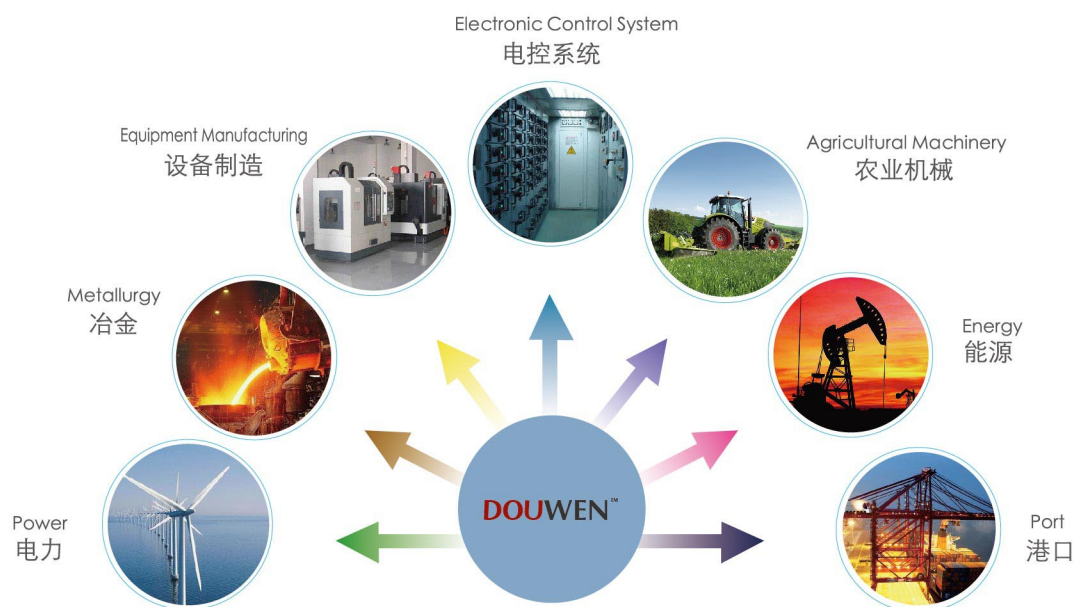


DOUWENTM Intelligent Reels
The Specialist of All Power System



DOUWEN is a professional mobile power system manufacturers, we focus on supplying the overall solution for the best mobile power technology in the world. Our mobile power system is widely used in crane, logistics, port, aviation, metallurgy, ocean, petroleum, power, energy, mining, chemical, machinery manufacturing and other industries.

Our mobile power system mainly includes: the festoon system, conductor rails system, reel system, energy transferring chain system, wireless power supply system, equipment control system, integrated cable system and its accessories.

DOUWEN— Innovation power system for a better future!

多稳是一家专业的移动供电系统制造商，我们专注于为全球客户提供最佳移动供电技术整体解决方案。我们的移动供电系统广泛的应用于起重、物流、港口、航空、冶金、海洋、石油、电力、能源、采矿、化工、机械制造等行业。

我们的移动供电系统主要包括：拖令系统、滑线系统、卷筒系统、拖链系统、无线供电系统、设备控制系统、电缆集成系统及其附件。

多稳——创新动力创造美好未来！



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Douwen Reel Technical Characteristic

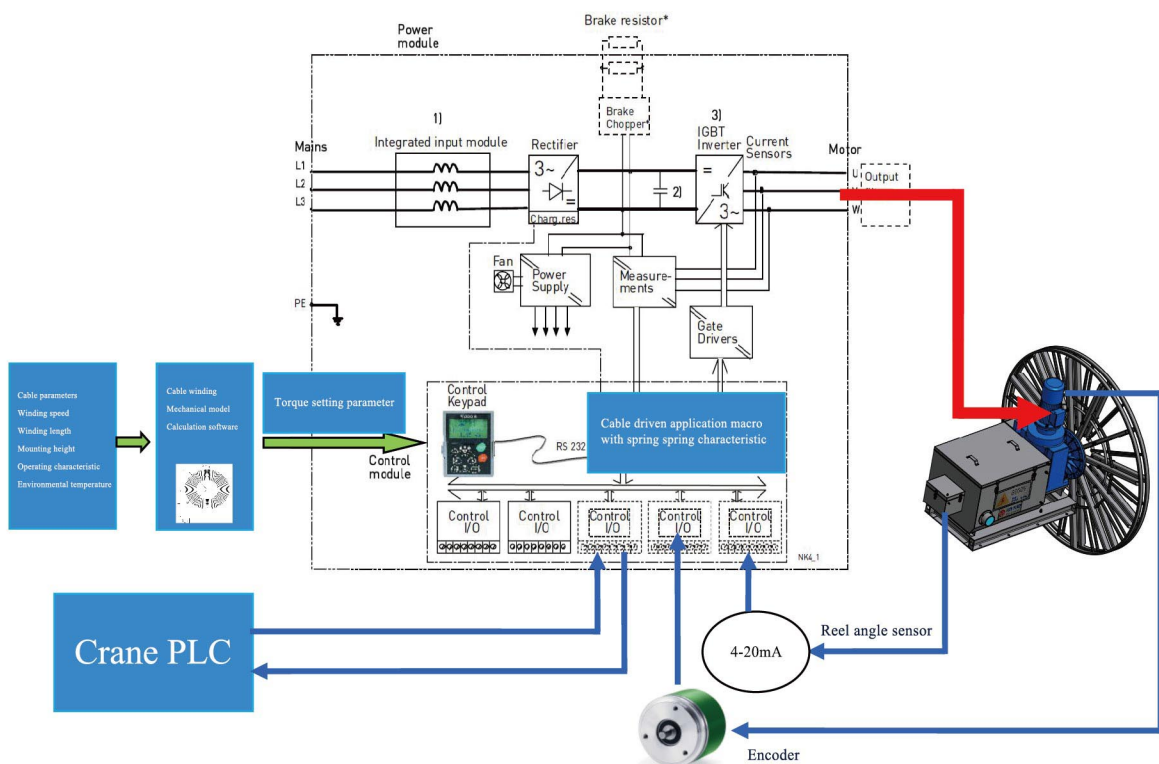
多稳卷筒技术特征

- | | |
|--|-------------------|
| ① The electric reel is driven by frequency conversion mode | ① 电动卷盘全部采用变频方式驱动 |
| ② Speed: 0-300m/min | ② 速度广: 0-300m/min |
| ③ Stroke: 0-2000m | ③ 行程长: 0-2000m |
| ④ Special protection: anti lock, anti slide | ④ 特有保护: 防抱死、防滑落 |
| ⑤ Automatic torque control technology | ⑤ 自动变扭矩控制技术 |
| ⑥ All reels are made of stainless steel or hot dip galvanized material | ⑥ 所有卷盘采用不锈钢或热浸锌材料 |
| ⑦ All fasteners are made of stainless steel | ⑦ 所有的紧固件采用不锈钢材质 |
| ⑧ Protection level IP55 | ⑧ 防护等级IP55以上 |



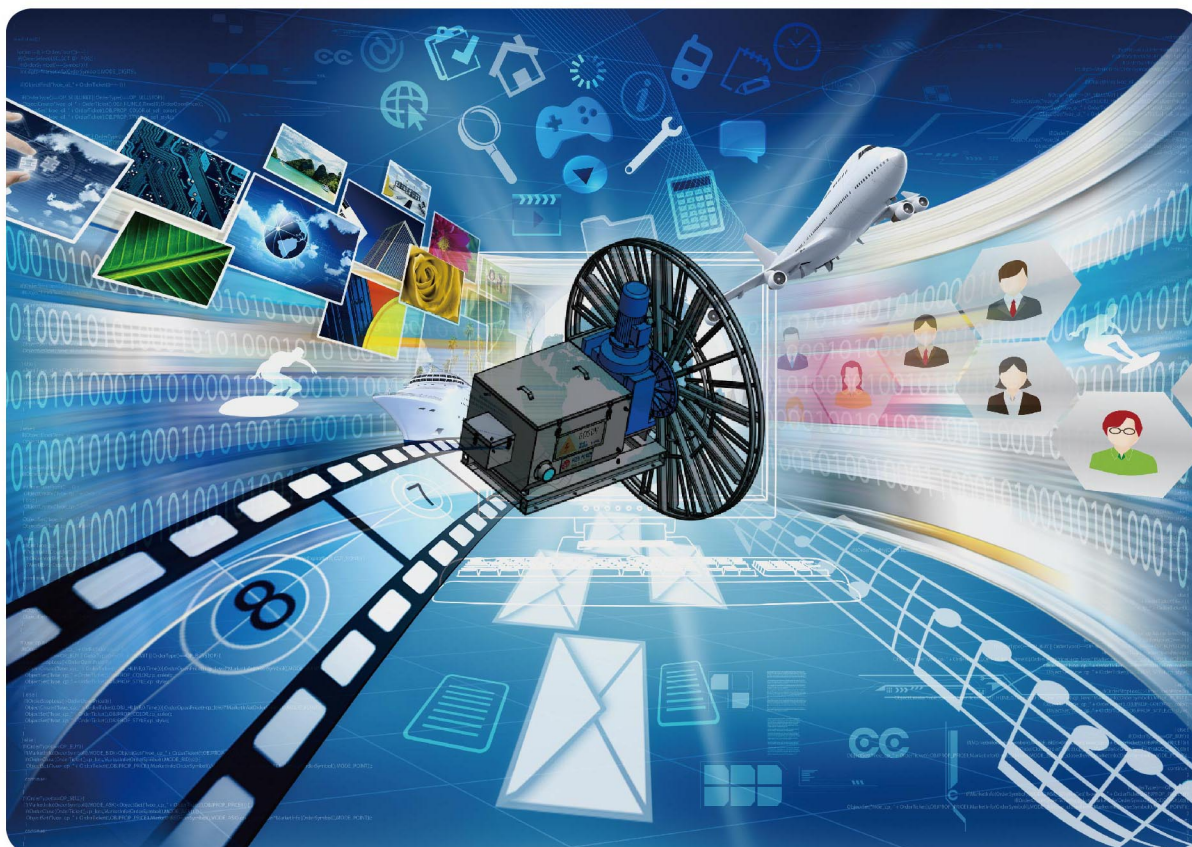
Diagram Of Variable Frequency Linear Automatic Variable Torque Control System

变频线性自动变扭矩控制系统框图



Remote Monitoring Platform

卷筒远程监控平台



DOUWEN Cable reel

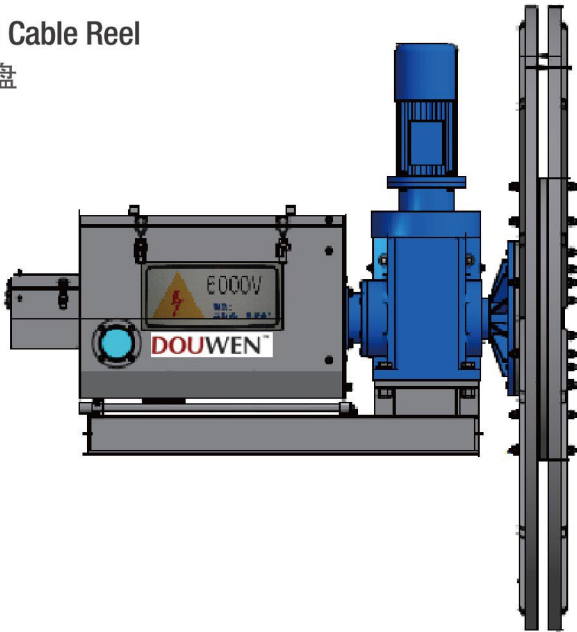
多稳电缆卷筒



Frequency Conversion Driven Cable Reel (EHD Series)

变频驱动的电 缆卷筒（EHD系列）

Disc High Voltage Cable Reel
盘式高压电 缆卷盘



Specifications 参数

Travel speed	速度范围	up to 300m/min
Winding length	卷起长度	800m max
OD of spool	卷盘直径	800-8500mm
Torque	扭矩	1000Nm-20000Nm
Voltage	电压	6.6kv-20kv
Electric current	电流	10A-300A
Temperature	温度	-40℃ -60℃

Typical application:

Port machinery RTG, RMG, STS
Bulk conveying stacker
Tunnel construction equipment shield machine, wet jet machine
Metallurgical equipment tanker
Other

典型运用：

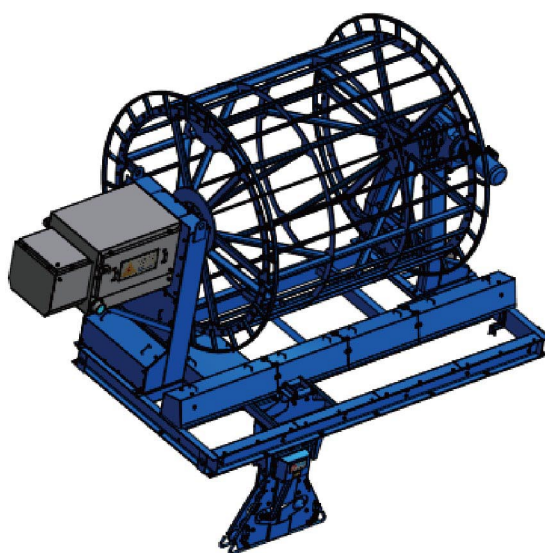
港口机械 RTG、RMG、STS
散货输送 堆取料机
隧道施工设备 盾构机、湿喷机
冶金设备 罐车
其他

Frequency Conversion Driven Cable Reel (EHR Series)

变频驱动的电 缆卷筒（EHR系列）

Barrel High Voltage Cable Reel

筒式高压电 缆卷盘



Specifications 参数

Travel speed	速度范围	up to 300m/min
Winding length	卷起长度	2000m max
OD of spool	卷筒直径	800-3500mm
Torque	扭矩	1000Nm-20000Nm
Voltage	电压	6.6kv-20kv
Electric current	电流	10A-300A
Temperature	温度	-40℃-60℃

Typical application:

Port machinery RTG, RMG, STS

Bulk conveying stacker

Tunnel construction equipment shield machine, wet jet machine

Metallurgical equipment tanker

Other

典型运用：

港口机械 RTG、RMG、STS

散货输送 堆取料机

隧道施工设备 盾构机、湿喷机

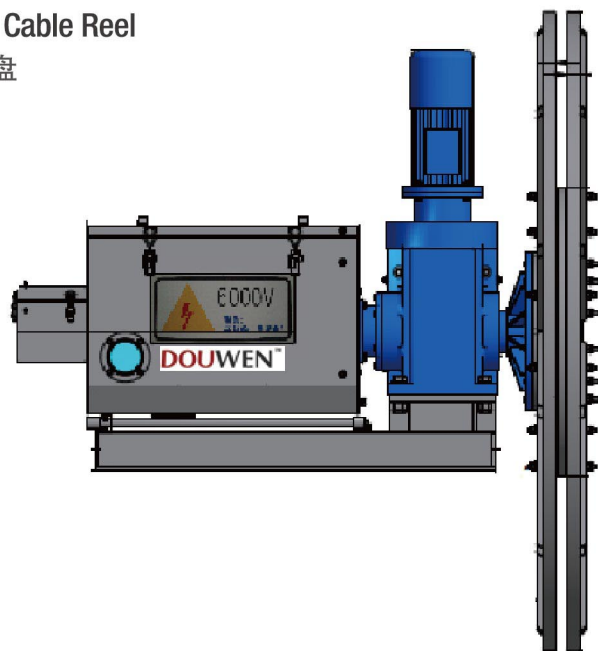
冶金设备 罐车

其他

Frequency Conversion Driven Cable Reel (ELD Series)

变频驱动的电 缆卷筒（ELD系列）

Disc Low Voltage Cable Reel
盘式低压电 缆卷盘



Specifications 参数

Travel speed	速度范围	up to 300m/min
Winging length	卷起长度	800m max
OD of spool	卷盘直径	800-8500mm
Torque	扭矩	1000Nm-20000Nm
Voltage	电压	380v-690v
Electric current	电流	1600A max
Temperature	温度	-40℃ -60℃

Typical application:

Port machinery RTG, RMG, STS
Bulk conveying stacker
Tunnel construction equipment shield machine, wet jet machine
Metallurgical equipment tanker
Other

典型运用：

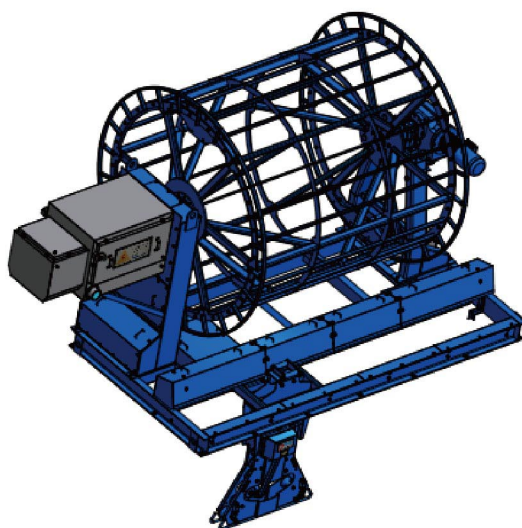
港口机械 RTG、RMG、STS
散货输送 堆取料机
隧道施工设备 盾构机、湿喷机
冶金设备 罐车
其他

Frequency Conversion Driven Cable Reel (ELR Series)

变频驱动的电 缆卷筒（ELR系列）

Barrel Low Voltage Cable Reel

筒式低压电 缆卷盘



Specifications 参数

Travel speed	速度范围	up to 300m/min
Winding length	卷起长度	800m max
OD of spool	卷筒直径	800-8500mm
Torque	扭矩	1000Nm-20000Nm
Voltage	电压	380v-690v
Electric current	电流	1600A max
Temperature	温度	-40℃-60℃

Typical application:

Port machinery RTG, RMG, STS

Bulk conveying stacker

Tunnel construction equipment shield machine, wet jet machine

Metallurgical equipment tanker

Other

典型运用：

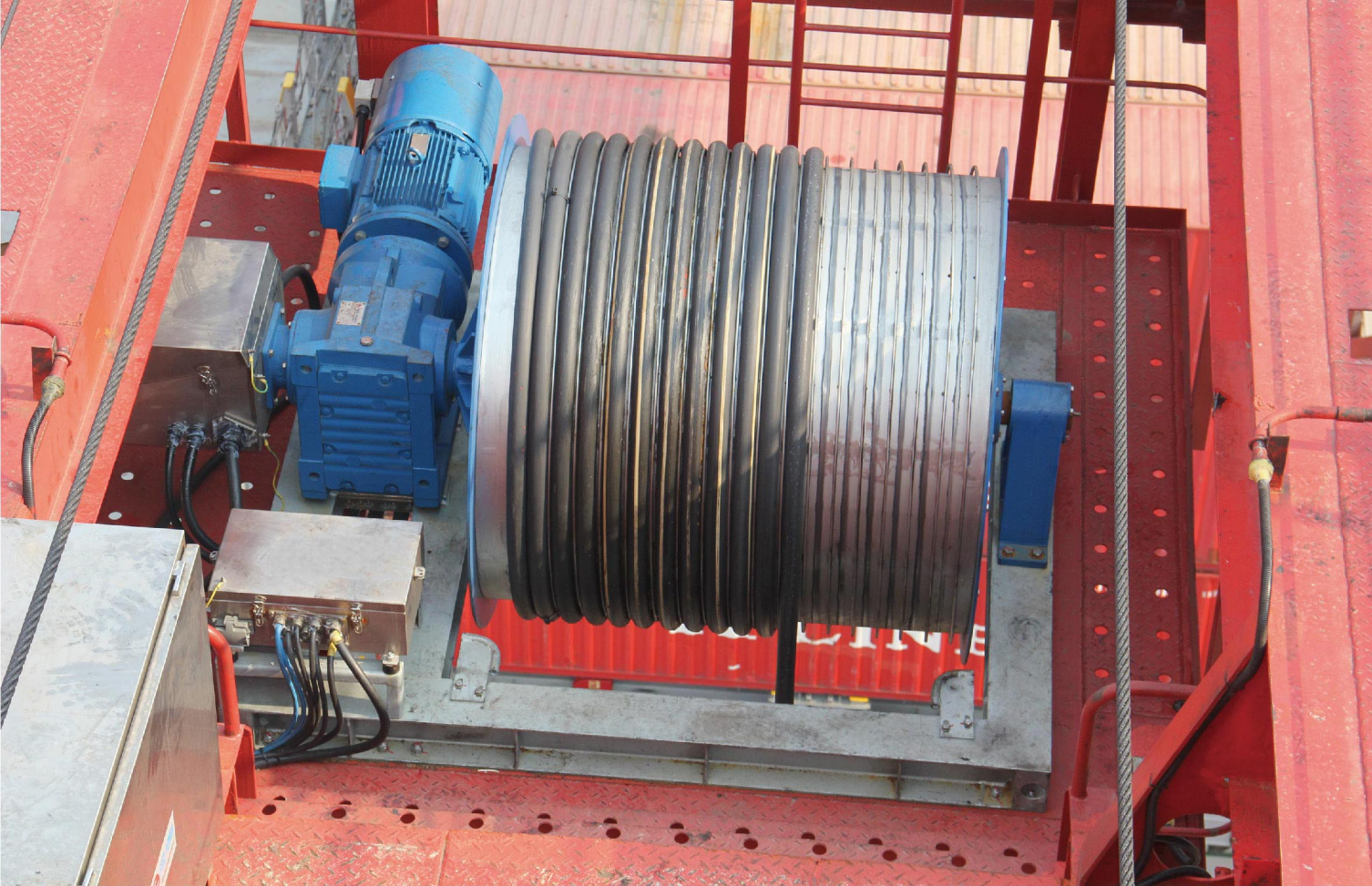
港口机械 RTG、RMG、STS

散货输送 堆取料机

隧道施工设备 盾构机、湿喷机

冶金设备 罐车

其他





Power /Control / Water reel

In the application of the stacker reclaimer

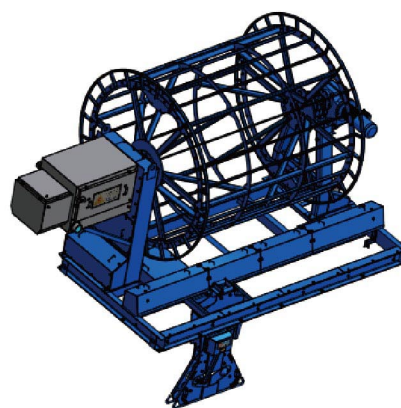
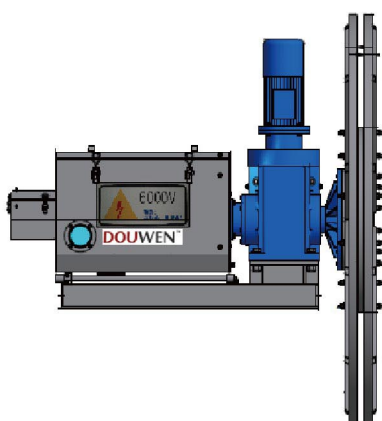
动力/控制/水缆卷筒在堆取料机上的应用

Frequency Conversion Driven Water Cable Reel (EW Series)

变频水缆卷筒 (EW系列)

Disc / Barrel Water Cable Reel

盘式/筒式水缆卷盘



Specifications 参数

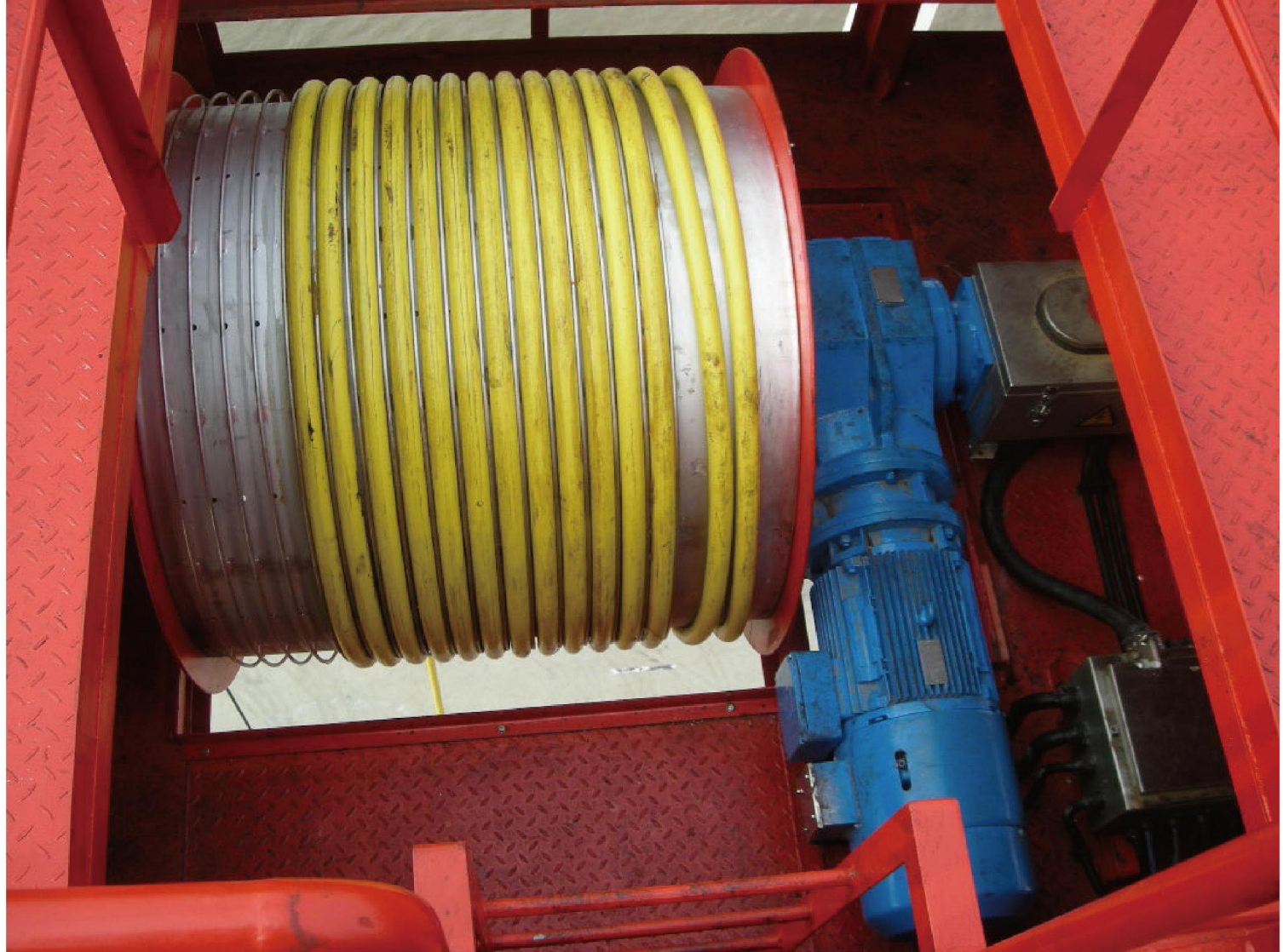
Travel speed	速度范围	up to 300m/min
Winding length	卷起长度	800m max
OD of spool	卷盘直径	800-8500mm
Torque	扭矩	1000Nm-20000Nm
Temperature	温度	-40℃ -60℃

Typical application:

Bulk conveying stacker

典型运用:

散货输送 堆取料机

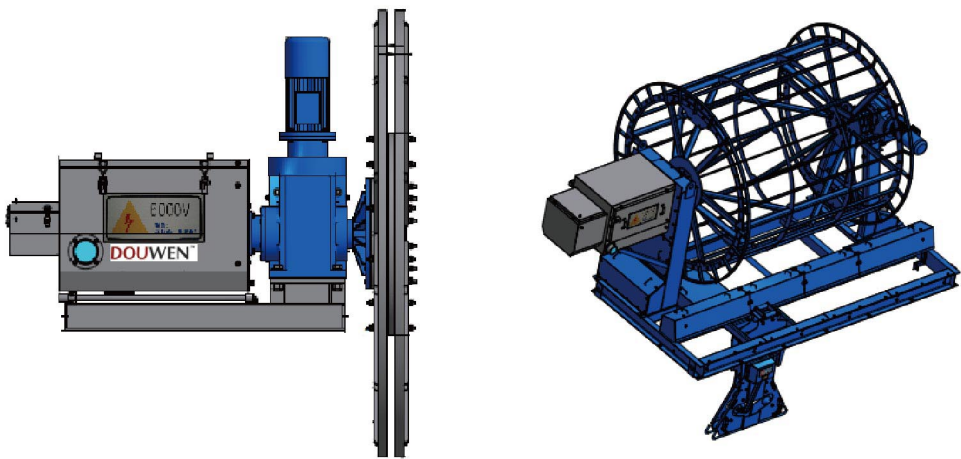


Frequency Conversion Driven Cable Reel (ES Series)

变频驱动的电 缆卷筒（ES系列）

Spreader Cable Reel

吊具电 缆卷盘



Specifications 参数

Travel speed	速度范围	up to 300m/min
Winding length	卷起长度	300m max
OD of spool	卷筒直径	800-8500mm
Torque	扭矩	1000Nm-20000Nm
Voltage	电压	1000V max
Electric current	电流	30A
Temperature	温度	-40℃-60℃

Typical application:

The crane, grab crane
Other

典型运用：

集装箱吊具、抓斗吊
其他

Main component

主要部件

Slip Ring Box

滑环箱

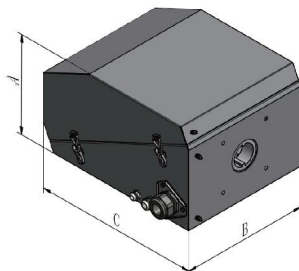
Slip ring box were according to the NEMA standard design, made of stainless steel, IP55; all the slip ring box are equipped with anti condensation heater and cam limit bit (built-in).

The slip ring box line current rating from 30, 60, 120, 240, 400, 600, 1200 and 2400 amp, according to user's need to make special rotary valve (water valve or valve).

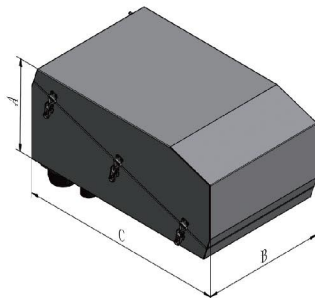
滑环箱均按NEMA规范设计，用不锈钢制造，防护等级IP55；所有的滑环箱均装有防冷凝加热器和凸轮限位总成（内置）。
滑环箱的额定电流等级从30、60、120、240、400、600、1200和2400安培，可以按用户的需要做出特殊的旋转阀（水阀或气阀）。

Slip Control Box

控制滑环箱



型号 Model	额定电流(A) Rated current (A)	工作电流(A) Working current (A)	额定电压(V) Rated voltage (V)	最大电缆规格 (mm) Maximum cable Specification (mm)	外形尺寸 (mm) Dimension (mm)		
					A	B	C
CC12	30	10	600	2.5	310	370	360
CC24	30	10	600	2.5	310	460	360
CC48	30	10	600	2.5	310	420	700

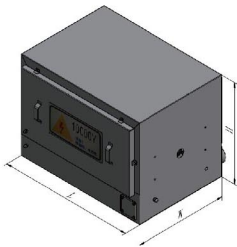


型号 Model	额定电流(A) Rated current (A)	工作电流(A) Working current (A)	额定电压(V) Rated voltage (V)	最大电缆规格 (mm) Maximum cable Specification (mm)	外形尺寸 (mm) Dimension (mm)		
					A	B	C
DK412	120	60	1000	25	310	370	300
DK424	240	120	1000	35	310	370	300
DK440	400	200	1000	70	310	460	300
DK460	600	300	1000	240	410	670	380
DK4120	1200	600	1000	2x240	520	810	520

MV (slip ring collector)
中压滑环箱（集电器）

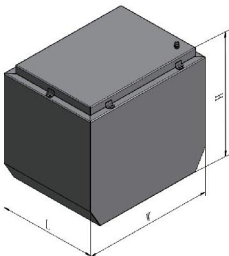
Medium voltage ring box were according to the NEMA standard design, made of stainless steel, IP55; all of the slip ring box are equipped with anti condensation heater and cam limit bit assembly. Connected with various types of gear box can also easily slip ring, connected with the fiber box. According to the needs of users, make the most reasonable selection.

中压滑环箱均按NEMA规范设计，用不锈钢制造，防护等级IP55；所有的滑环箱均装有防冷凝加热器和凸轮限位总成。滑环箱可以与各个型号减速机连接，也很容易与光纤箱连接。能根据用户的需要，做出最合理的选型。

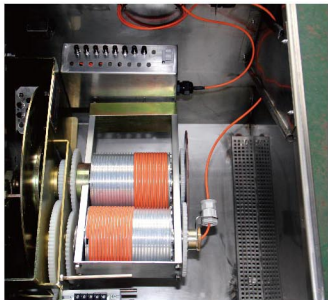


型号 Model	额定 电流 (A) Rated current (A)	工作电流 (A) Working current (A)	额定电压 (V) Rated voltage (V)	最大电压 (KV) Maximum voltage (KV)	外形尺寸 (mm) Dimension (mm)		
					A	B	C
DK460/3010	600	300	6000	7200	850	700	590
DK460/3013	600	300	10000	12000	1000	700	730
DK460/4517	600	300	15000	18000	1100	930	1100
DK460/4522	600	300	20000	24000	1450	1115	1200

Fiber optic coupler
光纤耦合器



圈数 Circle the number	光纤芯数 Working current (A)	L	W	H
40	6到12	500	600	550
	超过12	600	650	650
50	6到12	500	600	550
	超过12	600	650	650
70	6到12	600	600	550
	超过12	700	650	650
110	6到12	750	600	550
	超过12	850	650	650



Working environment temperature 工作环境温度	-25 to 60 -25℃到60℃
Relative humidity 相对湿度	< 90%, There is no condensation on the surface < 90%, 表面没有冷凝
Fiber ring number 光纤圈数	40/50/70/110
Fiber optic form 光纤的形式	Single-mode 9/125 m; multimode 62.5/125 单模9/125μm; 多模62.5/125
Usual connection mode 通常连接方式	ST-PC or FC-PC plug ST-PC或FC-PC插头

Main component

主要部件

Control Box

控制箱

Control box is designed according to NEMA specification, made of stainless steel, protection grade IP55, D/I logic linear variable torque drive technology.

控制箱均按NEMA规范设计，用不锈钢制造，防护等级IP55；D/I逻辑线性变扭矩驱动技术。



Outdoor Control Box
户外形控制箱



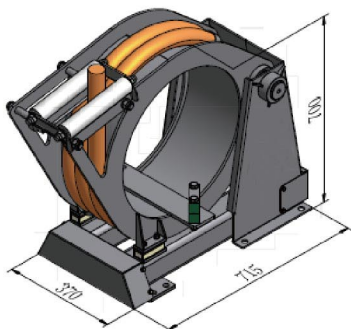
Indoor Control Box
室内控制箱

Cable Buffer

电缆缓冲器

The cable buffer can effectively prevent the cable from being pulled hard, the spring maximum pull of the buffer 5000N.

电缆缓冲器能有效防止电缆被硬性拉拽，缓冲器的弹簧最大拉力5000N。

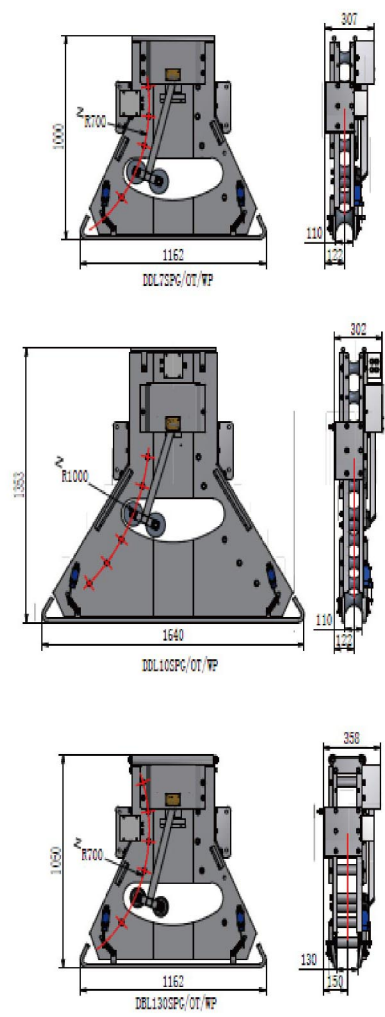


Cable Buffer
电缆缓冲器

Cable Guide Frame
导缆架

Cable fairlead frame is arranged between the reel and cable tray, chock roller center is aligned with the center of the reel; cable through the guide wheel into the cable tray or winding to reel; fairlead frame can effectively protect the cable.

电缆导缆架安装于卷筒和电缆桥架之间，导缆架滚轮中心对准卷盘的中心；电缆通过导向轮进入电缆桥架或卷绕到卷盘上；导缆架能有效保护电缆。



型号 Model	电缆形式 Cable form	最大低压电缆外径 (mm) Maximum external diameter of low-voltage cable (mm)	最大中压电缆外径 (mm) Maximum medium diameter of MV cable (mm)	重量(Kg) Weight(Kg)
DDL7	圆	76	63	66
DDL10	圆	97	89	98
DBL130	扁	130	100	73



Intelligent Reel Selection

Parameter List

智能卷盘选型参数表

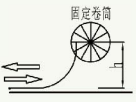
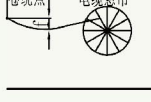
应用描述 Application description

设备型号: Equipment type		用途: Uses:	
设备主电源 Power supply	V/HZ	最大功率 Maximum power	KW
设备控制电源 Equipment control power supply	V/HZ	电缆卷筒工作制 Cable reel working	ED%
电缆卷筒马达电源 Cable reel motor power supply	V/HZ	环境温度 Environment temperature	℃
自然环境/腐蚀程度: Natural environment / corrosion degree:			
标准控制接口 Standard control	远程控制接口 Remote control	远程控制系统 Remote control system	

电缆/水缆描述 Cable / cable description

电缆额定电压 Cable voltage	V/AC	水缆通径 Diameter	mm□ mm	英寸□ Inch
电缆的芯数和横截面 Cable core number and cross section	mm²	水缆工作压力 Working pressure of water cable	bar	
电缆外径 Diameter	mm	水缆外径 Diameter	mm	
电缆重量 Weight	kg/m	水缆重量 (空管) Weight (air traffic control)	kg/m	
最大拉力 Maximum force	N	最大拉力 Maximum force	N	
含有光纤 Fiber	YES	流动的液体 Liquid flow	型号 Model	
光纤型号 Fiber type	μm			

卷绕方式描述 Winding mode description

水平方向收放缆 Horizontal retractable cable			垂直方向收放缆 Vertical retractable cable	
☐ 移动的设备 Mobile devices 	☐ 固定的设备 Fixed equipment 	☐ f max= 	☐ 垂直向下 Vertical downward 	☐ 垂直向上 Vertical upward 
卷绕点位置 Winding point position ☐ 在行程的中点 At the midpoint of the stroke ☐ 在行程的终点 At the end of the trip				
有效卷绕长度 Effective winding length m			有效卷绕长度 Effective winding length m	
最大行走速度 Maximum walking speed m/min			最大行走速度 Maximum walking speed m/min	
加速度 Acceleration ☐ m/sec² ☐ sec			加速度 Acceleration ☐ m/sec² ☐ sec	
安装高度 (h) Install height (卷盘中心到地面高度) (the center of the reel to the height of the ground) m			安装高度 (h) Install height (卷盘中心到地面高度) (the center of the reel to the height of the ground) m	
卷筒类型: ☐ 单排螺旋形 ☐ 多排螺旋形 ☐ 水平卷筒 Drum type: single row helical multi row helical horizontal reel			固定圈数 _____ 圈 fixed circle number circle	

附加技术要求: Additional technical requirements:

Cable Type Reference Table

电缆选型参考表

结构 Application									
	筒式系统Basic Reeling Systems			盘式系统Duty Reeling Systems					
动力/控制/数据 Power / Control/Data									
	RLR	RMO	RM	FLO	FL	RLR-SD	RLR-S	RMO	RLRM
材料 Material	Pur/Rubber	Pur/Rubber	Pur/Rubber	Rubber	Rubber	Pur/Rubber	PUR	Rubber	Rubber
电压 Voltage	0.6/1kv	3.6/6 kv up to 12/20 kv	3.6/6 kv up to 12/20 kv	3.6/6 kv up to 12/20 kv	3.6/6 kv up to 12/20 kv	up to 0.6/1 kv	up to 0.6/1 kv	3.6/6 kv up to 12/20 kv	3.6/6 kv up to 12/20 kv
电缆许用拉力 Tensile load capacity max. (N / mm ²)	15	20	20	15	15	28	25	20	20
电缆适应速度 Travel speed max[m/min]	120	120	120	120	120	200	200	200	200
电缆适应温度 Temperature range	-40℃-80℃	-40℃-80℃	-40℃-80℃	-40℃-80℃	-40℃-80℃	-40℃-80℃	-40℃-80℃	-40℃-80℃	-40℃-80℃

