

IN THE GROOVE

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Lebus绳槽卷绕技术

Lebus绳槽可以用于任何多层卷绕的起升机构和卷扬机构。Lebus绳槽的几何形状和本公司的经验，能够保证钢丝绳任何时候都能平顺地绕进绕出卷筒。

Lebus绳槽适用于任何规格的卷筒。Lebus技术能够确保钢丝绳排列整齐，从而保证每一层钢丝绳的载荷都能均匀分布，避免下层钢丝绳被压扁或嵌入上层钢丝绳之间。第三方进行的现场试验表明，Lebus绳槽卷绕技术能够提高钢丝绳的使用寿命500%。

Lebus的绳槽只在一圈中的两点上错开半个节距，其余部分均平行于卷筒法兰（卷筒端部的立板），这样在一圈以后绳槽正好错开一个节距。由于它能保证不乱绳，所以可以精确地计算出钢丝绳作用于卷筒上的力。这是其他卷绕方式都做不到的。

Lebus绳槽卷绕技术的优点如下：

- * 提高了卷筒的平顺性能
- * 提高了安全性
- * 延长了钢丝绳的寿命，即降低了更换钢丝绳的费用
- * 减少了更换钢丝绳的停机时间。

Lebus公司精于起升和卷扬卷筒的平顺性技术研究，具有50多年的经验，开发出各种各样卷扬和起升卷筒的钢丝绳卷绕技术，无人可以比拟。



Lebus公司在德国的工厂里生产绳槽卷筒和绳槽衬套。
Lebus manufacturers grooved winch drums and drum sleeves at its factory in Germany.

The Lebus Spooling System

The Lebus Spooling System is designed for any hoisting and winching application that uses multiple layers of wire rope on a drum. The geometry of Lebus grooving, coupled with our know-how, ensures that your wire rope spools smoothly onto and off the rope drum under total control—a totally dependable performance every time.

The Lebus Spooling System can be fitted to any size winch drum. The Lebus system keeps the spooled rope in a uniformed pattern, evenly distributing the load between the individual layers of rope. This prevents lower layers being crushed or pinched by upper layers. Independent field tests have proved over the years that the Lebus system can extend rope life by more than 500%.

With the Lebus system, the continuous groove in the drum is parallel to the flange (edge of drum) except for two crossover points on each revolution where the groove moves across the drum half a pitch to give a full pitch of movement for each revolution.

With Lebus grooving it is possible to calculate exactly the direction of the forces that the rope imposes on the drum because the spooling is totally controlled. This is not possible with any other spooling system.

The benefits of the Lebus Spooling System are:

- * Smooth spooling operations to improve winch performance
- * Increased safety
- * Longer rope life, meaning less money spent on replacing ropes
- * Reduced machinery downtime to replace worn ropes.

Lebus has specialised in smooth spooling technology for hoisting and winching applications for more than 50 years. It has developed unmatched expertise in all aspects of wire rope winching and hoisting technology. Accept no imitations.



Lebus绳槽卷绕技术任何时候都能够保证钢丝绳排列整齐，从而延长了钢丝绳的使用寿命。

The Lebus Spooling System guarantees perfect spooling every time. Smooth spooling makes ropes last longer.

繁忙的中国业务

Lebus公司非常高兴能与世界一流的集装箱岸桥起重机和浮式起重机生产厂家上海振华港机(集团)公司建立良好的关系。

Lebus与振华港机密切合作,2003年为起重量1200t的浮式起重机配套,通过代理商动力技术(中国)有限公司,提供了4套主卷扬、2套副卷扬和2套变幅卷扬的绳槽衬套;2005年为4000t浮式起重机的4个卷扬配套了10套绳槽衬套;2006年10月,给振华港机为比利时泽布吕赫港制造的集装箱起重机配套了6套绳槽衬套。

Lebus与振华港机的成功合作在2007年有了进一步的发展。1月份Lebus为7000t浮式起重机提供平滑绕绳装置,其中包括4套主卷扬、2套副卷扬和2套变幅卷扬绳槽衬套。在此之前,还为另外一台4000t浮式起重机和其他重型起重设备提供了绳槽衬套。

以上这些衬套上绳槽的形状都是根据卷筒的特殊结构和钢丝绳的长度专门设计的。

动力技术和Lebus还为天津航道局(CHEC)第一港湾建筑公司浮式起重机改造提供了4套绳槽衬套,其中2套用于500t浮式起重机卷扬,2套用于700t浮式起重机卷扬。同样,这些绳槽都是根据用户的特定参数设计的。

重视为顾客服务

不论世界上哪个地方有重要工程需要按期完工,位于德国的Lebus国际公司总经理Cris Seidenather就会飞往现场亲自指挥,这已经不是什么新鲜事。最近,Seidenather先生又飞到中国深圳蛇口以外南海的一个采油平台。负责油井作业的是Conoco菲利普公司,它要为卷筒安装一个绳槽衬套。安装工作开始后,尽管油井的作业条件非常恶劣,但在Seidenather先生的监督下,工作很快顺利完成。

钻井公司的卷扬经常在极端条件下连续高速地作业,因此它们卷筒上的绳槽经常不到五年就磨光了。在老卷筒上装一个新的Lebus绳槽衬套是最节省费用的方法,并且用时少得多,使油井能够很快就恢复生产。

Busy in China

Lebus is proud to enjoy good relations with Shanghai-based ZPMC, the world's leading manufacturer of dockside container-handling cranes and barge cranes.

Lebus began working with ZPMC in 2003 when it supplied grooved sleeves for a 1200-tonne capacity crane barge. Working closely with its authorised agent in China, Powertec, Lebus delivered four sets of sleeves for the main drum, two for the auxiliary drum and two for the luffing drum.

In 2005 Lebus supplied grooved sleeves for a 4,000-tonne floating crane, with 10 sets of sleeves in total for the four winches on the crane.

In October 2006 Lebus supplied ZPMC with six sets of sleeves for the drum of a container crane that was built for the Port of Zeebrugge in Belgium.

The successful relationship between Lebus and ZPMC led to further orders in 2007. In January Lebus supplied smooth spooling equipment for a new 7,000-tonne capacity floating crane, with four sets of sleeves for the main drum, two sets for the auxiliary drum and two for the boom drum. This was followed by orders for drum sleeves for another 4,000-tonne floating crane and other heavy lifting equipment.

In each case, the geometry of the grooving pattern on the sleeves was engineered to suit the specific construction and length of the wire rope that was used on the winch.

Powertech and Lebus have also delivered four drum sleeves to CHEC, the First Harbour Construction Corporation, in Tianjiang, for retrofitting on its barge cranes. Two of these sleeves were fitted to the winches of a 500-tonne capacity barge crane and two were fitted to the winches of a 700-tonne capacity barge crane. As always, the sleeves were specifically engineered to meet the parameters of the application.

Dedicated to customer service

When an important job needs completing on time, it is not unusual for Cris Seidenather, the managing director of Lebus International GmbH, to leave the factory in Germany and fly anywhere in the world to supervise projects personally.

A recent example took Mr Seidenather to an oil rig in the South China Sea, off the coast of Shekou in Shenzhen. Conoco Phillips China, the operator of the oil rig, needed new grooved sleeves for its winches.

The actual installation, supervised by Mr Seidenather, was completed quickly and smoothly despite the difficult conditions on the oil rig.

Drilling companies make their winches work in extreme conditions. They work constantly and at very high speeds. The grooves on the drum can become worn down within about five years. Putting new Lebus sleeves onto an old drum is a much lower cost alternative to getting new winch drums. It can also be done much more quickly, so the oil rig can return to productive operation much more quickly.



安装Lebus绳槽后,老卷筒焕然一新。
Fitting a Lebus sleeve onto an old drum to make it as good as new.



新衬套被焊接到老卷筒上。
The new sleeve is welded onto the old drum.

Lebus翻新Saipem驳船

意大利近海建筑商Saipem最近这些年将卷扬绕绳技术发挥到了极限,它的管路铺设驳船卷扬上重型钢丝绳的卷绕层数高达14层以上。

去年,Lebus为Saipem的Semac 1号铺管驳船上的12个卷扬全部进行了更新,拆吊老绳槽,在卷筒换上了分开式新绳槽。

今年,Saipem的Castoro 10号驳船又停在了印度尼西亚Batam港口,准备进行同样的更新。这条船卷扬机上直径76.2mm的钢丝绳缠绕了14层。

Lebus refurbishes Saipem barges

Italian offshore contractor Saipem has pushed the limits of spooling technology in recent years. Its pipe laying barges require vast lengths of heavy duty wire rope spooled in up to 14 layers or more. Last year Lebus completed the refurbishment of all 12 winches on Saipem's Semac 1 pipe laying barge, removing old grooving and welding new split sleeves onto the drums.

This year Saipem's Castoro 10 barge docked in the Indonesian port of Batam for a similar refurbishment. The winch drums on this vessel carry three inch (76.2mm) diameter wire rope in 14 layers.



Saipem驳船上平顺的绳槽。
Smooth spooling for Saipem's barge.



INTERNATIONAL

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Lebus的咨询服务

由于Lebus在绕绳领域具有50年的经验，不但在起升和卷扬方面的专业知识无人能够比拟，在设计 and 制造解决钢丝绳缠绕问题的设备方面也无人能够匹敌。此外，Lebus还能提供专家级的顾问服务。请与Lebus德国总公司或上海、香港的办事处联系，以便了解更多的情况。你一定会发现Lebus是如何通过钢丝绳的平顺缠绕来解决问题和节约金钱的。请记住，一根平顺缠绕的钢丝绳就是一根经久耐用的钢丝绳。

关于Lebus公司

Lebus国际工程公司的总部和工厂位于德国南方慕尼黑市附近。它在中国、香港、新加坡和挪威都设有办事处，在美国和英国也开设有姊妹公司。Lebus能够提供用于以下场合起重作业的各种规格绳槽卷筒和卷筒衬套：

- * 近海起重机
- * 港口起重机
- * 采油井架的牵引作业
- * 索道轨道系统，如香港的山顶缆车
- * 塔式起重机和移动式起重机，如著名的特雷克斯、Wolff和Kroll
- * 采矿设备
- * 深海用卷扬。



Lebus位于德国慕尼黑附近的工厂。
The Lebus factory near Munich, Germany.



勤奋的工人生产的Lebus卷筒。
Some of the dedicated workers who produce Lebus drums.

Lebus的联系方式

如有任何关于钢丝绳缠绕的问题、了解Lebus的产品或需要Lebus的帮助，请与下面的地址联系：

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Lebus Consultancy Service

Because Lebus has specialised in spooling technology for more than 50 years, it has expertise in hoisting and winching that no other company can equal. As well as designing and producing equipment that solves wire rope spooling problems, Lebus also offers a consultancy service offering expert advice. Please contact Lebus head office in Germany or our local agent in Shanghai or Hong Kong for further information and discover more about how Lebus can solve your problems and save you money by making your wire rope run more smoothly. Remember: a rope that spools smoothly is a rope that will last much longer.

About Lebus

Lebus International Engineers GmbH has its head office and factory in southern Germany, close to the city of Munich. It has agents in Shanghai, Hong Kong, Singapore and Norway. There are also Lebus companies in the USA and the UK.

Lebus supplies grooved winch drums and drum sleeves for a wide range of hoisting applications, including:

- * Offshore cranes
- * Harbour cranes
- * Draw works on oil rigs
- * Funicular railway systems such as the famous Peak Tram in Hong Kong
- * Tower cranes and mobile cranes for world-leading manufacturers such as Terex, Wolff and Kroll
- * Piling equipment for specialist manufacturers such as Soilmecc
- * Mining equipment
- * Oceanographic winches.

Contact Lebus

For any queries concerning wire rope spooling, Lebus products or details of how Lebus can help you, please contact:

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