



Calculation number: Cal\_KD50t-16.5-12m  
Crane work number: KD50t x16.5m Hol:12m  
User/Version: RUSAT/ 4.0.39D  
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## CRANE DATA

### 1 General

Crane type .....KD50t x16.5m Hol:12m  
Span ..... 16.5m  
Crane load (SWL) .....50000kg  
Number of hoists ..... 1 ps  
Hoisting height ..... 12m (max12.6m)  
Hoist type.....K6206D0500M512AD06N  
Trolley rail gauge .....2700mm  
Crane use .....Indoor

Crane group .....FEM A5  
Hoist group .....M5(FEM 2m)  
Hoist traversing group .....M5(FEM 2m)  
Bridge traveling group .....M5(FEM 2m)

Hoisting speed .....2.5/0.4      2-speed  
Trolley traversing speed .....0-20 m/min      Stepless  
Bridge traveling speed .....0-32 m/min      Stepless

Dynamic coefficient for load ..... 1.17  
Dynamic coefficient dead load ..... 1.1  
Sideways pull factor .....N/A  
Crane acceleration .....0.1m/s<sup>2</sup>

Weight of crane (with hoists) .....15497 kg  
Weight of crane bridge (without hoists) ..... 12334 kg  
Weight of one hoist and trolley .....3163 kg  
Weight of one end carriage .....648 kg  
Weight of one crane traveling machinery .....20 kg  
Weight of bridge panel .....50kg  
Weight of one main girder .....4649 kg  
Weight of crane service platform ..... 1171 kg

Main girder type (Box) .....490/1080/8/12/8/12-Q235  
Service platform type .....Bottom joint  
Surface preparation type .....Sa2.5  
Painting type .....Epoxy

### 2 Electrical

Main voltage .....380V/50Hz  
Control voltage .....48AC  
Nominal power of crane .....38.8kW  
Maximum current of crane\*) .....N/A  
Nominal current of crane\*) .....89.8Ass  
Power factor at starting current .....0.67  
Power factor at nominal current .....0.91  
Voltage drop of trolley power supply .....<= 2%  
Voltage drop of crane power supply .....N/A