



Calculation number: CaL\_KD80t-22.5-12m  
 Crane work number: KD80t x22.5m Hol:12m  
 User/Version: RUSAT/ 4.0.39D  
 Printing date: 2024/02/15  
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## CRANE DATA

### 1 General

Crane type .....KD80t x22.5m Hol:12m  
 Span .....22.5m  
 Crane load (SWL) .....80000kg  
 Number of hoists .....1 ps  
 Hoisting height .....12m (max14m)  
 Hoist type.....K6208D0800M414AD06N  
 Trolley rail gauge .....3800mm  
 Crane use .....Indoor

Crane group .....FEM A5  
 Hoist group .....M4(FEM 1Am )  
 Hoist traversing group .....M5(FEM 2m)  
 Bridge traveling group .....M5(FEM 2m)

Hoisting speed .....2/0.3 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 .....0.13m/s<sup>2</sup>

Weight of crane (with hoists) .....31311 kg  
 Weight of crane bridge (without hoists) .....26781 kg  
 Weight of one hoist and trolley .....4530 kg  
 Weight of one end carriage .....1556 kg  
 Weight of one crane traveling machinery .....38 kg  
 Weight of bridge panel .....50kg  
 Weight of one main girder .....10636 kg  
 Weight of crane service platform .....1597 kg

Main girder type (Box) .....740/1480/8/16/8/20-Q235  
 Service platform type .....Side joint  
 Surface preparation type .....Sa2.5  
 Painting type .....Epoxy

### 2 Electrical

Main voltage .....380V/50Hz  
 Control voltage .....48AC  
 Nominal power of crane .....43.2kW  
 Maximum current of crane\*) .....N/A  
 Nominal current of crane\*) .....105.4Ass  
 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