



# YUANTAI CRANE

## Metallurgical Wire Rope Electric Hoist Specifications



- Compact structure, light, safe and reliable.
- The spare parts are generalization and strong interchangeability.
- High security, easy maintenance.
- Thermal radiation protection.

## Part 1 Introduction

### ◆ Overall Features

- (1) Compact design, light weight, safe and reliable.
- (2) The spare parts are generalization and strong interchangeability.
- (3) High security, easy maintenance
- (4) Thermal radiation protection



### ◆ Supply scope

Electric hoist of lifting capacity 1-10t, lifting height 1-20m, working duty medium (M6), and also can produce non-standard products according to your requirements.

### ◆ Main application

Applied to lifting molten metal or other high temperature solid-state items.

It can be used as the lifting mechanism of the single girder crane, single girder suspension crane and double girder with hoist crane. It also can be used independently when installed on the fixed overhead track.

Its design and manufacture meet the national standard (No. 【2007】 375 Document) issued by AQSIQ. It is the special and safe lifting equipment widely used in the small and medium size metallurgical work place.

### ◆ Conditions

Ambient temperature:  $-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$ , moisture:  $\leq 85\%$ . 380V, 50Hz, 3 phases is applied to the condition of  $40^{\circ}\text{C}$ , moisture  $\leq 50\%$ , altitude below 1000m. (It also can be customize according to customers' requirements)

### ◆ Classification & Specification

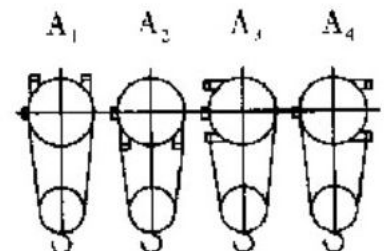
Metallurgy Single Speed and Metallurgy Double Speed.

Note: For example, YH 5t-9m, means lifting capacity 5t, lifting height 9m, single speed, metallurgy operating electric hoist.

### ◆ Structure Layout

Stationary type and operation type both included.

As shown on the right: A1、A2、A3、A4 separately fixed on the up, down, left and right side. A2 always used on the trolley of double beam crane with hoist. It is usually operation type without special explanation, traveling along with beams.



### ◆ Main Parts & Characteristics

#### (1) Lifting Mechanism

##### ➡ Lifting Motor

1. Adopts large starting torque conical brake asynchronous motor.



2. Insulation class is H
3. Equipped with overheat protection device inside the lifting motor.
4. Smooth working, small in size, light weight
5. ZD type motor for single speed, and ZDD type for double speed. The ratio of normal and low speed of ZDD motor is 4:1.

▣ Reducer

1. Three-level dead axle helical gear rotating body, long service life
2. Gear and the axle made by alloy steel after heat treatment, high intensity
3. Box and cover made from superior cast iron, fully covered
4. Great speed ratio, high accuracy
5. Compact structure, silent operation, high efficiency
6. Machinery oils
7. Easily assemble and disassemble



▣ Drum

1. Equipped with emergency safety brake device
2. Safe brake without electricity (pure mechanical), no influence of electricity.
3. Others same as wire rope electric hoist

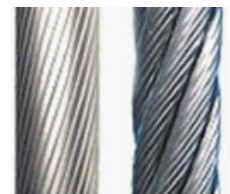
▣ Hook

1. Forge with special steel; thrust ball bearing connect with casing through hook and beam to make the hook operate freely.
2. No more than 5t :single pulley hook; More than 10t: double pulley hook.
3. High security, safety buckle, mousing hook



▣ Wire Rope

1. Adopt metal cable core wire rope
2. Safe and reliable



(2) Travelling Mechanism

▣ Traveling motor

1. Consist of electric trolley, travelling reducer, travelling motor, driven trolley, etc. The mechanism do reciprocating motion through main engine driven by side plate and drum.
2. The wheel tread is straight when used with box type girder or H beam.
3. The wheel tread is circular arc when used with I-beam.
4. Its travelling speed is 20m/min, but 30m/min is possible; if 1~5t capacity with 12m or higher lifting height, a driven trolley is necessary.

▣ Electrical Equipment

1. Equipped with protection devices such as double brakes, double limit, heat shield, etc.
2. Lifting mechanism have the function of forward and reverse contactor error protection.
3. Others same as wire rope electric hoist.



## Part 2 Parameters

YH Metallurgical Electric Hoist (Lifting single speed)							
Capacity	t	2					
Hoisting speed	m/min	8					
Travel speed	m/min	20					
Lifting motor	Type	ZD1 31-4/3kw					
Operation motor	Type	ZDY1 12-4/0.4kw					
Track		20a~30c					
Wire rope	Dia.(mm)	11					
	Specification	6×37+IWR					
Hoisting height	m	9	12	15	18	20	
Min curvature radius	m	2	3	4	5	6	
Weight (Operation type)	kg	439	457	479	494	505	
Weight (Stationary type)	kg	409	427	449	464	475	
Capacity	t	3					
Hoisting speed	m/min	8					
Travel speed	m/min	20					
Lifting motor	Type	ZD1 32-4/4.5kw					
Operation motor	Type	ZDY1 12-4/0.4kw					
Track		20a~30c					
Wire rope	Dia.(mm)	13					
	Specification	6×37+IWR					
Hoisting height	m	9	12	15	18	20	
Min curvature radius	m	2	3	4	5	6	
Weight (Operation type)	kg	475	493	515	530	541	
Weight (Stationary type)	kg	445	463	485	500	511	
Capacity	t	5					
Hoisting speed	m/min	8					
Travel speed	m/min	20					
Lifting motor	Type	ZD1 41-4/7.5kw					
Operation motor	Type	ZDY1 21-4/0.8kw					
Track		25a~50b					
Wire rope	Dia.(mm)	15					
	Specification	6×37+IWR					
Hoisting height	m	9	12	15	18	20	
Min curvature radius	m	2.5	3	4	5	6	
Weight (Operation type)	kg	679	752	776	794	809	
Weight (Stationary type)	kg	644	717	741	759	774	

Capacity	t	10					
Hoisting speed	m/min	7					
Travel speed	m/min	20					
Lifting motor	Type	ZD1 51-4/13kw					
Operation motor	Type	ZDY1 21-4/0.8kw					
Track		32b~50b					
Wire rope	Dia.(mm)	15					
	Specification	6×37+IWR					
Hoisting height	m	9	12	15	18	20	
Min curvature radius	m	3.5	4	6	7.5	9	
Weight (Operation type)	kg	1169	1221	1282	1326	1396	
Weight (Stationary type)	kg	1129	1181	1242	1286	1356	

#### YH Metallurgical Electric Hoist (Lifting double speed)

Capacity	t	2					
Hoisting speed	m/min	2/8					
Travel speed	m/min	20					
Lifting motor	Type	ZDD 32-4/16 3/0.75kw					
Operation motor	Type	ZDY1 12-4/0.4kw					
Track		20a~30c					
Wire rope	Dia.(mm)	11					
	Specification	6×37+IWR					
Hoisting height	m	9	12	15	18	20	
Min curvature radius	m	2	3	4	5	6	
Weight (Operation type)	kg	482	500	525	545	555	
Weight (Stationary type)	kg	450	470	490	510	525	

Capacity	t	3					
Hoisting speed	m/min	2/8					
Travel speed	m/min	20					
Lifting motor	Type	ZDD 41-4/16 4.5/1.1kw					
Operation motor	Type	ZDY1 12-4/0.4kw					
Track		20a~30c					
Wire rope	Dia.(mm)	13					
	Specification	6×37+IWR					
Hoisting height	m	9	12	15	18	20	
Min curvature radius	m	2	3	4	5	6	
Weight (Operation type)	kg	521	540	565	582	595	
Weight (Stationary type)	kg	490	510	533	550	560	

Capacity	t	5					
Hoisting speed	m/min	2/8					
Travel speed	m/min	20					
Lifting motor	Type	ZDD 51-4/20 7.5/2kw					
Operation motor	Type	ZDY1 21-4/0.8kw					
Track		25a~50b					
Wire rope	Dia.(mm)	15					
	Specification	6×37+IWR					
Hoisting height	m	9	12	15	18	20	
Min curvature radius	m	2.5	3	4	5	6	
Weight (Operation type)	kg	747	827	854	875	890	
Weight (Stationary type)	kg	710	789	815	835	854	

Capacity	t	10					
Hoisting speed	m/min	1.75/7					
Travel speed	m/min	20					
Lifting motor	Type	ZDD 52-4/20 13/3.25kw					
Operation motor	Type	ZDY1 21-4/0.8kw					
Track		32b~50b					
Wire rope	Dia.(mm)	15					
	Specification	6×37+IWR					
Hoisting height	m	9	12	15	18	20	
Min curvature radius	m	3.5	4	6	7.5	9	
Weight (Operation type)	kg	1286	1343	1410	1458	1536	
Weight (Stationary type)	kg	1420	1300	1366	1415	1490	



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Tips:

You can use the phone dimensional code recognition software to scan the right side of the two-dimensional code, to quickly and easily access our web site for more information.