and eco-friendly design. Variable frequency control, smooth running, low impact and meeting requirements of a variety of speed. Asbestos-free brake disc and its normal service life can be up to one million times. No-wear design, maintenance-free, long service life.

Rope Guide
Lifting weight, good wear resistance, to reduce the wear of wire rope effectively. Prevent wire rope from skipping and loosening to off-groove, and safety first.

Electric Cabinet
Rational design, convenient maintenance, decreasing running cost. Professional and high quality of electrical components, safe and reliable. Multiple safety protection devices to ensure equipment safe. Protection grade Ip55. Clear identification to easy for trouble removal.

Overload Limiter
Customized overload limiter with high sensitivity can output load or have overloading limit upon customer’s requirements.
**Fixed Pulley**
Nodular cast iron material

**Wire Support**
Array wires orderly and neatly

**Connectors**
Aviation plug ensures safety and easy maintenance, with high protection grade of IP55.

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**Cross Limit Switch**
To position the direction of cross and long travelings of the crane and realize speed reducing and position controlling. Safe, reliable and easy to install and adjust.

**Lifting Height Limiter**
Freely adjustable screw lifting height limiter with high precision, wide adjustment range, safe and reliable. Multiple-contact configurations can effectively achieve the function of transition with low and high speed and the stop during the rise and fall.

**Hook Block**
DIN standard of lifting hook with safety clasp and wire rope sheath Ergonomic design. Forged by the high-strength material of T grade. Accompanied with nondestructive test certification of lifting hook randomly.

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**MAIN GIRDER**
Double welding box girder, beam deflection with DIN/FEM standard
Steel material: Fe37 or Fe52 (Equal to Q235B and Q345B in China)
Whole length CNC cutting for complete web plate, to ensure the precision and smooth curve shape of the camber.
Trolley rail is made of high strength hot rolled flat steel (16Mn).
Automatic submerged arc welded main weld with NDT inspection
Shot-blasting Sa2.5 for complete girder after welding, to achieve stress release.
Epoxy zinc-rich painting for one bottom and two sides of 120μm thick, to achieve a long lifespan, beautiful appearance and good luster.
Main girders and end beams are connected together by class 10.9 high strength bolts to ensure the structure strength and precision of the whole machine.
END CARRIAGE

Maintenance-free three-in-one mechanism controlled by frequency converter is specially designed for cranes; 42CrMo alloy forged wheel, wear resistance, impact resistance, high performance, long life span.
Compact structure, few parts, easy assembly.
Adopt modular design, supply complete sets of equipment.

Providing wheel group with diameter of 125, 160, 200, 250, 320, 400, 450, 500, 630.
We also can provide non-standard wheel group according to the needs of customers.
Bearing use TWB, LYC and HRB. If you ask use SKF, FAG, NSK, we can satisfy your request.
The operation structure of trolley and cart adopts three-in-one driving structure, with stepless speeds controlled by frequency inverter, hard tooth surface disk brake;
Protection class: IP55, insulation class: F, electrical sustained rate: 40% ED;
The end beams are equipped with flat wheel or double flange wheels, anti-friction bearings, buffer blocks and end plate to prevent from derailment.
NON-SKID WALKWAY AND HANDRAIL

Non-skid walkway is located at one side of main beam and made of checkered plate, handrail(at least 1050mm), upright and toe protection edges, which are connected by bolts.

CROSS LIMIT SWITCH

To position the direction of cross and long travelings of the crane and realize speed reducing and position controlling. Safe, reliable and easy to install and adjust.

ELECTRIC CONTROL SYSTEM AND REMOTE RECEIVER

Cabin Control
Linkage control, conjoined with driving chair, easy to operate. Professional driving chairs, adjustable and fully turning. Round window with large arc glass, wide view. Two steps push button or joystick station with emergency stop.

Maintenance Cage
Mainly used for electric wire maintenance. If you put an order for more than sets of CHD series double girder overhead cranes, we suggest you choose hydraulic elevator as maintenance platform which is more flexible.

Pendant
Easy to control, unnecessary to add professional driver. Double block button to achieve safety stop. Following type or independent sliding type suspended under hoist. Protection class IP65. Lifespan: 500,000 times.

Remote Control
Easy to control, unnecessary to add professional driver. More free space for operator on the ground. Tens of thousands of frequency points, non-interference with each other. Two steps push button or joystick station with emergency stop. Protection class IP65. Lifespan: 500,000 times.
1. HFP Series engineering plastic ducted type HSMX
The shell of HFP series engineering plastic HFP series engineering plastic ducted-type HSMX shell is extruded by specific engineering plastics, which has the characteristics of safety and energy saving, acid and alkali corrosion and flame retardant.

Specifications

<table>
<thead>
<tr>
<th>No.</th>
<th>Specifications &amp; Model</th>
<th>Conduction Area</th>
<th>Current</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HFP-4-10/50 HPE-4-10/50</td>
<td>10²</td>
<td>50A</td>
<td>Standard size of 4m can be made into 3 pole or 5 poles match with current collector HFP-4-40/HFP-4-60/HFP-4-450, double carbon brush collector as an option.</td>
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<tr>
<td>2</td>
<td>HFP-4-15/80 HPE-4-15/80</td>
<td>15²</td>
<td>80A</td>
<td></td>
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<tr>
<td>3</td>
<td>HFP-4-25/100 HPE-4-25/100</td>
<td>25²</td>
<td>100A</td>
<td></td>
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<tr>
<td>4</td>
<td>HFP-4-35/130 HPE-4-35/130</td>
<td>35²</td>
<td>130A</td>
<td></td>
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<tr>
<td>5</td>
<td>HFP-4-50/180 HPE-4-50/180</td>
<td>50²</td>
<td>180A</td>
<td></td>
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<tr>
<td>6</td>
<td>HFP-4-70/210 HPE-4-70/210</td>
<td>70²</td>
<td>210A</td>
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</tbody>
</table>

Remarks:
a. The above specification can be made of various curved ducts with a radius greater than 1M
b. HFPF is a dustproof sliding contact line.

2. JDC-H type, single pole combined sliding contact line
JDC - H single-pole combined type HSMX is made from rare-earth alloy, large amount of iron closure and small voltage. Using the stainless steel strip with good wear resistance in the aluminum guide rail and brush friction parts, to ensure that the mobile guide and valid service life.

Specifications

<table>
<thead>
<tr>
<th>No.</th>
<th>Model</th>
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<th>No.</th>
<th>Model</th>
<th>Specifications</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>JDC-H-150A</td>
<td>90m²</td>
<td>6</td>
<td>JDC-H-150A</td>
<td>90m²</td>
<td>Standard size of 6m can be made into 3 poles and any poles.</td>
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<tr>
<td>2</td>
<td>JDC-H-250A</td>
<td>145m²</td>
<td>7</td>
<td>JDC-H-250A</td>
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<td></td>
</tr>
<tr>
<td>3</td>
<td>JDC-H-320A</td>
<td>180m²</td>
<td>8</td>
<td>JDC-H-320A</td>
<td>180m²</td>
<td></td>
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<tr>
<td>4</td>
<td>JDC-H-500A</td>
<td>300m²</td>
<td>9</td>
<td>JDC-H-500A</td>
<td>300m²</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>JDC-H-800A</td>
<td>450m²</td>
<td></td>
<td>JDC-H-800A</td>
<td>450m²</td>
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</tr>
</tbody>
</table>

3. Seamless type HSMX
Material: non-oxygen copper, contains copper 99.95% above.
More than 100% conductivity.

Specifications:

<table>
<thead>
<tr>
<th>3 poles seamless HSMX</th>
<th>Specifications</th>
<th>Weight (KG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Specifications</td>
<td>Weight (KG)</td>
</tr>
<tr>
<td>HFE302-10mm²</td>
<td>10mm²</td>
<td>0.72/m</td>
</tr>
<tr>
<td>HFE302-15mm²</td>
<td>15mm²</td>
<td>0.82/m</td>
</tr>
<tr>
<td>HFE302-25mm²</td>
<td>25mm²</td>
<td>1.07/m</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>4 poles seamless HSMX</th>
<th>Specifications</th>
<th>Weight (KG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Specifications</td>
<td>Weight (KG)</td>
</tr>
<tr>
<td>HFE402-10mm²</td>
<td>10mm²</td>
<td>0.88/m</td>
</tr>
<tr>
<td>HFE402-15mm²</td>
<td>15mm²</td>
<td>1.00/m</td>
</tr>
<tr>
<td>HFE402-25mm²</td>
<td>25mm²</td>
<td>1.38/m</td>
</tr>
</tbody>
</table>

4. JGH high temperature rigid body sliding contact line
JGH type high temperature rigid body sliding contact line is made up of trapezoidal type copper wire and steel tank bracket in a certain length of split phase group, with high strength special insulating pillar, forming of various sliding contact line indoor and outdoor, it can meet the bad environment requirement of high voltage & abnormal high temperature condition.

CABLE

Cable Properties:
Sheath: special polyvinylidene (Butadiene-acrylonitrile rubber), it remains flexible at -15°C, flame resistance and self-extinguishing.
Thin structure with a minimum bending radius of 10cm, suitable for quick rewinding device, oil resistant and cold resistant, the power cord and communication line can be added in the core (and can also produce the circular structure).
Specification & model: YFFB 0.75-95 mm²
### PARAMETERS OF CHD SERIES DOUBLE GIRDER OVERHEAD CRANE

| Lifting capacity (t) | Span (m) | Lifting height (m) | Travelling speed (m/min) | Lifting speed (m/min) | Electric control code | Crane working class | Crane working class | Trolley gauge W1(mm) | Wheel base W(mm) | Crane width L(mm) | Height above rail H1(mm) | Hook top limit size H2(mm) | Buffer height H3(mm) | Height below rail H4(mm) | Left limit size A1(mm) | Right limit size A2(mm) | Max. wheel load (KN) | Total power (Kw) | Dead weight (kg) |
|---------------------|----------|-------------------|--------------------------|----------------------|-----------------------|----------------------|----------------------|--------------------|------------------|------------------|---------------------|-----------------|----------------------|-----------------|-------------------|--------------------|-----------------|-----------------|
| 7.5 | 12 | 3.2~32 | 08/5.0 | CHD05E | 2m/AS | 2m/MS | 1700 |
| 10.5 | 12 | 3.2~32 | 08/5.0 | CHD10E | 2m/AS | 2m/MS | 1700 |
| 13.5 | 12 | 3.2~32 | 08/5.0 | CHD13E | 2m/AS | 2m/MS | 1700 |
| 16.5 | 12 | 3.2~32 | 08/5.0 | CHD16E | 2m/AS | 2m/MS | 2000 |
| Lifting capacity (t) | Span (m) | Lifting height (m) | Travelling speed (m/min) | Lifting speed (m/min) | Electric control code | Crane working class | Hoist working class | Trolley gauge W/mm | Wheel set width W/mm | Crane width L(mm) | Height above rail H(mm) | Hook top limit size H2(mm) | Buffer height H3(mm) | Height below rail H4(mm) | Left limit size A1(mm) | Right limit size A2(mm) | Max. wheel load (KN) | Total power (kW) | Dead weight (kg) |
|---------------------|---------|------------------|--------------------------|----------------------|----------------------|----------------------|----------------------|----------------|---------------------|----------------|------------------|------------------|----------------|------------------|------------------|----------------|-----------------|
| 20                  | 12      | 3.2~32           | 0.6/4.0                  | CHD20E               | 2m/A5               | 1Am/M4              | 2000                 | 3500 4640 1517 136 250 -99 854 907 99 22.3 5393 10.5 | 3500 4640 1567 186 250 -47 854 907 109 22.3 6702 13.5 | 3500 4640 1619 238 250 53 854 907 118 22.3 8712 16.5 | 3500 4810 1624 243 250 48 854 907 126 22.3 10942 19.5 | 3500 4910 1674 293 250 148 854 907 134 22.3 13104 22.5 | 3500 4910 1724 347 250 200 854 907 141 22.3 15471 25.5 | 4000 5024 1828 447 350 146 854 907 150 22.3 18652 28.5 | 4000 5024 1878 497 350 246 854 907 157 22.3 21331 |
| 25                  | 12      | 3.2~32           | 0.8/3.2                  | CHD25E               | 2m/A5               | 3m/M6              | 2400                 | 4000 5424 1928 547 350 296 854 907 168 22.3 25357 7.5 | 4000 5160 1772 0 250 -206 915 1005 126 27 7349 10.5 | 4000 5160 1872 100 250 -106 915 1005 141 27 9340 13.5 | 4000 5310 1874 102 250 -26 915 1005 149 27 10586 16.5 | 4000 5310 1974 202 250 -4 915 1005 161 27 13950 19.5 | 4000 5274 2024 252 350 96 915 1005 171 27 16653 22.5 | 4000 5474 2074 302 350 146 915 1005 181 27 19798 25.5 | 4000 5474 2124 352 350 246 915 1005 189 27 22610 |
| 32                  | 12      | 3.2~32           | 0.8/3.2                  | CHD32E               | 2m/A5               | 2m/M5              | 2400                 | 4500 5524 2226 454 350 396 915 1005 211 28.6 30746 7.5 | 4500 5240 1664 -108 150 86 980 1040 78 28.6 7329 10.5 | 4500 5190 1764 -8 150 -36 980 1040 87 28.6 10258 13.5 | 4500 5240 1814 42 150 64 980 1040 92 28.6 11506 16.5 | 4500 5290 1929 157 250 149 980 1040 98 28.6 14793 19.5 | 4500 5340 1979 207 250 199 980 1040 103 28.6 16807 22.5 | 4500 5460 2034 262 250 344 980 1040 108 28.6 20449 25.5 | 4500 5510 2084 312 250 394 980 1040 114 28.6 24198 28.5 | 4500 5660 2134 362 250 444 980 1040 119 30.6 27738 31.5 | 4500 5710 2184 362 250 544 980 1040 124 30.6 31698 |
| 40                  | 12      | 3.2~32           | 0.4/9                    | CHD40E               | 2m/A5               | 2m/M5              | 2400                 | 4500 5240 1826 -148 150 -186 980 1040 95 49.8 8366 7.5 | 4500 5240 1976 2 150 -136 980 1040 106 49.8 10564 10.5 | 4500 5290 1993 19 250 1 980 1040 113 49.8 13305 13.5 | 4500 5290 1993 19 250 201 980 1040 120 49.8 16112 16.5 | 4500 5460 2048 74 250 246 980 1040 126 49.8 18939 19.5 | 4500 5510 2098 124 250 346 980 1040 131 49.8 22334 22.5 | 4500 5510 2148 174 250 446 980 1040 137 49.8 26094 25.5 | 4500 5660 2198 224 250 496 980 1040 143 49.8 29861 28.5 | 4500 5710 2248 274 350 496 980 1040 150 49.8 35350 31.5 | 4500 5724 2348 374 350 496 980 1040 157 49.8 39018 |
| 50                  | 12      | 3.2~32           | 0.53/3.2                 | CHD50E               | 2m/A5               | 2m/M5              | 3000                 | 5500 6410 1898 14 250 -154 980 1040 129 49.8 12563 7.5 | 5500 6360 1998 14 250 -46 980 1040 138 49.8 15140 10.5 | 5500 6410 1998 14 250 96 980 1040 146 49.8 18038 13.5 | 5500 6410 2198 214 250 196 980 1040 152 49.8 21069 16.5 | 5500 6410 2198 214 250 196 980 1040 158 49.8 24584 19.5 | 5500 6410 2298 264 250 296 980 1040 164 52.8 28487 22.5 | 5500 6360 2298 314 250 396 980 1040 164 52.8 32847 25.5 | 5500 6424 2398 314 350 448 980 1040 172 52.8 33413 28.5 | 5500 6424 2398 414 350 498 980 1040 177 52.8 37387 31.5 |
SERVICE

Our service solutions are specially made based on different requirements of individual clients. Meeting their standards could remove any of their worries. Including:

- Customized solutions
- Reliable, efficient and safe crane equipment
- High quality packaging
- Installation and assembly & test running
- Professional training
- Plenty of spare parts
- Maintenance
- Analysis and suggestions
- Intelligent crane design software
- The experienced team of engineers

Clescrane’s service pack is safe and costs less. Clescrane’s service pack also applies to cranes and hosts produced by other manufacturers.

OPTIONS

Safety
Sophisticated load handling methods reduces the risk of collisions and accidents.

Productivity
Time savings in load handling and final positioning makes processes more efficient.

Cost savings
Longer lifetime of components and less maintenance work results in better economy.

Advanced Product Solution Constant Innovation Based on the Demand of Customers