



DLC系列电缆拖车

Series DLC Cable Towing Trolley



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一、DLC系列电缆拖车简介

DLC系列电缆拖车可使用于环境温度在-30℃~+50℃之间，相对湿度不大于95%，最大可操作风速8级（蒲福级），最大可承受风速12级（蒲福级）等各种工况。并具有以下特点：

行走轮、侧水平轮、反滚轮都采用聚胺脂材料，其具有耐磨性好，有弹性抗冲击，噪声低等特点，正常使用寿命为20000小时；

电缆拖车的前后两端安装了橡胶缓冲块，能有效吸收冲击能量，并有极佳的抗撕裂性能，使用寿命长；

标准件采用热浸锌或不锈钢材质制作，抗腐蚀性好；

特别的设计使各行走轮、侧水平轮、反滚轮内的轴承防水性能好，采用了自润滑轴承，方便了维护；

DLC50型电缆拖车适用于高速载重的工况。

I. Brief

DLC series cable towing trolley is use at workplace as: ambient temperature at range of -30℃ ~+50℃ , relative humidity less than 95%, maximum operating wind speed 8 class, maximum carrying wind speed is up to 12 class.

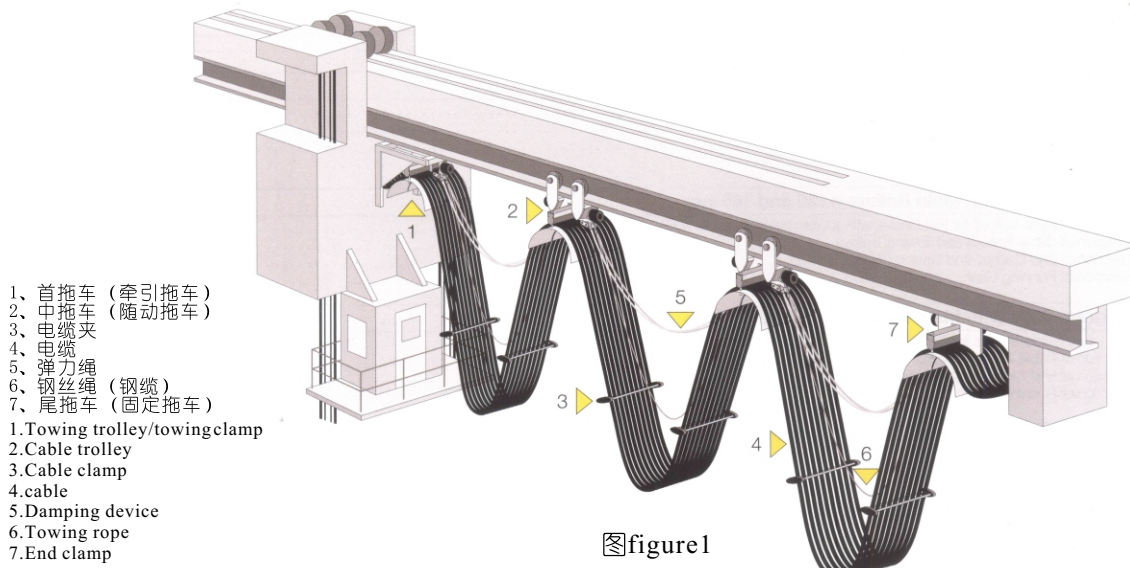
The walking wheel, side horizontal wheel, reverse rolling wheel are made of polyurethane with flexibility and little noise, their normal life can be 20000.

Rubber dampers are install on front and behind end, for absorbing impact energy, and also with tearproof performance, long service life.

standard parts are made by stainless steel or galvanized.

Special design of all wheels with water proof bearings, and are all self lubricant bearings, easy to maintenance.

Series DLC50 towing trolley suit for high speed and heavy loading working condition.



图figure1

根据图1的示例，一个拖车系统由下列部份构成：

- 1部尾拖车
- X部中拖车 (X数值根据图2示例运算求得)

- 1部首拖车
- 1部托拖车 (见图3)，托拖车只在中拖车大于10部以上才要求装，并要求施加一个动力给托拖车进行运行。托拖车安装于所有中拖车的中间。

- 所有的拖车都运行于一个导轨，所有的电缆都平铺在鞍梁板上。

- 所有的拖车都要正确匹配相对应的运行导轨 (运行导轨为20#和25#工字钢)

- 其它另行约定。

As figure1 show, a towing trolley system is composed of below:

1 piece of end clamp; x piece of cable trolleys; 1 piece of towing clamp;

1 piece active towing trolley (see figure3), active towing trolley only append when cable trolley's quantity more than 10 pieces. the active towing trolley need a power to run, it is installed on middle of all cable trolleys.

All towing trolleys run on one railway, all cable are align on nek surface.

All trolleys must run on correct railway (20# and 25# H steel.).

Other conditions can be discussed with manufacturer.

二、结构型式和标记

DLC系列电缆拖车分为多种型式结构，具体选型请参照下列标记示例：

标记示例：DLC (A)(B)(C)(D)

DLC 为吊挂式电缆拖车代号

(A) 为40，表示鞍梁板规格330

(A) 为50，表示鞍梁板规格530

(B) 为100，表示电缆中车

(B) 为200，表示电缆首车

(B) 为300，表示电缆尾车

(B) 为400，表示电缆托车

(C) 为A，表示配20#工字钢

(C) 为B，表示配25#工字钢

(D) 为X，表示卸船机刚性牵引

(D) 为XL，表示卸船机柔性牵引

(D) 为S，表示双层吊挂拖令

DLC 40 100 A X，表示鞍梁板规格330，电缆中车，配20#工字钢导轨，用于卸船机刚性牵引。

电缆拖车的规格型号根据《电缆拖车每跨电缆参数表选型表》中的每跨电缆参数进行，详见表1：

表1：电缆拖车每跨电缆参数选型

拖车系列 Series Size	适用电缆 Suitable Cable	静负荷 (每跨电缆重) Weight per span	运行速度 Running Speed	配涨力带 Num. of Strap
DLC40	≤ Φ 50	120kg	≤ 240m/min	2根Pieces
DLC50	≤ Φ 62	200kg	≤ 240m/min	4根Pieces

II. STRUCTURE AND SIGN

DLC series towing trolley have several type, below for selection.

Sign example: DLC (A)(B)(C)(D)

DLC, Code for towing trolley.

(A) is 40, express as nek surface is 330 width

(A) is 50, express as nek surface is 530 width

(B) is 100, express as cable trolley

(B) is 200, express as towing clamp

(B) is 300, express as end clamp

(B) is 400, express as active cable trolley

(C) is A, express as use 20# H steel

(C) is B, express as use 25# H steel

(D) is X, express as rigidity drive of ship-unloader

(D) is XL, express as flexibility drive of ship-unloader

(D) is S, express as double layers of festoon system.

DLC 40 100 A X, express as with 330 width nek surface, cable trolley, fit for 20# H steel railway, appliance for rigidity drive of ship-unloader.

Cable towing trolley's size selection according to cable parameters of table 1 of 《each span cable parameters of cable towing trolley selection table》

Table 1 Cable parameters per span of cable towing trolley for selection

三、电缆拖车的选用

III. Selection

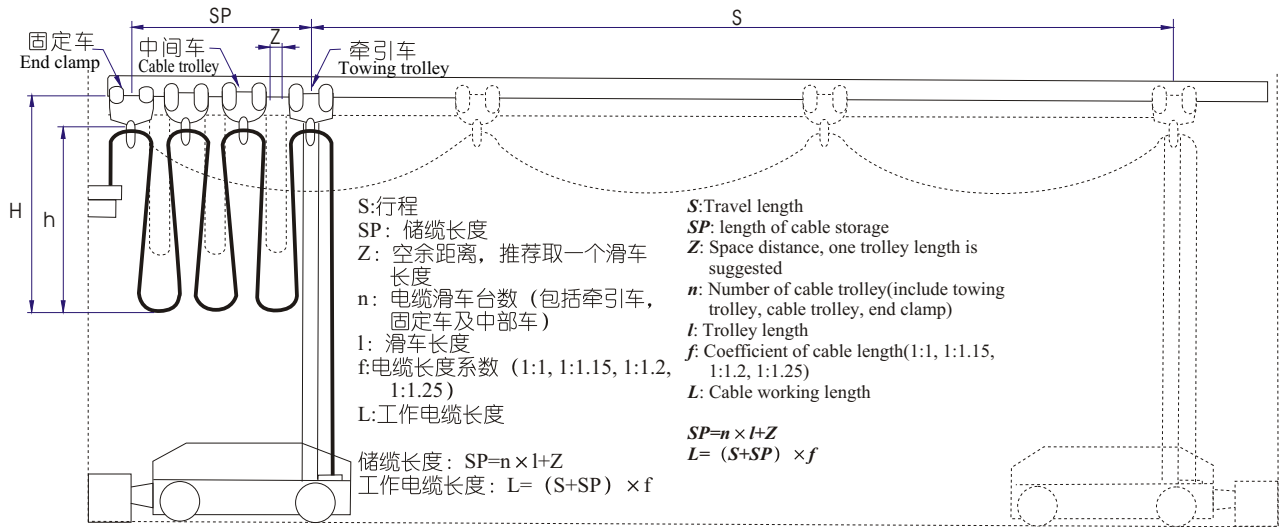


图2 Figure2

根据图2示例, 通过每个拖车的相
关参数 (详见图3和表1、2) 可运算滑车
的数量和电缆长度、排列方式。

其中滑车间距确定原则为电缆收拢
后垂直高度不影响起重机安全生产并满
足静负荷允许范围; 牵引镀塑钢丝长度
为: 滑车间距, 涨力带长度为: 滑车间
距 $\times 0.7$ 倍。为防止电缆在高速运行中横
向晃动, 应滑车间距的 $2/3$ 处安装电
缆夹, 或在每跨电缆中安装电缆固定环,
规格由厂商根据电缆排列图设计配套
供应。

As figure2 show, With every trolley relative
value (for detail see figure3, table1, table2), can determine
trolley quantity, and cable length and arrange method.

The determinate principle of space of cable
trolleys is after cable is in storage state, the cable height
will not affect the crane's working safety and cable's
static load is in range of permission. the length of towing
steel wire is: space distance of trolleys, strap length is:
 0.7 time of space distance of trolleys. To avoid shake at
horizontal in high speed running, the cable clamp is need
in $2/3$ place of space distance of trolleys, or use fix ring
at each span. the ring size is determined according to
cable arrange by manufacturer.

四、技术参数和外形尺寸 (图3和表2)

IV. Technical value and dimension size (figure3 and table2)

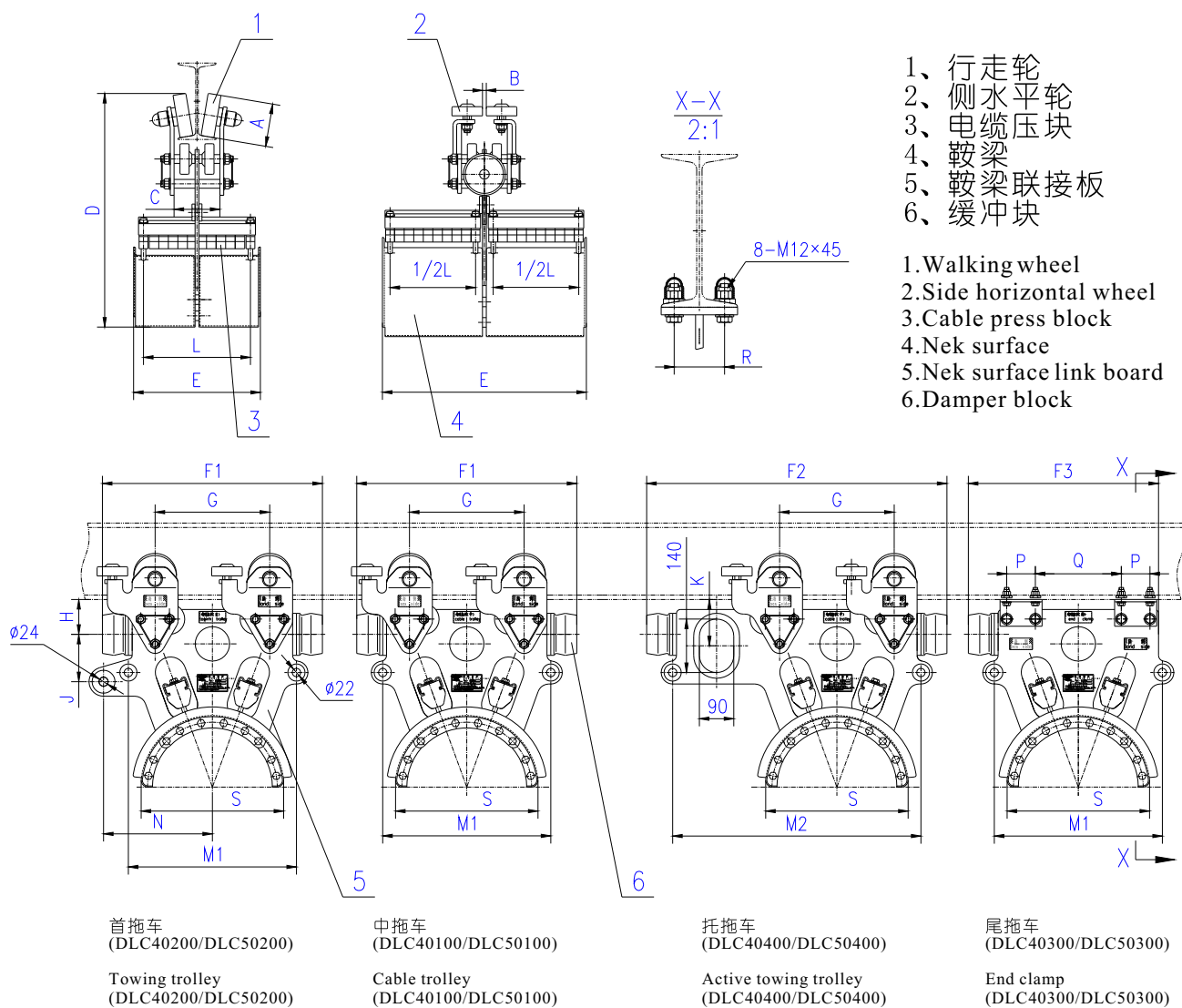


图3 Figure3

表2:电缆拖车的相关外形尺寸

Table2 Dimension of DLC series cable towing trolley

拖车型号 Type of Towing	工字钢 H steel	A	B	C	D	E	F1	F2	F3	G	H	J	K	L	M	N		
DLC40100A	20a(20b)	Φ 112	10	120	612	332	576		—	300	91	124		280	440	—		
DLC40200A																		
DLC40300A								498										
DLC40400A								—	786								121	430
DLC40100B	25a(25b)	Φ 120	11	138	641	534	576	—	—	365	91	130		494	455	—		
DLC40200B																		
DLC40300B								498										
DLC40400B								—	786								117	430
DLC50100B	25a(25b)	Φ 120	11	138	641	534	662	—	—	365	91	130		494	455			
DLC50200B																		
DLC50300B								584										
DLC50400B								—	897								117	463
DLC50100A	20a (20b)	Φ 112	10	120	641	534	662	—	—	365	91	130		494	455	—		
DLC50200A																		
DLC50300A								584										
DLC50400A								—	897								121	463

五、电缆拖车轨道安装与维护

安装和日常维护时请注意：

- 1、对于导轨焊接对接处，应平整光滑，偏差小于0.2mm，否则要求对接口进行打磨处理以达到使用规范。
- 2、在安装运行和日常使用时对于导轨表面进行清洁处理，不会使导轨上的渣粒对于拖车的行走轮进行损坏。
- 3、拖车装配导轨后，各拖车的橡胶缓冲块应成一条线，相互间的位置偏差小于5mm，特别对于首、托、尾三车与中车的缓冲块位置。
- 4、拖车装配好以后，两车的行走轮与工字钢的接触面观察时，以不透光线为基准。侧水平轮的间隙请按“电缆拖车的相关外形尺寸”进行检测。
- 5、调试运行和日常使用时，请在开机以前对于各拖车间的每跨电缆进行观察，确认电缆无缠绕或打结现象，并观察牵引镀塑钢丝和涨力带无断裂现象。
- 6、每隔半年对于电缆拖车中的相关紧固件进行检测。标准件的扭紧力矩见表3：

表3：标准件的扭紧力矩

序号 No.	螺纹规格 Bolt size	扭紧力矩(Nm) Pre-tighten torque
1	M12	60
2	M16	150
3	M20	420

六、订货需知

订货时需提供电缆规格表或电缆排列图。对于特殊规格的电缆拖车，如双层电缆拖车等，请与我具体联系。

V. Installation & maintenance

Notice of installation and maintenance:

- 1.To welding connection of railway, the even tolerance less than 0.2mm, otherwise the connection must be burnished to match requirement.
2. Cleaning railway surface in maintenance will prevent walking wheel from damage by dreg on railway.
3. After installing the towing trolleys on railway, all rubber dampers must be in one line, their tolerance must be less than 5mm, special to rubber dampers of towing trolley, active towing trolley and end clamp.
- 4.After installing the towing trolleys on railway, check the tough surface of the two walking wheel to railway, their must not any ray pass through. check the side horizontal wheel space according to "dimension size".
5. In testing and running, check all span spaces that the cable must be neither any knot nor any twist , and the steel wire or strap has not any break.
6. Check and re-tighten fastener every 6 month. the pre-tighten torque see table3.

Table3 the pre-tighten torque

VI. Ordering notice

Please Provide cable specification and cable arrangement figure in ordering. For other special cable towing trolleys, such as double layers cable, etc., please link us.

新一代电缆拖车

为您创造更多效益!

NOVEL TOWING TROLLEY BRING MORE BENEFITS FOR YOU!

正在运行中的DLC新型电缆拖车

DLC type cable towing trolley is working at site.



青岛港岸桥使用现场

DLC type cable towing trolley is working at Qingdao port P.R.China.



阿联酋岸桥使用现场

DLC type cable towing trolley is working at United Arab Emirates port.

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