



Calculation number: Cal\_KD16t-13.5-12m  
 Crane work number: KD16t x13.5m Hol:12m  
 User/Version: RUSAT/ 4.0.39D  
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## CRANE DATA

### 1 General

Crane type .....KD16t x13.5m Hol:12m  
 Span ..... 13.5m  
 Crane load (SWL) ..... 16000kg  
 Number of hoists ..... 1 ps  
 Hoisting height ..... 12m (max12m)  
 Hoist type.....K5104D0160M512CD06N  
 Trolley rail gauge .....2000mm  
 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 .....4/0.7 2-speed  
 Trolley traversing speed .....0-20 m/min Stepless  
 Bridge traveling speed .....0-32 m/min Stepless

Dynamic coefficient for load .....1.18  
 Dynamic coefficient dead load .....1.1  
 Sideways pull factor .....N/A  
 Crane acceleration .....0.12m/s<sup>2</sup>

Weight of crane (with hoists) .....8330 kg  
 Weight of crane bridge (without hoists) .....6785 kg  
 Weight of one hoist and trolley ..... 1545 kg  
 Weight of one end carriage.....608 kg  
 Weight of one crane traveling machinery .....20 kg  
 Weight of bridge panel .....50kg  
 Weight of one main girder .....2081 kg  
 Weight of crane service platform .....958 kg

Main girder type (Box) .....410/740/6/8/6/8-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 ..... 18.5kW  
 Maximum current of crane\*) .....N/A  
 Nominal current of crane\*) .....42.2Ass  
 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