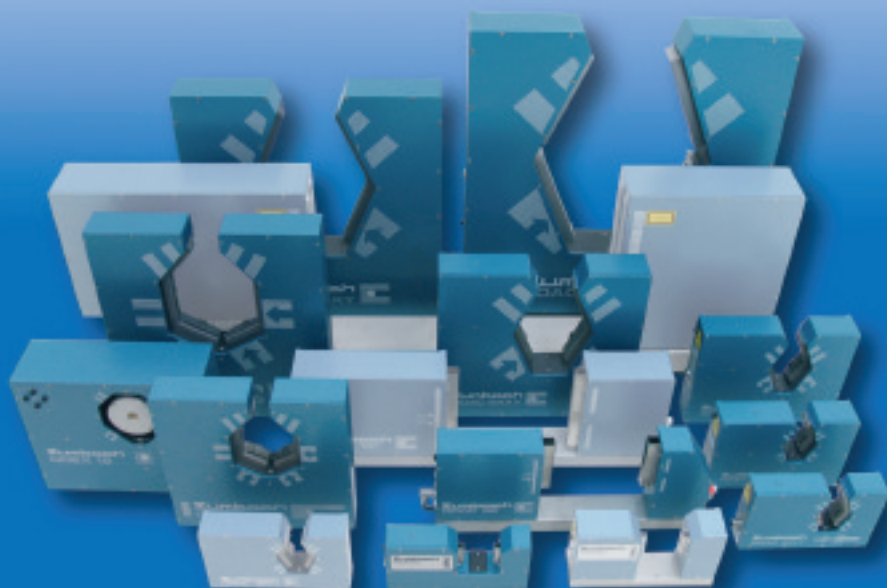


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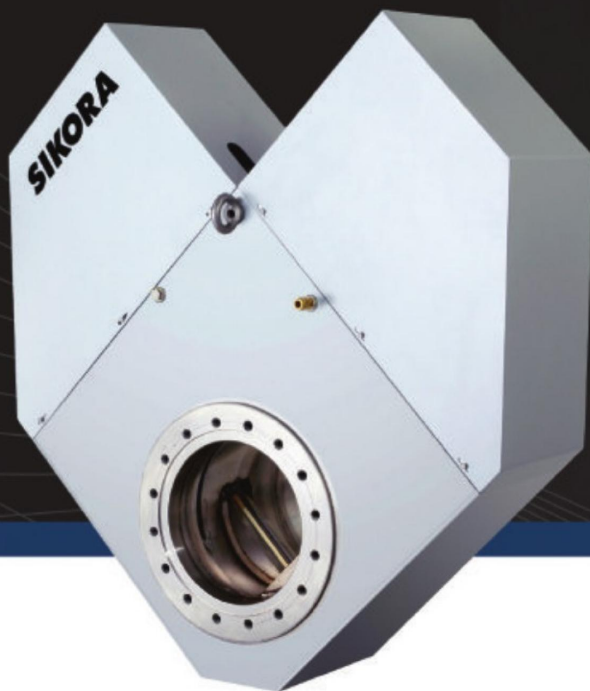
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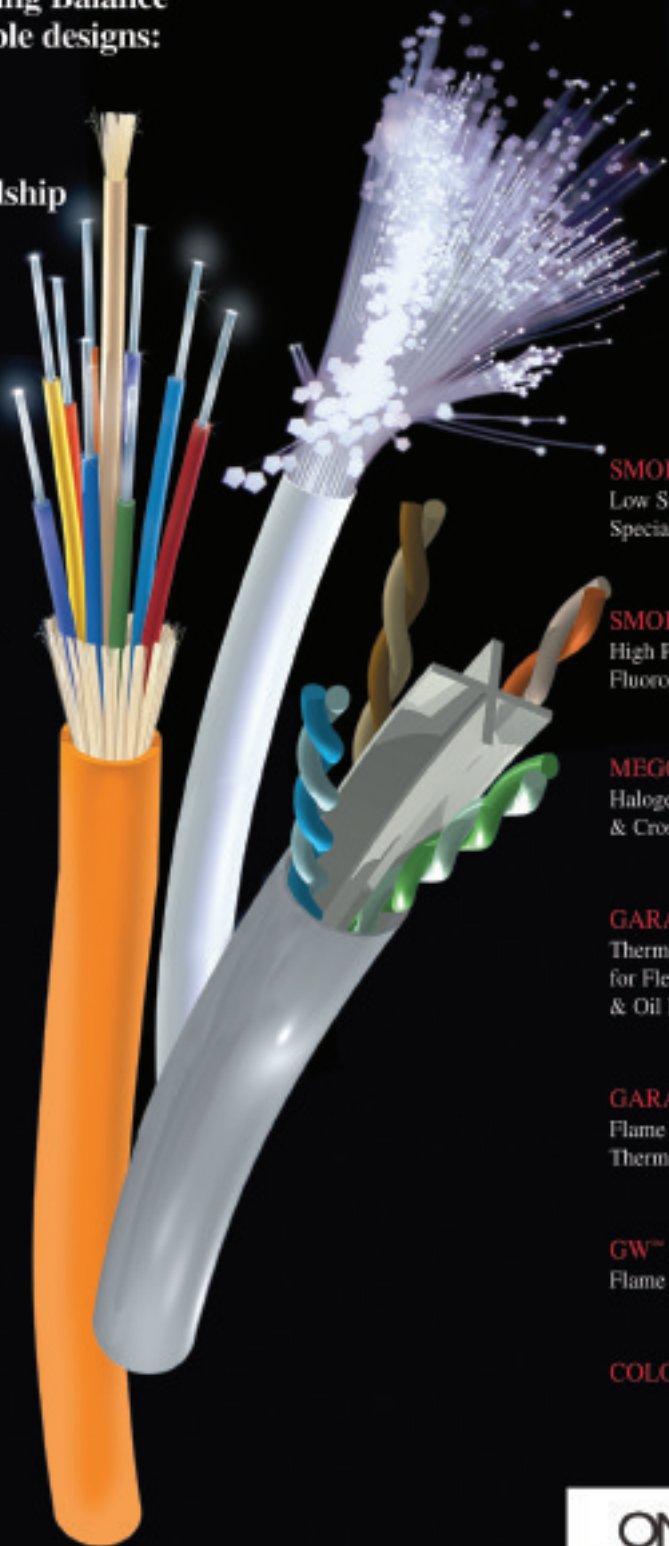
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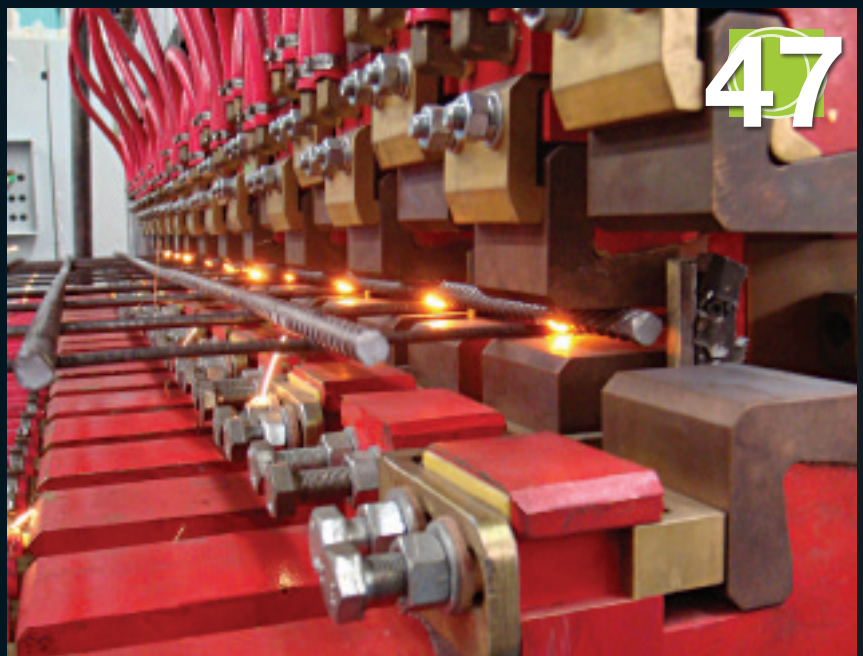
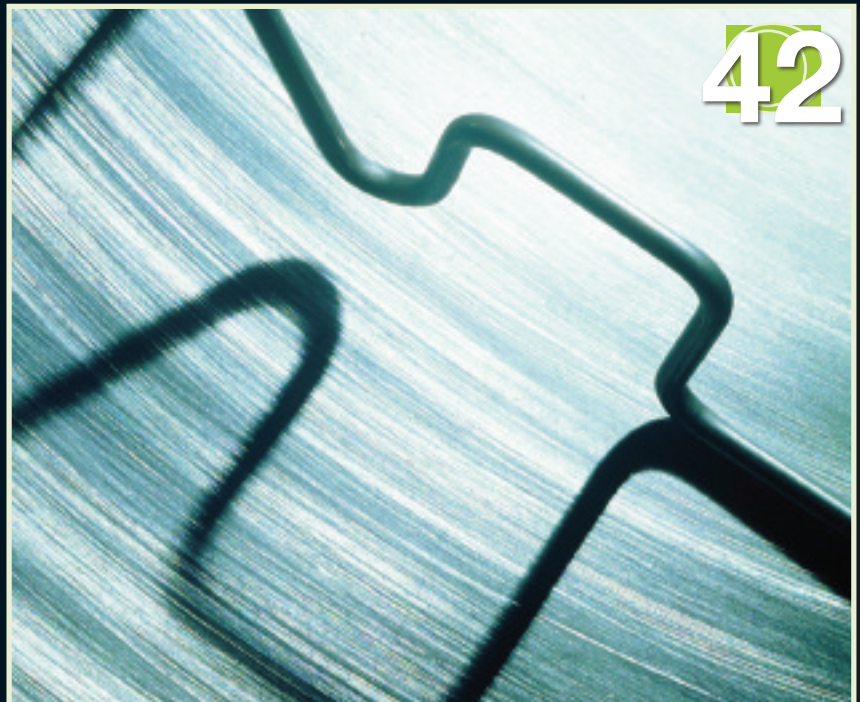
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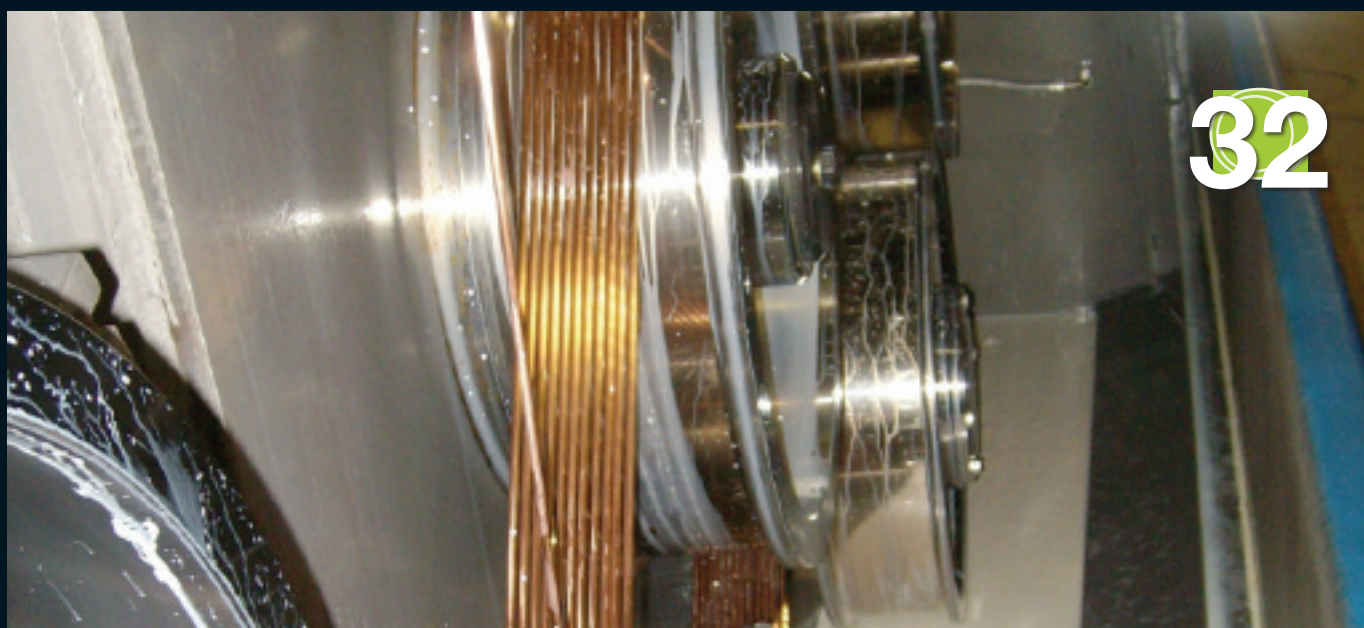
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May 2010

12–13: Wire Expo –
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 trade exhibition – Milwaukee,
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Organisers: Wire Association
 International (WAI)
Fax: +1 203 453 8384
Website: www.wirenet.org

September 2010

21–24: wire China 2010 –
 trade exhibition –
 Shanghai, China
Organisers:
 Messe Düsseldorf China
Fax: +86 21 5027 8138
Email: wire@mdc.com.cn
Website: www.wirechina.net

November 2010

TBC: 59th IWCS –
 technical conference –
 Providence, RI, USA
Organisers: IWCS Inc
Fax: +1 732 389 0991
Email: admin@iwcs.org
Website: www.iwcs.org

18–20: Wire & Cable India –
 trade exhibition – Mumbai, India
Organisers: CII
Fax: +91 22 2493 9463
Email: info@ciionline.org
Website: http://cii.in

April 2011

2–5: Interwire – trade exhibition
 – Atlanta, Georgia, USA
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 International (WAI)
Fax: +1 203 453 8384
Email: info@wirenet.org
Website: www.wirenet.org

May 2011

TBC: wire Russia 2011 –
 trade exhibition –
 Moscow, Russia
Organisers:
 Messe Düsseldorf GmbH
Fax: +49 211 4560 7740
Email: info@wire-russia.com
Website: www.wire-russia.com

June 2011

19–23: JICABLE – technical
 conference and trade exhibition
 – Versailles, France
Organisers: SEE
Email: jicable@see.assoc.fr
Website: www.jicable.org

October 2011

11–13: wire Southeast Asia –
 trade exhibition – BITEC,
 Bangkok, Thailand
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○ AEI Compounds facility in Kent, UK

Investing in new facilities

AEI Compounds Ltd, a subsidiary of TT electronics plc and a specialist producer of cross-linkable and thermo-plastic polymer compounds, is to move its operations from its current base in Gravesend to Sandwich, Kent.

The company will also be installing new production capacity for its range of environmentally friendly, low smoke, halogen free (LSFOH) cable compounds. The new line will be capable of producing up to 1,500kg per hour.

Mark Shaw, managing director of AEI Compounds, commented: "This investment in our business and technical capability is critical to our strategy of continuing to lead in the supply and development of high performance flame retardant solutions to the polymer industry.

"Our customers are based in all regions of the world and with competition

increasing from low-cost developing economies we need to stay ahead by investing in the very best equipment and personnel.

"Despite the current challenging market conditions the business has continued to perform well, with a strong operating profit performance in the last financial year backed by revenue growth of 27 per cent and volume growth of 21 per cent."

The new facility in Sandwich will allow the business to develop all of its current activities and will house the company's comprehensive R&D and technical centre.

The project is scheduled to be complete by the end of February 2010.

AEI Compounds Ltd – UK
Email: sales@aeicompounds.co.uk
Website: www.aeicompounds.com

Takeover talks called off

Cable maker Prysmian has called off talks to take over the Dutch company Draka Holding NV. In separate statements on 10th September 2009, Prysmian and Draka said they could not reach agreement on the main terms and conditions.

The proposed takeover, first announced in late June 2009, could have created a market leader worth over €3 billion. When talks were first announced, Prysmian was worth about €1.77 billion, and Draka about €325 million, according to data from Reuters. By 10th September, Prysmian's worth was estimated at around €2.5 billion and Draka at €548 million.

The deal talks were unusual in the current climate of tight credit and global recession, but analysts recognised the possibility of cost savings from the takeover.

Prysmian – Italy
Website: www.prysmian.com

Draka Holding – The Netherlands
Website: www.draka.com

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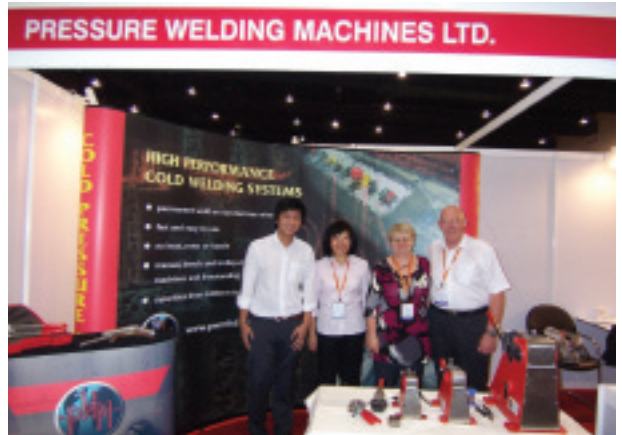
Website: www.mademreels.com

Success in Bangkok

wire Southeast Asia proved to be a very successful event for British manufacturer PWM, which designs and manufactures high performance cold welding equipment and dies for the world market.

Steve Mepsted, managing director of PWM, said: “We were surprised by the high turnout. Visitor traffic was excellent and our stand was busy every day, right up to the last day.

“Visitor quantity and quality were both good, with a large number of prospective buyers from Vietnam, India, Pakistan and Jordan. We also received numerous sales leads, and the larger machines in our range, such as the EP500, P1000 and P1500 rod welders, proved particularly popular with manufacturers looking for a fast, cost-efficient method of welding large non-ferrous rod sections.”



○ Steve Mepsted and his team at wire Southeast Asia

PWM Ltd – UK

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Improved outlook from worldsteel

The World Steel Association (worldsteel) is predicting that apparent steel use will have contracted, worldwide, by -8.6% to 1,104mmt in 2009 after declining by -1.4% in 2008.

This is an improved figure over the spring forecast issued in April 2009 when a decrease of -14.1% was predicted.

The improvement is largely due to strong growth in steel demand in China. With signs of a recovery becoming apparent, global steel demand in 2010 is forecast to grow by 9.2% to 1,206mmt, near to 2008 levels.

Commenting in October 2009, Daniel Novegil, chairman of the worldsteel economics committee said: "The global recovery is stronger than we predicted in April. According to our current forecast, China will rebound 19% in 2009 and 5% in 2010. Emerging economies will slow down 17% in 2009, to grow 12% in 2010. Apparent steel use in developed economies, that contracted 34% in 2009, will rebound 15% in 2010. Therefore, worldsteel forecasts moderate growth in global steel demand in 2010.

As was the case before the financial crisis, the emerging economies, especially China, will be the critical factor in driving world steel demand in the near future."

World Steel Association – Belgium Website: www.worldsteel.org

Bahrain service centre

Gauder Group has opened a new service centre in Bahrain, dedicated to serving the needs of Pourtier and Setic customers in the Middle East and supporting the sustained development of the cable industry in the area.

Bahrain has been chosen due to its central location in the area, within a short distance of main hubs such as United Arab Emirates, Saudi Arabia, Oman, Kuwait and the entire Arabic peninsula.

Gauder Group Middle East – Kingdom of Bahrain

Email: suk@gaudergroup.com

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Reel handling merger

Tulsa Power Holdings Corporation has announced the merger of Reel-O-Matic Inc and Tulsa Power Inc, both manufacturers of reel handling equipment for processing and distributing cable, wire and other flexible materials.

The companies will maintain manufacturing facilities in Oklahoma City and Tulsa, Oklahoma respectively. All key personnel will remain the same at each location, with Terry Simmons as president of Reel-O-Matic, and Mike Spence as CEO of Tulsa Power.

"The Reel-O-Matic merger combines two highly regarded manufacturers with brand-name recognition into one parent company, diversifying our existing product lines and expanding our end markets," said Mike Spence. "We are excited by the new opportunities this merger creates for our customers." Terry Simmons added, "With almost 100 years of combined experience and shared technology, both companies are in a greater position to enhance and improve their equipment for everyone's benefit".

The companies manufacture shafted and shaftless take-up and payout machinery, high speed spoolers, coiling equipment and caterpullers, and specialise in the design and development of customised handling equipment for manufacturers and distributors of wire, cable and wire rope, amongst other products.

Reel-O-Matic Inc – USA
Website: www.reelomatic.com

Tulsa Power Inc – USA
Website: www.tulsapower.com

Cable closures

In September 2009, Nexans SA announced it was to shed 400 jobs in France and close a production unit in a move to reorganise its activities, hard hit by the economic crisis. The group aims to reduce the activities of Nexans France and Nexans Copper France to cap costs.

As part of the project, 387 layoffs will take place in the production units of Clichy (Paris), Fumay, Jeumont, Lyon Mehun and the Chauny production unit in Northern France, which will be closed.

Some 50 jobs will be created in Nexans France and Nexans Copper France.

Nexans France, which makes half of its revenues from exports, has seen its sales directly hit by difficulties in traditional buying countries. This was made worse by the emergence of powerful local competitors in export markets and increased competition in the French market from Italian and Spanish cable makers.

"In this context, Nexans France has seen its activity level slump by 20 per cent in the first half of 2009," the company said.

Nexans – France
Fax: +33 15669 8484
Email: nexans.web@nexans.com
Website: www.nexans.com

Latest issue

Power & Trends 2/09, the most recent issue of the Maschinenfabrik Niehoff customer newspaper, contains articles dealing with the rising demand for energy in East and Southeast Asia caused by large infrastructure and economic development projects, the consequences for the wire and cable industry and latest manufacturing solutions from Niehoff.

In an interview, Mr Weidong Luo, managing director of Jiangsu Jiangrun Copper Co Ltd, talks about the strategic implications of trying to become the market leader and the commercial challenges this involves.

The company, which belongs to the "Top 500 Enterprises" in China, manufactures and trades oxygenless copper rod, different kinds of bare and plated copper wire, strands and cables. Other features include "No Cable – No Power" a company portrait that introduces the Bangkok Cable Co Ltd.

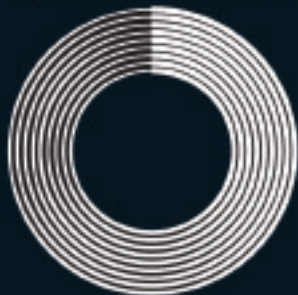
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公司还在安装新的装置，生产环保、低发烟、无卤素（LSFOH）电缆聚合物。新装置的产能将达到1500公斤/时。

执行长官Mark Shaw评论道：“我们的这项业务和技术产能投资对我们的战略至关重要，我们的战略就是要在向聚合物工业提供和开发高性能阻燃解决方案方面，继续处于领先地位。我们的客户基于世界的所有领域，面临着不断增长的、来自低成本发展中经济的竞争，我们要投资于最好的设备和人员，保持领先。”

“面对当前市场的挑战，我们的业务仍保持持续发展，我们在上一个财务年度取得了很好的经营业绩，收入增长了27%，销售额增长了21%。”

在Sandwich的新设施将使我们当前的业务全面发展，而且，公司的综合研发中心也将坐落于此。

项目计划在2010年完成。

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网址: www.aeicompounds.com

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Gauder Group Middle East – 巴林
电子邮件: suk@gaudergroup.com

网址: www.gaudergroup.com

Prysmian和Draka 取消接管会谈

电缆制造商Prysmian取消了接管荷兰Draka Holding NV公司的会谈。简而言之，在他们于2009年9月10日分别发表的声明中，Prysmian和Draka说他们未能在主要条款上达成一致。

所提议的接管首次宣布于2009年6月下旬，若能接管，则能使公司成为一个市场领军者，市值将超过30亿欧元。

当首次宣布会谈时，根据路透社报道的数据，Prysmian的价值为17.7亿欧元，略低于其最近的竞争对手法国Nexans，Draka的价值为3.25亿欧元。到了9月10日，Prysmian的价值被估计为25亿欧元，Draka的价值为5.48亿欧元。

在当前信贷紧张和全球衰退的气候下，尽管分析家们能看到接管后带来的成本节约的可能性，但在这种环境下交易会比较少见。

Prysmian – 意大利
网址: www.prysmian.com

Draka Holding – 荷兰
网址: www.draka.com



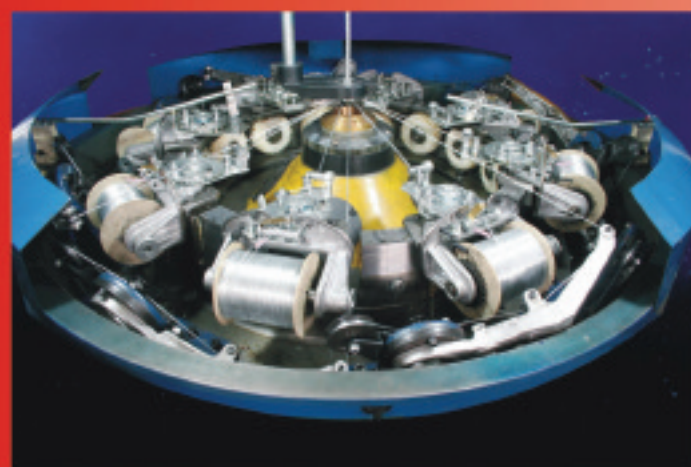
NYDG

上海南洋电工器材有限公司主要从事于电线电缆机械的设计和制造，现主要产品为编织机，绕包机，印字机。其中，编织机按编织线径由小到大分为：轻型、标准型、重型。



GSB-1Q型

GSB-1Q型16锭高速编织机是目前我公司的最新产品。该机型适用于编织极细丝，应用行业包括微型电脑，移动通讯设施，航天航空及军事领域等。该机型的主要技术指标达到国内领先水平，接近国际先进水平，每分钟转速范围0~120米，无极调速；由交流伺服系统控制牵引，编织节距可在2~60mm范围内以精度0.1mm无级任意选择；可编织0.03~0.05mm的极细铜丝；恒张力收放线机构确保编织过程中的张力均衡；机器工作噪音 ≤ 75 分贝。



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世界钢铁协会预测： 近期展望好转



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世界钢铁协会（worldsteel）预测：继2008年下降-1.4%之后，全球表观钢铁用量在2009年将萎缩-8.6%，达到11.04亿公吨。

这是数字比2009年4月发布的春季预测好，当时的预测是下降-14.1%。在很大程度上，这个好转得益于中国钢铁需求格外强劲的增长。随着缓慢复苏变得明显后，预计全球2010年钢铁需求将增长9.2%，达到12.06亿公吨，恢复到2008年的水平。

worldsteel经济委员会主席Daniel Novegil在2009年10月份评论道：“全球复苏比我们4月份的预计要强劲。根据我们目前的预测，中国将在2009年回弹19%，在2010年回弹5%。发展中国家的经济将在2009年放缓17%，在2010年增长12%。”

发达国家的表观钢铁用量将在2009年萎缩34%，将在2010年回弹15%。所以，worldsteel预测：全球钢铁需求在2010年将温和增长。与以往的经济危机一样，发展中国家的经济，尤其是中国，将是推动未来世界钢铁需求的关键因素。”

World Steel Association – 比利时
网址: www.worldsteel.org

Nexans削减工作和关闭工厂

法国巴黎 - Nexans削减了400份工作，关闭Chauny生产工厂。

Nexans SA在2009年9月宣布：由于受到经济危机的重创，它将在法国削减400份工作，关闭一个生产工厂，并计划重新组织生产活动。集团的目标是降低Nexans France和Nexans Copper France的生产活动，以降低成本。

“这个项目旨在受经济危机的重创时期恢复其竞争力，并保证其在市场中的未来...”，公司在一份声明中说到。作为项目的一部分，它将辞退Clichy（巴黎）、Fumay（法国东部）、Jeumont（法国北部）、Lyon（法国南部）、Mehun（法国中部）以及法国北部Chauny的生产工厂的387名员工，Chauny工厂将被关闭。在Nexans France和Nexans Copper France还将创建大约50份工作。

Nexans France一半的销售收入源于出口，其销售由于传统的采购国发生困难而直接受创。在出口市场中，由于有力的当地竞争者以及意大利和西班牙电缆制造商对法国市场的竞争，使情况更加恶化。“在此情况下，与2008年相比，Nexans France在2009年第一季度的业务猛降20%”，公司说。

“为了维持其竞争力、继续投资于研发和工厂的能力，Nexans将把它在法国的工业设施降低到一个较低的、能保持持续发展的生产水平，”它补充道。

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100% 具有证书

在罗马尼亚和巴林的经营最终实施和采用HT证书后，Madem在全球的所有工厂现在都采用具有HT ISPM 15证书的材料。HT标准源于对木质包装材料在运输过程中对虫害控制的需要。每年，对全球各个国家客户的这些要求越来越严格。Madem Group预计了到这种趋势，并在全球的经营中积极应对，在巴西、美国、西班牙、罗马尼亚和巴林采用了这种证书。

“除明显的包装材料虫害控制问题外，HT证书还对环境保护具有积极的作用，因为HT过程不采用苛刻的化学品，并符合ISO 14.000标准，”公司市场和销售总监Leandro Mazzocato说。他补充道：“Madem目前只采用HT认可的再生木材，这使我们成为真正的“绿色的”公司。”

Madem Reels – 巴西 电子邮件: madem@madem.com.br
传真: +55 54 3462 5900 网址: www.mademreels.com

线材制造商宣布进行第二次扩建

这是6个月内的第二次，LS Cable的分公司Superior Essex Inc宣布：扩建其在韦恩堡的工厂。这家电磁线和电缆制造商将在一个新工厂投资近130万美元，这家工厂与其主要的中西部经销中心在一起。这是Superior Essex在6个月内在韦恩堡进行的第二次扩建。公司在4月份宣布：将投资50万美元来合并其哥伦比亚城和肯塔基经销中心，使它们在韦恩堡成为一个具有20万平方英尺面积的经销中心。这家公司以亚特兰大为基地，是世界上最大的电磁线制造商之一，开始雇佣更多的设备操作人员和组装人员，将在2009年年底逐渐投入运行。新的工厂将隶属于公司的Essex Brownell分公司，该分公司制造和经销各种电气绝缘材料，用于原始设备制造商（OEM）和马达修理市场。

Superior Essex Inc – 美国 网址: www.superioressex.com

Power & Trends

Maschinenfabrik Niehoff客户报纸最新版Power & Trends 2/09刊登了有关东亚和东南亚能源需求上升的文章, 这些上升源于大型基础设施和经济发展项目、以及Niehoff最新的线材和电缆制造解决方案。

在一篇概述中, Jiangsu Jiangrun Copper Co Ltd 执行总裁Weidong Luo先生谈到了其战略暗示, 即试图成为市场领军者以及由此而涉及的商业挑战。这家公司是中国的“500强”之一, 制造和贸易无氧铜棒、各种光裸和电镀铜线、绞合线和电缆。“无电缆-无电力”是公司介绍栏目的名称, 该栏目介绍了Bangkok Cable Co., Ltd. (BCC) 公司, 这是一家泰国的领军型线缆制造商。在信息提供栏目中还提供短新闻。

Power & Trends被印制成英文、德文和中文, 它是Niehoff-News的继任刊物。您可以从德国Niehoff总部或Niehoff在全球的任何分公司或服务机构获得该刊物, 也可以从Niehoff网站获得。

Maschinenfabrik Niehoff GmbH & Co KG - 德国
网址: www.niehoff.de

Niehoff Endex NA Inc - 美国
网址: www.niehoff-usa.com

LS Cable的目标是要超越海底电缆销售额

LS Cable的一位执行长官在2009年9月宣布: 公司期望在2015年达到1万亿韩元的海底电缆销售额, 将超越现在的由三家欧洲公司主导的全球市场。“我们的目标是在2015年达到7000亿到1万亿韩元的海底电缆销售收入, 并在该年成为全球第一的公司,” 公司在Gangwon省Donghae市工厂的执行总裁Son Jong-ho说。

为了达到这个目标, 公司已在价值1800亿韩元(1.488亿美元)的工厂开始生产海底电缆。这种规模的工厂在韩国是第一个, 在世界上是第四个。“7000亿韩元的销售收入将给公司带来全球海底电缆市场35%的份额,” Son说。

全球海底电缆市场去年达到1.5万亿韩元, 预计年增长率为24-25%, Son说。他期望不断增长的再生能源市场将提升连接海上风力发电场与大陆的电力电缆的需求。海底电缆的需求还将提升, 用来输送岛屿和大陆之间的大量电力, 他补充道。

LS计划在2011年完成一个105公里海底电力和通讯电缆系统, 连接Jeju岛和Jin岛(在韩国的Jindo)。公司说: 3.12亿美元的项目意义重大, 因为它将铺平公司进入高利润的全球海底电缆市场的道路。尽管LS Cable曾涉足由Nexans在1997年建造的、连接Haenam与Jeju岛的海底电缆修理工程, 但这个项目还是LS Cable的第一个海底电缆项目。

LS Cable - 韩国
网址: www.lscable.com



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110型手持式冷焊机 (110-A, 20-A)

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Flat wire: maximum width 33mm, minimum thickness 0.4mm

Shanghai Shenchen Wire & Cable Equipment CO.,LTD. —The Kingdom of Cold Welding Machines—



Shanghai Shenchen Wire & Cable Equipment CO.,LTD. —The Kingdom of Cold Welding Machines—



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F20 4系大型冷焊机系列冷焊机



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Tel: +86-21-65199437 +86-21-65199438 +86-21-65187232 Fax: +86-21-65199430 Website: <http://www.sch-china-cable.com.cn>
E-mail: sch@sch-cable.com.cn

The “democratic” Internet is in fact passing into the control of fewer and larger companies all the time

One of the key findings of the “Internet Observatory Report” from Arbor Networks treats evolution of the Internet core over the last five years, in the course of which Internet traffic is found to have migrated away from the traditional ten to twelve Tier-1 international transit providers. Today, the majority of Internet traffic by volume flows directly among large-content providers, datacentre/CDNs (content delivery networks), and consumer networks.

As a consequence, according to the most recent report from the Chelmsford, Massachusetts provider of network management and security products, most Tier-1 networks have evolved their business models away from IP wholesale transit to focus on broader cloud/enterprise services, content hosting, and VPNs (virtual private networks). As noted by Ed Gubbins of *Telephony Online*, Tier-1 incumbents were once the chief providers of connectivity between content companies and local or regional broadband providers. “But over time,” he wrote, “Google and other content providers have built out their own infrastructure, connecting more directly to end users and bypassing those intermediaries.” (13th October). Characterised by Arbor’s chief scientist Craig Labovitz as “a pretty dramatic shift,” the trend tracks with another cited in the report: the consolidation of companies that control the Internet, bringing easily one-third of its traffic under the control of about thirty “hypergiants.” Only two years ago, 5,000 companies were required to handle half the world’s Internet traffic; today, Arbor found, some 150 companies control that volume. Google alone controls 7% of the world’s Internet traffic.

The Arbor Networks data was collected from nearly 3,000 peering routers across 110 large and geographically diverse networks: nine Tier-1 carriers, 48 Tier-2s, and 33 consumer and content providers in Europe, Asia, and the Americas. At its peak, the study monitored more than 12 terabits per second and a total of more than 256 exabytes of Internet traffic, and Arbor believes it to be the most comprehensive examination of global Internet traffic since the start of the commercial Internet in the mid-1990s. “In the popular imagination the Internet is a very democratic network, all about connectivity to thousands of places,” Mr Labovitz told *Telephony Online*. “In truth these thousands of places are becoming hundreds of places, as content is being consolidated into a shrinking number of very large players.”

Fast broadband of at least 1Mbps by 2010 is stipulated for all Finns by mid-year

Finland has become the first country in the world to mandate access to high-speed broadband for every citizen. As stipulated by the the Ministry of Transport and Communications, Finnish telecom operators must by July 2010 be able to provide “every residence and business office with access to a reasonably priced and high-quality connection” with a minimum speed of 1 megabit per second.

Natalie Apostolou noted on *telecomseurope.net* that the remarkable guarantee of Internet accessibility is moreover only an intermediate step. Finland’s government had already announced that it will make a 100Mbps broadband connection a

right of citizenship by the end of 2015. (“One Mbps for Everyone in Finland,” 16th October). Helsinki in September 2009 pledged an investment of \$18.6 million in the national broadband project to advance the aim of giving all citizens access to a high-speed broadband connection. Finland, with a population of 5.3 million, already has an Internet penetration rate of around 79%. Ms Apostolou wrote, “The Finnish government is also bolstering the construction of telecom connections as a means of creating new jobs, in addition to promoting the development of e-government services.”

Elsewhere in telecom . . .

Ⓢ According to www.broadbandsuppliers.co.uk, complaints have shot up 9% recently from British customers who believe that broadband suppliers are not

delivering the speeds quoted in advertisements. After completing new analysis of 12 months’ worth of data from suppliers, the site found that most customers do not in fact get the speeds promised them. While the site educates consumers about the many factors (eg distance from phone exchange to computer station) that can affect individual connections, it considers dishonest the offer of a speed of 10Mb per second in a headline and “up to 10Mb” in the small print, and actual delivery of only 2Mbps to the subscriber.

Nadeem Azam, marketing manager of the independent broadband comparison site, said: “The broadband companies must get away from the marketing drug of promising fast speeds to get a connection at any cost. They are inadvertently teaching customers to not believe the claims they make, and that will damage trust in the telecom industry as a whole for decades to come.”

Ⓢ Investors are unlikely to rush to acquire Nokia Siemens Networks (NSN), which its Finnish and German parent companies wish to divest, the daily *Financial Times Deutschland* reported on 19th October. NSN was created in 2007 to last until 2013, and neither principal has said it is mulling an exit strategy. But analysts consulted by Reuters said Siemens has lost interest in the struggling telecom equipment supplier because the Munich-based engineering conglomerate has left the telecom sector altogether. The venture fell to a July-September operating loss of \$78.88 million – from a profit of \$264.5 million in that quarter of 2008 – on its encounter with stiff competition from Sweden’s Ericsson.

Ⓢ Vivo, Brazil’s largest mobile operator by subscribers, said it plans to share a total of 12,000km of fibre optic networks with other operators by 2012, according to company president Roberto Oliveira de Lima. (*BNAmericas*, 16th October) The partnership among Vivo, fellow mobile provider Claro, and Brazilian fixed-line operator Embratel is to be in force in 2010 and will cover the southern states of Parana, Rio Grande do Sul, and Santa Catarina.



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MARIO FRIGERIO
FERROUS WIRE EQUIPMENT

As reported by *TeleGeography*, the network will benefit from a total extension of 4,500km, with each partner rolling out and taking responsibility for 1,500km. Additional fibre optic deployments of 4,500km and 3,000km are to follow under a similar arrangement, the company said, possibly with another slate of participants.

- ① China Telecom and the Russian carrier Synterra on 13th October agreed to build a new fibre connection across the Amur River

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between the border towns Heihe and Blagoveshchensk, the third cross-border link between China and Russia. China Telecom previously has built cables jointly with Rostelecom and TTK. As noted by Robert Clark on telecomasia.net (16th October), the contract was one of a number of military, energy, and resources deals agreed in Beijing during the week of the annual economic summit between China and Russia. No timetable for groundbreaking or completion of the new cable was offered. Nor did China Telecom disclose the length or capacity of the system. The project requires approval of both governments and "further research by both sides."

- ① China's mobile communications business accounted for more than 60% of total telecommunications industry income in the first nine months of 2009, a record high since the country began collecting such figures a decade ago, the industry regulator said on 20th October. As reported by *Shanghai Daily*, the Ministry of Industry and Information Technology said the fixed-line income portion fell four percentage points year-on-year to 28.2%. Over the January-September period, China's telecom industry posted revenue of \$91.11 billion, for a 3.1% annualised rise. Mobile communications revenue accounted for 60.14% of total income, compared with 55.58% in the same nine months of 2008. In Shanghai and Beijing, the mobile penetration rate had surpassed 100% by the end of September, meaning that every citizen of those cities has one or more handsets, according to the ministry. The average cost of mobile communication in China is about 0.15 yuan a minute, very close to the 0.10 to 0.12 yuan cost of fixed-line phoning.

- ① Norway's Telenor and the Russian conglomerate Alfa Group said on 5th October that they are ending their longstanding legal battles over Russia's No 2 mobile operator, Vimpelcom, and will combine their main mobile phone holdings in Vimpelcom and Ukraine's Kyivstar into a single new jointly-owned mobile operator. The companies had contended in court for control of Vimpelcom for years. In a joint statement issued from Moscow, Telenor and Altimo,

the telecom arm of Alfa Group, said Altimo will receive 43.89% of the voting shares in Vimpelcom Ltd (approximately its current Vimpelcom holding); Telenor, 35.42%. Telenor and Alfa said combining Vimpelcom and Kyivstar will create one of the largest mobile operators in emerging markets. Vimpelcom and Kyivstar reported combined revenues of \$12.6 billion in 2008, with some 85 million subscribers at the year's end.

- ① The Australian opposition has backed calls by Telstra to delay the passage of the government's proposed legislative dismemberment of the telecom giant. As noted by Mitchell Bingemann of *Australian IT*, the federal move is being billed as the biggest regulatory shakeup of the communications sector in Australia in a generation. ("Opposition Moves to Delay Telstra Breakup," 20th October)

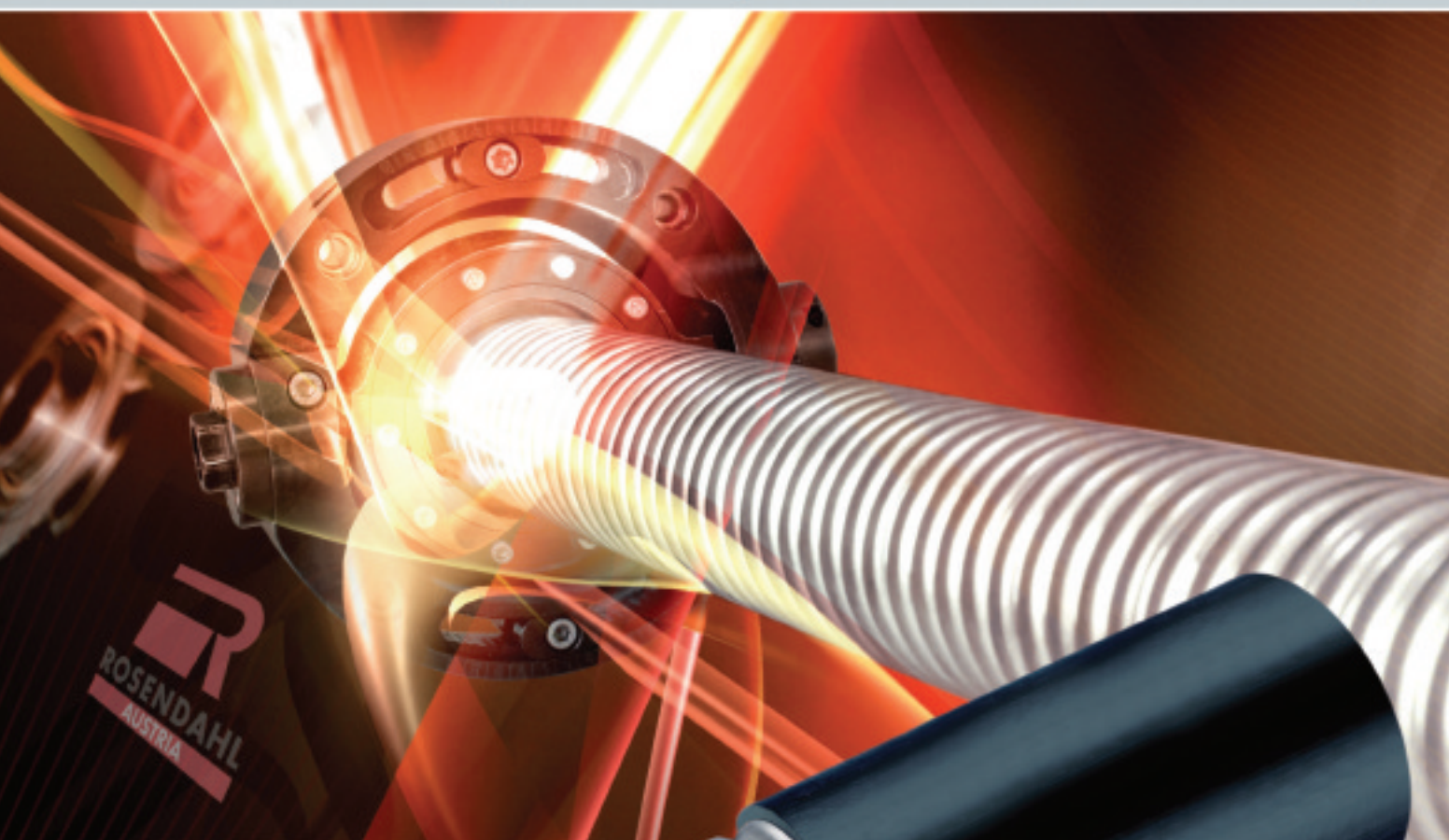
Mr Bingemann reported that, as the draft bill stands, the government wants Telstra to voluntarily separate its retail and wholesale arms. Failure to do so could see Telstra forced to divest its cable network and other holdings or face being denied the wireless spectrum it needs to evolve its lucrative mobile business and roll out fourth-generation mobile technology. Telstra has called for the draft legislation to be delayed.

Now, Mr Bingemann wrote, "With the [opposition] Coalition taking up its fight, the numbers are beginning to stack up for the telecom."

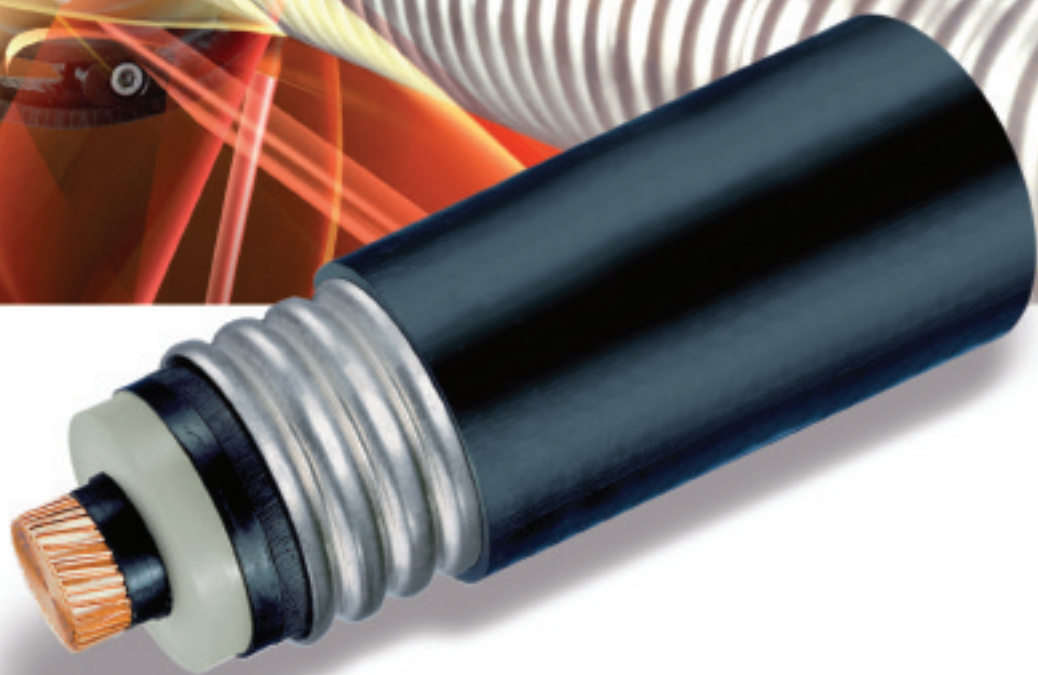
- ① The LG Group is planning to merge its three Korean telecom service providers into one company with \$6 billion in sales and \$773 million in operating profit. As reported by *Korea Times* (12th October), the combination would bring together mobile operator LG Telecom, Korea's smallest mobile operator; fixed-line provider LG Dacom; and ISP (Internet service provider) LG Powercom.

The country's biggest carrier KT (formerly Korea Telecom) merged with wireless unit KTF (Korea Telecom Freetel) last year, and industry analysts expect mobile leader SK Telecom to absorb its ISP, SK Broadband, over the course of 2010.

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Arbor Networks提供的《互联网观察报告》中的一项重大发现是互联网核心过去五年的演进情况。在此期间，互联网流量逐渐离开传统的10到12家Tier-1国际转接交换局。今天，互联网流量的大部分主要直接在大型内容提供商、数据中心/CDN(内容交付网络)、消费者网络之间流动。

结果，根据来自这家位于麻省Chelmsford的网络管理和安全产品供应商的最新报告，大多数Tier-1网络已经变其IP批发转接交换服务的业务模式为以更为广泛的云/企业服务、内容托管和VPN(虚拟专用网)为重点的业务模式。

据Telephony Online的Ed Gubbins表示，Tier-1交换局曾经是内容公司和本地或者区域性宽带供应商之间的连接的主要提供者。“不过，随着时间变化，Google和其他内容服务商建设了自己的基础设施，更加直接地与最终用户建立联系，绕开了这些中间机构。”(10月13日)

Arbor的首席科学家Craig Labovitz将此描述为“非常巨大的变化”。这种趋势与报告中提到的另一种趋势恰好一致：控制互联网的企业走向合并，大约30个“互联网巨头”控制了三分之一的互联网流量。就在两年前，控制世界上半互联网流量的是5,000家公司。到今天，根据Arbor的发现，控制一半流量的是150家公司。仅Google一家就控制着世界上7%的互联网流量。

Arbor Networks的数据是从分布在110个地理上相距甚远的大型网络上大约3,000个同级别路由器上收集的，覆盖位于欧洲、亚洲和美洲的9个Tier-1运营商、48个Tier-2、33个消费者和内容提供商。在峰值时刻，此次研究监测的每秒流量高达12太比特以上，互联网总流量超过256艾字节。Arbor认为这是互联网自上个世纪90年代中投入商业应用以来最全面的全球互联网流量调查。

Labovitz在接受Telephony Online采访时表示：“在公众的印象中，互联网是非常民主的网络，因为它连接到成千上万个地方。实际上这些成千上万个地方正在变成成百上千个地方，因为内容正在被整合到非常大型的企业中，而这种企业的数量正在不断减少。”

其它电信新闻...

① 据Vivo公司的总裁Roberto Oliveira de Lima表示，这个巴西用户数最多的移动运营商准备到2012年与其他运营商共享长度为1.2万公里的光纤网络。(见10月16日的BNAmericas)由Vivo、同为无线运营商的Claro以及巴西固网运营商Embratel准备在2010年在这方面展开合作，覆盖的区域包括Parana的南部州、Rio Grande do Sul和Santa Catarina。

据TeleGeography报道，该网络将总共扩建4,500公里，由每个合作伙伴负责扩建和维护1,500公里。该公司还表示，根据合作的安排，随着另一批参与者的加入，后续还将建设4,500公里和3,000公里的光纤网络。

② 中国电信和俄罗斯电信公司Synterra 10月13日签订合同，沿黑龙江的边境城市黑河和Blagoveshchensk建设一条新的光纤链路，使之成为中俄之间第三条跨境链路。中国电信之前还与Rostelecom和TTK共同敷设过线缆。据Robert Clark 10月16日在telecomasia.net上的报道，该合同是在北京具备的中俄年度经济峰会上达成的一系列军事、能源和资源协议中的一个。

目前还没有这条新的链路破土动工时间或者完成时间的消息。中国电信也还没有透露这条链路的容量及长度。该项目需要双方政府的批准以及“双方进一步的研究”。

③ 据中国工信部10月20日表示，在2009年头三个季度，中国移动通信业务量占整个电信行业业务量的60%以上，是自十年前开始统计该数据以来最高的一次。据《上海日报》报道，中国工信部固网的收入占比与上年相比下降了4%，降至28.2%。

从1月到9月，中国电信行业的总收入为9,111亿元，较上年增加3.1%。移动通信的收入占总收入的比例为60.14%，而2008年同期的比例为55.58%。

以北京和上海为例，到9月末，移动渗透率已经超过100%。据工信部解释，这意味着每名市民至少拥有一部手机。中国的移动通信平均费用为每分钟大约0.15元，非常接近每分钟0.10到0.12元的固话通话费用。

④ 挪威的Telenor和俄罗斯集团公司Alfa Group 10月15日表示将了解他们为争夺俄罗斯第二大移动运营商Vimpelcom而进行的旷日持久的司法

纠纷，并将合并它们在Vimpelcom和乌克兰Kyivstar中的控股股份，成立一家新的合资移动运营商。两家公司为了Vimpelcom的控股权，闹上法庭已有数年之久。据Telenor和Alfa Group的电信事业部Altimo在莫斯科发表的联合声明，Altimo将接管Vimpelcom Ltd中43.89%的有投票权股份(大致等于Alfa Group目前在Vimpelcom中的股份)，而Telenor则保留35.42%的股份。

Telenor和Alfa表示，合并后的Vimpelcom和Kyivstar将成为新兴市场上最大的移动运营商之一。Vimpelcom和Kyivstar 2008年的合并收入为126亿美元，年末的用户总数约为8,500万。

⑤ 澳大利亚反对党支持Telstra的呼吁，要求推迟通过政府提议的将该电信巨头拆分的议案。据Australian IT记者Mitchell Bingemann的报道，这个议案被视为三十年来澳大利亚最大规模的通信行业政策性重组。(见10月20日《反对党要求推迟拆分Telstra》)

据Bingemann报道，在草案拟定后，政府希望Telstra主动拆分零售和批发业务部门。如果Telstra不这么做，政府将强制Telstra拆分网络部或者其他部门，或将拒绝许可Telstra发展高盈利性移动业务及推出第四代移动通信技术所必需的无线频谱。

Telstra已经呼吁推出该法案草案的通过。Bingemann报道称，现在“有了反对党联盟站在它一边，形势开始对电信业有利”。

⑥ LG Group计划将三家韩国电信服务公司合并成一家销售额60亿美元，经营性利润7.73亿美元的公司。据Korea Times 10月12日报道，该公司将把韩国最小的移动运营商LG Telecom与固网运营商LG Dacom和ISP(互联网服务提供商) LG Powercom合为一体。韩国最大的电信运营商KT去年(之前的Korea Telecom)已经与KTF(Korea Telecom Freetel)的无线部门合并。行业分析人士预计在移动市场上处于领先地位的SK Telecom将在2010年与其ISP—SK Broadband合并。

⑦ 位于香港的电信服务提供商Pacnet Co的首席执行官William Barney 10月19日表示，准备投资3亿到5亿美元用于购并。据Dow Jones Newswires记者Lorraine Luk报道，Barney表示正在展开磋商，准备购并中国和印度的公司，并考虑投资购并内部资源。Pacnet是由Asia Netcom Corp和Pacific Internet Ltd合并而成，拥有经营着连接香港、中国、韩国、日本、台湾、菲律宾和新加坡的海底电缆网络。

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6



Duelling currencies

US declines to accuse China of manipulation of the yuan

In its semi-annual report to Congress on International Economic and Exchange Rate Policies, the Treasury Department declared on 15th October that no major trading partner of the United States manipulated its rates of exchange against the American dollar during the first half of 2009. Currency valuation is a persistently contentious topic with US manufacturers, who claim that China keeps its currency at artificially low levels against the dollar to gain unfair trade advantage. They say the weak Chinese currency has cost jobs in the US – a hot-button issue with American politicians and their constituents. At least 15 million Americans are out of work.

The Treasury Department offered some support to the critics of Beijing's monetary policy, expressing "serious concerns" about inflexibility. China's rapid accumulation of foreign exchange reserves, including US dollars, was also cited. Even so, the US declined to name China a currency manipulator, having found that its actions fall short of the requirements for the designation. President Barack Obama did, in September, accede to the demands of American manufacturers and their unions for punitive tariffs on Chinese tyre imports. But Mr Obama clearly prefers to hold to a moderate course in the currency-valuation dispute.

A claim of currency manipulation would require the US to negotiate with the country so designated. If a solution eludes them, the US could take its case before the World Trade Organization. A success with the WTO could lead to the imposition of economic sanctions.

❖ American manufacturers assert that China's currency – the renminbi, or yuan – is undervalued by 20 per cent to 40 per cent against the dollar, giving the country a huge trade advantage. An undervalued yuan means that Chinese products are cheaper for US consumers, while American products cost more in the Chinese market. The US trade deficit with China totalled \$143.7 billion through August 2009, for the greatest imbalance with any country. Still, the figure to that point was 15.1 per cent below the total a year earlier, a rare good effect of a recession that has curtailed consumer demand.

In a tale of two dollars, Canada's gain on the US deals a blow to Canadian exporters

"For all that the US was the epicenter of the world economic crisis, it remains an oasis of political stability that has never defaulted on its debt obligations." *Toronto Star* columnist David Olive probably hoped that this reminder would soften up his readers for his take on the recent worrisome rise in value of the Canadian vis-à-vis the US dollar: that this phenomenon, which puts Canadian manufacturers and exporters at a competitive disadvantage, is the necessary price of rebuilding the United States economy, to which Canada's fortunes are tied. ("Sinking US Dollar Will Eventually Benefit Canada," 15th October)

Mr Olive acknowledged the concern of Prime Minister Stephen Harper that the steady approach of the Canadian "loonie" to parity with the US greenback is hurtful to many Canadians. But he countered that, for a strong American recovery, moribund US corporate investment in new plant and equipment needs the jolt of the greater export competitiveness that comes with a lower dollar. "What hurts us [Canadians] more," he wrote, "is that the trading partner with which we do \$1 billion worth of business each day remains in the Intensive Care Unit."

A falling greenback makes America's manufactured exports more price-competitive and simultaneously makes its imports more costly. The net impact should also mean a much-needed boost in US job creation, a vital constituent of a strong recovery.

Mr Olive noted a potential benefit to Canada from America's improved export prowess, as many US products – from Boeing aircraft to the Buicks that Detroit's General Motors sells with growing success in Japan and China – contain high-value Canadian components. But his main thrust was that Canadian economic conditions will not improve appreciably until the US economy returns to robust health. For the next while, perhaps two years or so, Mr Olive told his fellow-countrymen, "One of our best hopes for that outcome is that the greenback finds and remains at a lower, more competitive level."

❖ "Comments on this story are moderated," according to the Star – which is just as well. In a response that was more thoughtful than indignant, EagerBeaver wrote: "Olive's thesis – that in the end a healthy and recovered US economy depending on a falling dollar is better than otherwise for Canada – seems obvious. The US is our major trading partner and major taker of our in-demand items (oil, natural gas, etc). But, as the US recovers, Canada's 'not in demand' industries need to adjust and work out new markets while innovating and investing (R&D, new equipment).

"The biggest threat to Canada from a recovered US is that the US becomes more aggressive and more competitive in new techs, including the auto industry. This is part of the Obama strategy. Canada must be ready to improve its competitive position. The Canada Action Plan [Mr Harper's economic stimulus programme] is no prescription for a new 21st Century Canadian economy facing such new competition."

Canada and India

Its rivals steal a march on Canada in one of the world's fastest-growing economies

Another *Toronto Star* writer worried about his country's fortunes is Rick Westhead, who warns that Canada is not capitalising on its relationship with the fourth-largest global economy as measured by purchasing power: India. Canadian monthly direct investment in India has averaged US\$2.4 million since 2000, according to India's Ministry of Commerce and Industry. By contrast, Mr Westhead points out, the US has averaged \$64.5 million; and "Belgium, Sweden, even tiny Bermuda have all outpaced Canada."

"It's shameful," commented Rana Sarkar, president of the Toronto-based Canada-India Business Council. "Western companies are already in India, seeding and nurturing relationships that will pay off as the market there matures, and we [Canadians] are nowhere." ("Passage to India: Opportunity Missed," 17th October)

The appeal India holds for entrepreneurs is unmistakable. Writing from New Delhi, Mr Westhead noted that there are more billionaires in India than in Japan. And the country's 300 million-strong middle class is buying up everything from cellphones (500 million in use nationwide, 15 million new subscribers every month) to luxury items. Yet trade ties between Canada and India are feeble. Why? Mr Westhead ascribes the problem at least in part to the fact that, in India, politics and business are much more intertwined than in North America; and Canada's refusal to support India's bid for a permanent seat on the United Nations Security Council is seen as a snub. Canada in fact opposes any expansion of the permanent membership, but this is not a mitigating factor with Indians. "They just take it very personally," a former Canadian diplomat familiar with Canada-India relations told the *Star*. "Unfortunately, the business relationship suffers."

Other affronts to Indian sensibilities include the decision by Air Canada in 2006 to discontinue its direct Toronto-New Delhi service after less than three years. Canada's largest airline and flag carrier thereupon added a second daily flight from Vancouver to China.

There are signs that Canadian politicians – notably the opposition Liberal leader Michael Ignatieff – are raising their awareness of Canada's neglected relationship with India. In an April 2009 speech to the Canada India Foundation about the merits of improved ties, Mr Ignatieff accused the Conservative government of Prime Minister Stephen Harper of having "turned a cold shoulder" to India. "We have been slow to wake up to India's new power," he said. "Canada's share of Indian imports has actually declined." It is indeed a late awakening for Canadians, concurs Mr Westhead of the *Star*. And they face an uphill climb.

❖ Although his delegation wasn't able to fly direct, Stockwell Day, the Canadian minister for international trade, recently led his second business delegation to India. But Swapan Kataria, the New Delhi-based representative of the Indo-Canada Chamber of Commerce – is of the opinion that it will take more than trade delegations to improve relations. Mr Kataria, who has escorted several delegations from Canada around India, said not very much is accomplished by the visitor-delegates. He told the *Toronto Star*, "They basically come over for a holiday and take some photos at temples to show voters back home."

This observer of the India-Canada business scene recommends instead that Canada pursue better trade relations with India at a higher level. "India is about to sign a free-trade agreement with Korea," he said. "Where is Canada on something like that?"



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The recovery

With new confidence in the world economy, investors look toward Europe and China

According to a global survey of 229 fund managers conducted by Bank of America Merrill Lynch (Charlotte, North Carolina) during the week commencing 2nd October, most investors are optimistic on the world economy and no longer fear a double-dip recession. Those surveyed manage a total of \$616 billion.

A net 65 per cent of respondents reported believing that a global recession is unlikely in the ensuing twelve months, up from 47 per cent a month earlier.

A net 72 per cent of respondents believe the outlook for corporate profits will improve over that period, up from 68 per cent a month earlier.

Reflecting that optimism, the survey found the managers' appetite for risk at its highest in three years. Shifting more money out of cash and into equities, asset allocators pushed their cash positions to the lowest levels since January 2004.

A net 39 per cent of money managers surveyed said they expected profits to rise by at least 10 per cent over twelve months, up from the 25 per cent who were of that view in September.

Writing in *MarketWatch* (San Francisco), Barbara Kollmeyer pointed out "one big shift" in the survey findings: more money going into European equities. A net 30 per cent of global portfolio managers now see euro-zone equities as undervalued relative to other regions – the highest reading since April 2001.

As for emerging markets, confidence in the prospects for the Chinese economy and emerging markets in general remains strong. A net 49 per cent of the October respondents said they thought China's economy would strengthen in the year through October 2010, up from 35 per cent holding this view a month earlier. A net 36 per cent of the respondents also said they would tend to favour emerging markets over the course of the year ahead.

The survey was conducted by BofA Merrill Lynch Global Research with the help of British-based TNS, which provides market information services in over 80 countries.

❖ In a persuasive sign of the renewed confidence of US-based investors, on 15th October the Rasmussen Investor Index jumped to its highest level since the



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collapse of the Lehman Brothers investment house 13 months before. At 95.5, the Investor Index, which measures the economic confidence of investors on a daily basis, was up nine points from a week earlier, eight points from a month earlier, and 32 points from the beginning of 2009.

Of related interest . . .

- ❖ “The economic center of gravity has been shifting for some time, but this recession marks a turning point. It’s Asia that’s lifting the world, rather than the US, and that’s never happened before.”

This view, expressed to the *New York Times* by Neal Soss, chief economist for the global financial services company Credit Suisse Group AG, is supported by gathering evidence of China as catalyst of the global recovery. China’s government-dominated, top-down economy is surging after Chinese banks extended more than \$1 trillion in loans in the first half of 2009, on top of a government stimulus programme totalling nearly \$600 billion. Amplified by other resurgent Asian economies, the Chinese impetus for recovery indicates that an increasingly powerful China is rapidly gaining on the United States in economic influence.

Telecom

- ❖ It was reported on 16th October that top US telecommunications executives surveyed in the previous month said business conditions have stabilised in their industry, but they saw no signs of a quick recovery. The wireline segments of traditional phone companies have shrunk in favour of wireless; and competition in wireless, including from discount carriers and retailers, was described as “fierce.” Internet and data services are growing as revenue sources, and telecoms like AT&T and Verizon are competing with cable companies for TV subscribers. One concern for the executives, the *Wall Street Journal* said, is possible legislation or new rules that would limit telecoms’ ability to restrict the services allowed to be run over their wireless and landline networks.
- ❖ The microblogging service Twitter on 15th October launched a Japan-based mobile version. Japanese is the sole foreign-language platform so far for San Francisco-based Twitter, and the company’s push in Japan suggests a determination to succeed in a market in which other US social networking sites – including Facebook and MySpace – have failed to gain much traction.

Twitter teamed up with the Tokyo-based Internet firm Digital Garage Inc in 2008, and that spring launched a Japanese-language platform for cell phones. Early in 2009 it hired a Japan country manager. In Tokyo for the new mobile launch, Twitter co-founder Biz Stone noted his company’s perception of Japan as the gateway to Asia. “It’s an excellent opportunity for us,” he told Associated Press correspondent Tomoko A Hosaka. “Japan represents a leading edge, with advanced mobile usage. Mobile is in Twitter’s DNA.”

Aviation

An alliance with Japan Airlines could be a major boon for Delta, already the world’s largest carrier

Japan Airlines Corp likely will not conclude alliance talks with US rivals Delta Air Lines Inc and AMR Corp’s American Airlines until a Japanese government task force finishes a review of its ailing financial structure, people familiar with the matter told the *Wall Street Journal* in October.

JAL executives had hoped to be able to choose between proposals floated by Delta and partner American Airlines by the end of that month. (“JAL Puts Talks with Delta, AMR on Hold,” 6th October)

Japan’s government in September set up a five-member panel to advise on the JAL overhaul. As a result, a previously set deadline for finalising the company’s restructuring plan was put off by two months – until the end of November.

Meanwhile, the US carriers maintained contact with their Japanese counterparts, and a source close to the story told the WSJ, “No one is packing their bags.”

Portentous deliberations

The decisions taken by Tokyo’s task force could be very nearly as significant for Atlanta-based Delta as for JAL. The world’s largest airline by fleet size, Delta already has a presence in Japan by way of its acquisition in 2008 of Northwest Airlines; but its market share is much smaller than that of Japanese carriers.

It was reported on 12th September by Japan’s national broadcaster NHK that JAL was seeking an investment of about \$550 million from Delta, as well as a capital injection from Air France-KLM. Delta was reported to be in talks to take a minority stake in the struggling Japanese carrier. NHK also reported that Delta and JAL contemplate joint operation of international flights.

Such an arrangement would mean much to Delta, whose SkyTeam global airline alliance lacks a Japanese affiliate. In addition to shared routes and passengers, the proposed tie-in with JAL would give Delta coveted access to Tokyo’s Haneda Airport. Through its merger with Northwest its operations are now confined to the main international airport, Narita, at some distance from the capital’s business centre.

Writing in the *Atlanta Journal-Constitution*, Kelly Yamanouchi noted the observation of airline consultant Bob Mann that Japan is a “very concentrated market” for airlines, with only two major carriers – Japan Airlines and All Nippon Airways. Both are members of alliances that compete with Delta’s SkyTeam.

Mr Mann said, “Not having either of them in SkyTeam is a major disadvantage.” (“Delta Reportedly in Talks with Japan Airlines,” 11th September)

Dorothy Fabian – Features Editor

News, Events, Innovations, Economic Information, Technical Articles & much more...



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货币战争

美国未认定中国操作汇率

在10月15日提交给国会的国际经济和汇率政策报告中，美国财政部表示美国的主要贸易伙伴中2009年上半年没有操纵对美元汇率的国家。

货币估值问题一直是美国制造业非常关注的问题。美国制造业认为中国人为的压低人民币兑美元汇率，以获得不公正的贸易优势。他们认为弱势的人民币导致美国失业率上升——一个美国政治人物及其选民异常敏感的问题。目前美国至少有1,500万人失业。

财政部部分赞同批评中国政府的货币政策的人的意见，对汇率的灵活性表示“严重关切”。财政部还提到中国快速累积了大量外汇储备，包括美元储备。

即便如此，美国没有认定中国为货币操纵国，称中国的行为不足以支持这种认定。奥巴马总统确实在9月份同意美国制造业的要求，对进口的中国轮胎征收惩罚性关税。不过奥巴马总统显然愿意在货币估值争端中采取比较温和的态度。

如果操纵货币的指控成立，美国就必须与该国举行磋商。如果双方无法达成解决方案，美国可以向世贸组织提请裁决。如果世贸组织裁定为操纵货币，就可以进行经济制裁。

❖ 美国制造业认为中国货币——人民币的价值被低估了20%到40%，给予中国巨大的贸易优势。人民币值的低估意味着中国产品在美国市场上更加价廉，而美国产品在中国市场上更加昂贵。

到2009年8月，美国对中国的贸易赤字已经达到1,437亿美元，为各国之首。尽管如此，该数值比一年前低15.1%，这是经济衰退抑制消费需求带来的不多的好处。

加元升值、美元贬值打击加拿大出口商

“对所有人来说，美国是世界经济危机的震中。不过它仍然是一块政治稳定的绿洲，从未对债务赖账。”

Toronto Star的专栏记者David Olive可能希望他的文章能让读者对近期飙升的加拿大元兑美元汇率放心。加拿大元对美元的升值已经让加拿大制造商和出口商处于非常不利的位置，但这是重建维系着加拿大长治久安的美国经济的必要代价。（10月15日《美元贬值最终有利于加拿大》）

Olive表示，他了解总理Stephen Harper担心一直让加拿大元盯住美元的政策会让很多加拿大人受损。不过他对此持反对意见，如果要美国经济要强劲复苏，只有让美元贬值，赢得更强的出口竞争力，才能让奄奄一息的美国企业投资于新的工厂和设备。他指出：“对我们加拿大伤害最大的，是和我们每天贸易额达10亿美元的贸易伙伴还呆在重症监护室里。”

美元贬值让美国生产的出口产品价格更具有竞争力，同时增加了进口产品的成本。这样可以极大地促进美国的就业岗位创造，为强劲复苏提供关键性的动力。

Olive提到了美国出口改善可能带来的好处：因为许多美国产品——从波音飞机到底特律的通用在日本和中国市场取得不断成功的别克都包含有高价值的加拿大零部件。不过他的主要观点是如果美国经济不能强劲反弹，加拿大经济就不会得到理想的改善。

Olive认为，在今后两年多时间里，“我们最好期望美元能够保持在较低、更加具有竞争力的水平。”

❖ 据持类似观点的《多伦多星报》的报道，“这篇报道的看法是温和的。” EagerBeaver在《星报》上提出了更具思考性而非情绪性的看法。他表示：“Olive的观点是显而易见的，即美国经济的最终健康恢复有赖于美元贬值对加拿大来说并非坏事。美国是我们最主要的贸易伙伴，也是我们资源性产品（石油、天然气等等）的主要进口国。不过随着美国经济的复苏，加拿大的非资源性行业需要进行调整，开发新的市场，同时进行创新和投资（研发、新设备）。”

“美国经济复苏对加拿大最大的威胁，是美国在新技术领域将更加强大和更具有竞争力，包括在汽车行业。这是奥巴马的战略的一部分。加拿大必须时刻准备着改善其竞争地位。《加拿大行动计划》（Harper的经济刺激方案）对面向这种新型竞争的21世纪的加拿大经济来说不是什么药方。”

加拿大和印度

加拿大发展对印关系落后他国

另一位为加拿大忧国忧民的《多伦多星报》记者是Rick Westhead。他警告称，加拿大没有充分利用与以购买力来衡量经济总量居世界第四的印度之间的关系。据印度工商业部的统计，自2000年以来，加拿大对印度的每月直接投资平均为240万美元。与此相对应，美国的平均投资额为645万没有，而且“比利时、瑞典，甚至小小的百慕大都超过加拿大。”

位于多伦多的加印商务委员会的总裁Rana Sarkar表示：“这令人羞辱。西方公司已经进入印度，开发和维护关系。随着市场走向成熟，必将获得回报。但我们加拿大没有人在那里。”（10月17日《通向印度的通道：错失的机遇》）

印度对创业者的吸引力是毋庸置疑的。Westhead从新德里报道称，印度资产上十亿的富翁的数量超过了日本。另外，该国还有人数多达3亿的中产阶级，正在积极消费各种产品，从手机（全国用户5亿，每月增长1,500万）到奢侈品。不过印度和加拿大贸易关系非常薄弱。这是为什么呢？

Westhead把部分原因归结为印度的政治和经济与北美相比，更难以分家。加拿大拒绝支持印度加入联合国安理会被认为是种怠慢。实际上，加拿大一贯反对任何常任理事国的扩充计划，但对印度人来说，这并不能减轻他们的情绪。一位熟悉加印关系的前加拿大外交官在接受《星报》采访时表示：“他们个人非常在意，不过这损伤了商业关系。”

其他伤印度人感情的事情还包括2006年加拿大航空在航线营运时间还不足三年的时候，停运了多伦多——新德里直航航线。同时这家加拿大第二大的航空公司增加了一条从温哥华到中国的航线，每日一个航班。

有迹象表明，加拿大政治家——特别是在野的自由党领袖Michael Ignatieff——正在唤起加拿大人对忽视的加印关系的重视。在2009年4月对加印基金会所做的关于改善两国关系的好处的演进中，Ignatieff指责总理Stephen Harper领导下的保守党政府对印度“表示冷淡”。他称：“我们对印度的新力量反应迟钝。加拿大在印度出口中的份额实际上下降了。” Westhead认为，这确实是对加拿大人的迟到的唤醒。他们得奋力攀登。

❖ 虽然无法直航，加拿大国际贸易部长Stockwell Day近期率领其第二个商务代表团访问印度。不过位于新德里的印加商会代表Swapan Kataria表示，要改善印加关系，只派代表团是不够的。

Kataria曾带领过多个来自加拿大的代表团访问印度全国。他表示光代表团并不能带来多大改善。他在接受《多伦多星报》采访时表示：“他们实际上是过来度假，在庙里照几张相，然后回去给选民看看而已。”

这位印加商业关系的观察员认为，加拿大应该与印度发展更高层次的贸易关系。他说：“印度将和韩国签订自由贸易协定。加拿大什么时候能够这么做？”

经济复苏

投资者对世界经济重树信心，把目光投向欧洲和中国

据美洲银行美林（北卡罗纳Charlotte）从10月2日开始的一个星期里对全球229位基金经理的调研，大多数投资者对世界经济持乐观态度，不再对两位数的经济衰退感到恐惧。接受调研的基金经理管理的资金总量高达6,160亿美元。

据报告称，65%的受访人员认为今后一年不会再发生全球性的衰退，高于一个月以前的47%。72%的受访者认为今后一年里公司利润情况将发生好转，高于一个月前的68%。

作为这种乐观情绪的反映，报告发现基金经理的风险的承受能力达到了三年以来的最高点。基金经理将更多的资金投向证券，使现金持有量降到了2004年1月以来的最低水平。39%的受访基金经理认为他们预计今后一年多的时间里利润至少将上升10%，而9月份持这种观点的人数为25%。

Barbara Kollmeyer在MarketWatch（旧金山）上撰文指出调研结果发生了“重大变化”：更多的资金涌向了欧洲证券。全球资产配置经理有30%认为欧元区的证券相对于其他地区被低估了——这是2001年4月以来的最高比例。

对新兴市场来说，对中国经济和新兴市场的总体前景看好的信心仍然很强。在10月份受访的基金经理中，有49%的人认为中国的经济将在年内保持强劲，直到2010年10月，而上月持这种观点的人的比例为35%。36%的受访者还表示在今后一年里他们将继续看好新兴市场。

本次调研是在英国TNS协助下，由美洲银行美林全球研究公司进行的。该公司为80多个国家提供市场信息。

- ❖ 作为可信的美国投资者信心恢复的证据，10月15日的Rasmussen投资者指数升到了13个月前雷曼公司倒闭以来的最高点——95.5。该投资者指数按日衡量投资者对经济的信心。其较一个星期以前上升了9个点，一个月前上升了8个点，较年初上升了32个点。

相关新闻...

- ❖ “经济中心发生迁移已经有些时间了，不过这次衰退标志着转折点。是亚洲，而不是美国正在支撑着世界。这是以前从来没有发生过的。”

来自全球金融服务公司苏黎世信贷集团的首席经济学家Neal Soss在接受《纽约时报》采访时表达了这一观点，且这一观点正得到中国扮演全球经济复苏枢纽的现实的证实。在中国的银行界在上半年投放了10万亿美元以上的贷款后，加上中国政府出台的6,000亿美元政府刺激计划，中国的政府主导、由上至下的经济正在蓬勃发展。加上其他复苏的亚洲经济体，中国的复苏力度说明在经济影响力方面，中国正在日益赶超美国。

电信

- ❖ 据10月16日的报道，美国电信行业高层在头一个月的调研中表示电信行业的业务环境正在稳定下来，但没有快速复苏的迹象。传统固话公司的业务正在为无线业务所取代，而无线领域的竞争在不断打折的营运商和零售商的推动下，变得“异常激烈”。互联网和数据服务正逐渐成长为收入来源，而像AT&T和Verizon这样的电信公司则与有线电视公司展开了竞争，争夺电视用户。据《华尔街日报》报道，这些高管有一个担心，就是可能会出台新的法规或者规定来限制电信公司可以在无线和有限网络上提供的业务的品种。

- ❖ 微型网志服务网站Twitter 10月15日发布了日文版。日文是这家位于旧金山的公司的唯一外语版本。公司在日本的推广活动说明该公司意图在其他美国社交网站——包括Facebook和MySpace进展甚微的市场赢得成功。

Twitter在2008年就与东京的互联网公司Digital Garage携手合作，并于当年春发布了面向手机的日文平台。2009年初，该公司雇用了日本业务经理。

在东京参加新的移动平台发布会的时候，Twitter的共同创始人Biz Stone称他的公司把日本当作进入亚洲的门户。他在接受共同社记者Tomoko A Hosaka采访时表示：“这对我们来说是个非常好的机会。日本站在前沿，有非常先进的移动使用。移动是Twitter的DNA。”

繁忙的世贸组织

波音空客之争旷日持久，美方先胜出一局

“专家们警告说，唯一可以确定的，是这场为期五年的贸易战，不仅已在时间和成本上创下了记录，而且还远远看不到尽头。”

这句话引自Julie Johnsson和Michael Oneal在《洛杉矶时报》上的报道，指的是美国和欧盟之间因对飞机生产厂家的政府补贴爆发的贸易争端。世贸组织的初步裁定对美国有利。

9月4日，世贸组织裁定欧盟政府对空中客车生产的所有商用喷气客机提供非法补贴。位于法国的空中客车公司和位于美国的波音公司之间存在激烈的，甚至是痛苦的竞争。（9月5日《世贸组织裁定欧盟非法补贴空客》）

据在世贸组织做裁定纪要的工作人员的描述，美国和欧洲官员在这个世贸组织分发给双方政府、长达1,000页的初步裁定的解读上存在重大分歧。

据LATimes.com报道，与美国贸易代表Ron Kirk关系密切的知情人把这次裁定视为美国和波音公司的决定性胜利。但欧盟方面的人则持不同看法。欧盟发言人Anthony Smallwood称：“这只是长篇故事里的最新一章。”

听上好像是，虽然世贸组织在考查波音和空客之间的这项贸易争端上已经花费了五年时间，争端的肇始却有十年以上的历史。世贸组织的卷入，是因为美国1992年废除了一项限制直接和间接为民用航空开发提供补贴的双边协议。

美国政府坚持认为欧盟政府向空中客车项目提供了2,000亿美元的直接补贴。欧盟则指责美国提供了240亿美元的州政府间接补贴和交叉补贴。9月4日的裁定是根据美国提出的指控做出的。预计将另外成立委员会，在年底对欧盟提出的反诉做出裁决。

Dorothy Fabian — 专栏编辑



○ Frigeco's TA rod breakdown machine

Zero slip breakdown

To tackle the demands of lower production costs, improved machine performance and finished wire quality, Frigeco (a division of Mario Frigerio) has further developed its TA copper and aluminium rod breakdown machine with zero slip.

Conventional slip breakdown machines can cause longitudinal friction – by the wire sliding on the capstan – and axial friction, as the wire moves from wrap to wrap on the capstan itself. Frigeco's TA rod breakdown machine avoids friction between wire laps and between wire and the capstan. An independent AC motor for each drawing block, with dancer synchronisation of the wire/capstan speed, eliminates the longitudinal slipping problem and avoids longitudinal wire scratches.

In each drawing block wire is wound to a double capstan. The first pulling capstan is motor driven while the second idle capstan is out of centre with respect to the first.

The idle capstan prevents side sliding and drafting and avoids axial wire scratches.

To prevent dangerous wire yielding the machine is also supplied with large diameter pulling and idle capstans, while a high-pressure lubricant die holder and efficient wire cooling help to achieve high production speeds.

Frigeco believes that the many advantages of using the zero slip TA rod breakdown machine include:

- Reduced wire breaks when produced wire is re-drawn
- The machine is adaptable to most drawing ranges and wire elongations, with inlet diameter from 8mm to 10mm and outlet diameter of 0.8mm to 9mm
- Reduced energy consumption
- The absence of slippage minimises pulling capstan wear, resulting in low maintenance costs and reduced downtime
- Low noise, less than 80dBA
- Unused motors are switched off

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Swellable yarns for power cable

GarnTec is a worldwide supplier to the cable industry.

The company has recently developed a range of water-swellable yarns, QE-SC, especially for power cables. The yarns are designed to offer the highest swelling capability for longitudinal waterblocking.

Yarns from 1.5mm to 8mm diameter are also used as a construction element.

Swellable and separating tapes are available for all types of cables.

Tapes are available in a range of spool sizes, from 10kg spools up to wooden drums of over 100kg.

GarnTec GmbH – Germany
Fax: +49 3625 955610
Email: info@garntec.de
Website: www.garntec.com

Saving heat and energy

ILES Srl works to develop energy-efficient heat treatment plants.

The company has recently completed a conveyor belt furnace with forced air circulation, the model 2.72 R1, said to save over 35 per cent of energy costs compared with a conventional furnace with the same technical characteristics.

The results of customer tests suggest that it is possible to effectively treat the material at lower temperatures.

The new plant also has the safety advantage for operators of no hot external components.

ILES Srl – Italy
Fax: +39 0373 750110
Email: info@iles.it
Website: www.iles.it

Contract in the Middle East

Nexans has provided power cables to the Saudi Kayan Petrochemical Company.

The cables, supplied by the distributor, Noskab, were manufactured by the Nexans plant in Turkey and delivered during the fourth quarter of 2009.

The contract was for a range of low voltage (LV), medium voltage (MV) and instrumentation cables to The Saudi Kayan Petrochemical Company for the construction of the Saudi Kayan industrial complex, located at Jubail Industrial City.

After the construction of the Saudi Kayan industrial complex is completed it is expected that the annual production capacity will exceed 4 million metric tonnes of petrochemical and chemical products, and that it will also allow the Saudi marketplace to produce specialised chemicals never before produced in Saudi Arabia.

Nexans – France
Fax: +33 15669 8484
Email: nexans.web@nexans.com
Website: www.nexans.com

Strategic cable business alliance

American Superconductor Corporation (AMSC) and LS Cable Ltd (LS Cable) have formed a strategic alliance to advance commercial sales of superconductor cables. Under the alliance, LS Cable and AMSC will work collaboratively to deploy at least 10 kilometres (6.2 miles) of superconductor power cables over the next five years.

LS Cable's superconductor cable systems will utilise AMSC's proprietary second generation (2G) high temperature superconductor (HTS) wire, branded as 344 superconductor. The alliance ensures that LS Cable will have an ongoing supply of HTS wire from AMSC.

Power cables made with AMSC's HTS wire are said to conduct up to ten times the amount of power of conventional cables made with copper wire. They can be placed strategically in the power grid to draw flow from overtaxed conventional cables or overhead lines to mitigate grid congestion experienced in urban centres. They also automatically suppress dangerous power surges to create resilient, 'self-healing' Smart Grids that can survive attacks and natural disasters, making them an ideal modernisation tool for metropolitan power grids.

LS Cable is currently working with the Korea Electrotechnology Research Institute (KERI) to develop a 100-metre, 154 kilovolt (kV) superconductor cable system to be installed in Gochang, South Korea's power grid in 2011. The system will utilise approximately 13 kilometres (8 miles) of AMSC's 344 superconductors.

AMSC – USA
Website: www.amsc.com

LS Cable – Korea
Website: www.lscable.com

Coiling and spooling lines



○ PS 80 semi-automatic coiling line

PS Costruzioni's sturdily built PS 80 MBN and PS 85 MBN semi-automatic coiling and spooling lines are flexible machines for processing a wide range of products – including telephone, computer and category 5 cables – onto either coils or spools.

The PS 80 can process multiple insulated flexible cables with a diameter of between 1mm and 6mm, or multiple insulated solid cables with a diameter of 1mm to 4mm. It will produce 0.75 to 1.5 coils or spools at 100m per minute, according to the ability of the operator and the wire type. Minimum section of flexible cable is 3 x 0.75mm², and the maximum section of semi-solid cable is 1 x 50mm². Maximum linear speed is 400m per minute.

The PS 85 will process multiple insulated flexible cables with a diameter of between 4mm and 15mm, multiple insulated solid cables with a diameter up to 10mm (size 35mm²) or 16 x 7 flat cables.

PS 85 MBN can wind 0.75 to 1.5 coils or spools at 100m per minute. Minimum section of flexible cable is 3 x 0.75mm², and the maximum section of semi-solid cable is 1 x 50mm². Maximum linear speed is 400m per minute.

PS Costruzioni Meccaniche Srl – Italy
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Email: ps@pscstruzioni.com
Website: www.pscstruzioni.com



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Software partnership

Cimteq, the supplier of the cable design software CableBuilder, has signed a partnership agreement with SAP to enhance its software's ability to generate professional reports, manufacturing instructions and online catalogues.

CableBuilder, used by wire and cable manufacturers worldwide for design, quotations, costing and datasheets, will now feature an integrated reporting engine in the form of Crystal Reports.

Crystal Reports software enables CableBuilder users to design interactive reports and use them as a template to format CableBuilder data. These reports can be static or interactive, and can cover a variety of purposes from manufacturing instructions to datasheets to quotation performance analysis.

The chief benefit of Crystal Reports is thought to be the familiar and convenient drag-and-drop user interface, similar to the majority of word processing applications. A secondary, but important, feature is the ability to generate PDF, Microsoft Office, and HTML documents from the same user-defined report format, hence reducing the time and cost of reporting.

Nick Hirst, an implementation consultant at Cimteq, said of the integration, "Crystal Reports has enabled the customer to generate manufacturing instruction reports with better formatting and more precise information, hence reducing ambiguity and eliminating some of the causes of scrap and rework."

Cimteq – UK
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Email: ali.shehab@cimteq.com
Website: www.cimteq.com

Continuing the development of dry lubrication

The Condat group allocates significant resources to its research and development laboratories in the areas of:

- Strategic and prospective research to find new lubricating solutions and develop lubricant technology
- Applied research to characterise and develop new products
- Analysis and SAV to review and maintain current lubricants in use

During the last two years over €500,000 has been invested in a Laboratory of Analysis. Situated in Chasse-sur-Rhône, France, the laboratory gathers information from the group's production units in Brazil, China and USA. Its role is to analyse the finish goods manufactured in Condat factories, and to control the raw materials used in their composition. It also follows the evolution of products currently in use.

The Condat Laboratory of Analysis controls and measures the powders and pellets of the Vicafil and Steelskin ranges in the following parameters:

- Size and shape of powder granules (calcium and sodium) is analysed in 3D by granulometers with double cameras, from 64 different angles. Grain size affects the customer's productivity, and is recommended according to wire diameter and drawing speed
- Hardness of the particles: if the grain is too crumbly it breaks down too quickly, creating dust and excessive consumption. If it is too hard, it will not circulate in the die, increasing die wear and wire breakage
- Quality and quantity of fat content, using infrared spectrometers and chromatography of phase gases. Quality of the fat content influences product resistance to high temperature and regulates the lubricant film. Quantity of the fat content influences the cleanness of the wire after drawing: the higher the fat content, the cleaner the wire
- Thermal decomposition: the temperature at which changes of product behaviour (solid, crystalline, liquid phases) are observed, to establish melting points, fusion points, and decomposition of the different elements to optimise soap consumption or residue left on the drawn wire.

Condat AS – France
Email: info@condat.fr

Fax: +33 47807 3885
Website: www.condat.fr

Conductor preheater

During the manufacture of data cables, a reliable conductor preheating is required to ensure optimum adhesion of the insulation on the wire. For these applications Sikora offers the preheating system, Preheater 6000. The Preheater 6000 is positioned before the extruder and preheats the wire by means of inductive heating from 100°C to 180°C, depending on product type.

Sikora offers the device with its own processor system, Ecocontrol 600, directly integrated in the pre-heater housing. The Ecocontrol 600 displays the product and production parameters numerically and graphically on a clear 8.4" TFT monitor. Moreover, it includes a trend display of the relevant data, such as temperature and line speed. An integrated product library stores and recalls product recipes.

To ensure a stable temperature and optimum adhesion the required power is calculated by the Preheater 6000, depending on line speed and product diameter.



○ Preheater 6000 from Sikora

A change of line set up with the Preheater 6000 is possible in combination with several interfaces such as Profibus-DP.

Sikora AG – Germany
Fax: +49 421 48900 90
Email: sales@sikora.net
Website: www.sikora.net

Software sale in India

InnoVites BV has announced that Polycab, one of the largest manufacturers of cable and wire in India, has selected InnoVites to implement CableBuilder®. CableBuilder is cable design software developed by Cimteq Ltd. InnoVites is the exclusive reseller of CableBuilder in India and sells and supports this solution from its Cable Competence Center in Hyderabad, India.

InnoVites also develops and sells ERP software specific for cable manufacturers, InnoVites for Cable, based on Microsoft Dynamics AX®.

InnoVites BV – The Netherlands
Website: www.innovites.com

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Website: www.ajextumer.com

Finished cables on one line

Rosendahl has merged its system SZ technology (for stranding sector-shaped conductors) with a sheathing process, all in one line.

Using SZ technology, where no heavy mass is in rotation, the working principle is the same as in conventional helical stranding systems.

The payoffs and take-up stands in the line are stationary reelers, needing no special foundation. The non-rotating reeler also helps to improve the line efficiency due to a very fast and simple reel loading and unloading cycle.

As the reel does not have to be transferred between the stranding and the sheathing process, time and space saving is guaranteed. There is also no limitation for the size of take-up so a longer product length can be held on larger take-up reels.

The advantage of non-rotating machinery provides a safe working area for operators and reduces maintenance.

Rosendahl Maschinen GmbH – Austria
Fax: +43 3113 5100 59
Email: office@rosendahlustria.com
Website: www.rosendahlustria.com

Adaptive die match technology

EW Menn, in partnership with Brankamp, has combined EW Menn's push button die match with Brankamp's process monitoring expertise to create ADM. ADM stands for Adaptive Die Match and describes a system that electronically measures and evaluates die match and corrects it automatically while the machine is running, without interrupting production and without requiring the assistance of an operator. Standard process monitoring takes place simultaneously.



EW Menn is also active in the field of special applications, such as the warm rolling system

○ EW Menn's model AF61 equipped with ADM

that allows heating of the blanks just before feeding them into the rolling dies. Originally developed for aerospace applications, involving titanium and highly special alloys, this system allows a higher degree of material displacement, enabling forming processes that cannot be achieved without heating and greatly extending the possibilities of the flat die rolling process.

EW Menn GmbH – Germany
Email: mail@ewmenn.de

Fax: +49 2733 7781
Website: www.ewmenn.de

Production capacity increase

Lihua International Inc, a manufacturer and distributor of low cost alternatives to pure copper superfine and magnet wire, has announced an expansion in production capacity.

The company has begun production on four new proprietary high-speed manufacturing lines. The new lines increase Lihua's copper wire capacity from 1,000 metric tonnes to 1,500 metric tonnes per month, and CCA wire capacity from 500 tonnes to 600 tonnes per month.

"As CCA and recycled copper magnet wire are increasingly accepted as alternatives to pure copper wire and magnet wire, we are growing our production capacity to meet surging domestic demand," said Jianhua Zhu, chairman and chief executive officer.

Lihua's copper recycling facility operates two horizontal smelters producing 25,000 tonnes per year.

Lihua International – China
Website: www.lihuaintl.com

Cable marking

Laselec, a specialist in cable-marking equipment, has introduced its MT 200 control station. The highly compact MT 200 marks cable samples using a UV laser, as well as producing an analysis report. The machine is said to be simple to use and allows users to check the markability of the cable and carry out periodic controls during production.

The MT 200 is equipped with a laser marker that integrates a real time self-calibration and energy-control system for the laser source, which guarantees the reproducibility of test conditions. The Comet software system, which is included with the equipment, offers the option of checking the contrast of the marking. The software analyses, in real time, the obtained data using a digital camera and a double fibre-optic system that illuminates the samples.

The MT 200 is designed to meet all the requirements of cable manufacturers and suppliers of cable insulation materials with reduced maintenance and low operating costs.

Laselec – France

Website: www.laselec.com

Large field diameter scanner

A measuring head is available from Zumbach, offering highly accurate outside diameter measurements up to 500mm. Systems in static or oscillating configuration are available, for hot or cold processes, with up to six axes. The 550mm measuring field has no 'dead' zones.

Zumbach has developed the ODAC® 550 HLF for large diameters, widths, heights and diagonals.

This technology is said to eliminate previous problems and disadvantages of large product systems. At the heart of the development is a new optical system for collimation and scanning,

generating an absolutely parallel (tele-centric) measuring field and supplying 1,000 calibrated measurements per second. Accurate measurements, within 0.01mm, are generated regardless of product position in the measuring field. It also makes possible large emitter-receiver separations of 2m or more. The new scanner is suitable for hot rolling, cold rolling, forming and welding applications in difficult environments and with tight product specifications.

Zumbach Electronic AG – Switzerland

Fax: +41 32 356 0430

Email: sales@zumbach.ch

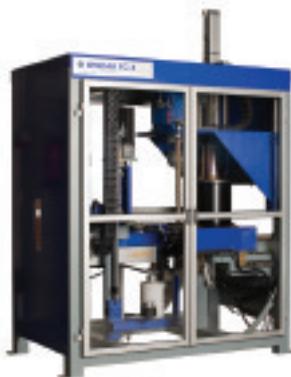
Website: www.zumbach.com

New coiling solution

Windak has announced that the first of its new generation of automatic coilers, the FC5, has been successfully installed in Finland.

According to Urban Bollo, managing director of Windak Sweden, the FC5 automatic flex coiler is the first machine Windak has introduced as part of a new series of affordable automation packaging solutions. "We understand that the market today demands cost-effective solutions that have a short pay-back time with maximum flexibility and output," he said.

The FC5 is compact and can accommodate a wide range of cable



○ Windak's new FC5 coiler

diameters and coil sizes. It features fully automatic coiling, with or without a strapper or binder. Without a strapper or binder the coil is stretch-wrapped before it exits the coiling head.

Windak – Sweden

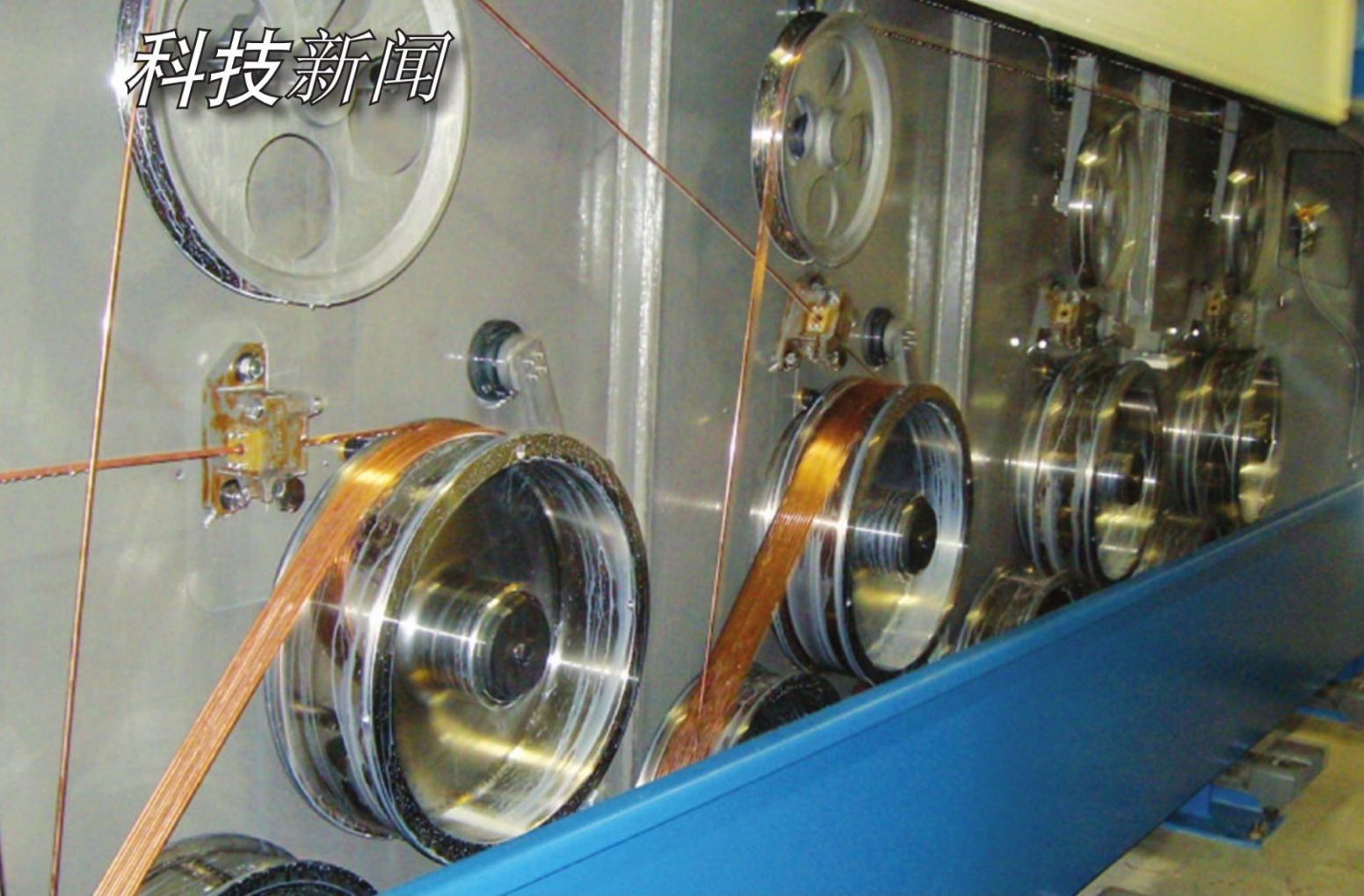
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○ Frigeco的TA粗拉机

零滑移大拉机

为了降低生产成本、改进设备性能和最终线材产品质量，Frigeco (Mario Frigerio的一个分公司) 进一步开发了其零滑移TA铜和铝大拉机。

传统的滑移大拉机会造成纵向摩擦 - 由线材在绞盘上滑动造成 - 以及轴向摩擦，由线材在绞盘上一卷一卷地移动造成。

Frigeco的零滑移避免了线材重叠部分之间的摩擦以及线材和绞盘之间的摩擦。每个拉伸块都配备一个独立的直流马达，而且，张力调节辊与线材/绞盘速度同步，消除了纵向滑移问题，避免了线材纵向刮伤。

在每个拉伸块内，线材被卷绕在一个双绞盘上。第一拉伸绞盘由马达驱动，第二空转绞盘稍微偏离第一绞盘中心。空转绞盘可防止滑移和漂移，避免任何线材轴向刮伤。

为了防止危险的线材屈服，设备还配备了大直径的拉伸绞盘和空转绞盘，同时，采用一个高压润滑剂模具支架

和有效的线材冷却来帮助达到高产的速度。

TA的优点包括：

- 再拉伸线材时断裂减少
- 设备适应于大多数拉伸范围和线材拉伸率，入口直径范围为8毫米到10毫米，出口直径范围为0.8毫米到9毫米
- 能量消耗降低

- 消除滑移后，拉伸绞盘磨损最小化，维护成本和停车时间降低
- 低噪音，低于80dBA
- 不用的马达被关闭。

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电子邮件: info@mariofrigerio.it
网址: www.mariofrigerio.it

Nexans在中东的合同

Nexans已为沙特Kayan Petrochemical Company提供电力电缆。这些通过经销商Noskab供应的电缆由Nexans在其土耳其的工厂生产，在2009年第四季度交货。由Nexans承包，为沙特Kayan Petrochemical Company提供各种低电压(LV)、中电压(MV)和仪表电缆，这些电缆用于沙特Kayan在Jubail工业城的工业联合装置。

沙特Kayan的工业联合装置竣工后的年产能将超过4百万公吨石油化工产品，而且，还能生产沙特阿拉伯市场以往从未生产过的特殊化学品。

Nexans - 法国
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 网址: www.garntec.com

继续开发干式润滑剂

Condat集团将重大的资源分配给它的研发实验室，用于：

- 战略和有希望的研究，以发现新的润滑解决方案和开发润滑剂技术
- 应用研究，以特征化和开发新产品
- 分析和SAV，以审核和维护当前正在使用的润滑剂

在过去的两年中已经对分析实验室投入了50多万欧元。实验室位于法国的Chasse-sur-Rhône，集团在巴西、中国和美国的生单单位的信息源源不断地汇集于此。实验室的作用在于分析Condat各家工厂制造的最终产品，并控制所产品使用的各种原材料，实验室还跟踪目前正在使用产品的演变。

Condat分析实验室控制和测量Vicafil和Steelskin范围内的粉末和粒子的以下参数：

- 通过配备双摄像机的颗粒测量仪，从64个不同的角度对粉末颗粒尺寸和形状（钙和钠）进行3D分析。颗粒尺寸影响客户的生产力，建议根据线材直径和拉伸速度来确定。
- 颗粒硬度：太易碎的颗粒容易被打碎，造成粉尘和过度消耗。太硬的颗粒则会在模具中循环，增加模具磨损和线材断裂。
- 含油量的质量和数量：采用红外分光光度计和相位气体色谱仪。含油量的质量将影响产品抵御高温的能力，并调节润滑剂膜。含油量的数量则影响线材拉伸后的清洁度，含油量越高，线材越清洁。
- 热分解：观察产品性状（固体、结晶、液相）发生改变的溫度，以建立溶解溫度、融结溫度和不同元素的分解，优化皂耗量或线材拉伸后在线材上的残余皂量。

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 电子邮件: info@condat.fr
 网址: www.condat.fr

新型卷绕解决方案

Windak宣布：已成功地在芬兰安装了它的首台新一代自动卷绕机FC5。

据Windak瑞典执行总裁Urban Bollo所述，Windak推出的FC5是首台设备，它是人们都买得起的新一代自动包装解决方案的一部分。“我们理解到：目前市场所需的是投资回收期短、具有最大的灵活性和输出、经济的解决方案。”

FC5的结构紧凑，能容纳各种电缆直径和线圈尺寸。它能执行全自动卷绕，可配备或不配备捆包机或扎束机。如果没有捆包机或扎束机，那么线圈在缩膜包装后就退出卷绕头。

Windak – 瑞典
 电子邮件: info@windakusa.com
 网址: www.windakusa.com



○ Windak的新型FC5卷绕机

软件成功

InnoVites BV宣布：印度最大的电缆和线材制造商Polycab已选择InnoVites来执行CableBuilder®。CableBuilder是由InnoVites的工业合作伙伴Cimteq Ltd开发的电缆设计软件。InnoVites是印度唯一的CableBuilder转销商。InnoVites在其位于印度海得拉巴的Cable Competence Center销售和支撑这个解决方案。InnoVites还开发和销售为电缆制造商定制的ERP软件、基于Microsoft Dynamics AX®的InnoVites for Cable软件。

InnoVites BV – 荷兰 网址: www.innovites.com

卷线和绕线设备

PS Costruzioni公司制造的PS 80 MBN和PS 85 MBN半自动卷线设备是加工包括电话、电脑和5大类电缆在内的广范围产品，使其形成线圈或线轴，机器十分灵活。

PS 80可以处理直径在1-6毫米之间的多个绝缘挠性电缆，或者是直径在1-4毫米之间的多个绝缘实心电缆。根据作业员能力和线材类型，按每分钟100米可生产0.75-1.5个线圈或线轴。挠性电缆的最小截面是3 x 0.75mm²，半实心电缆的最大截面是1 x 50mm²。最大线速度是400米/分。



○ PS 80半自动卷线

PS 85可以处理直径在4-15毫米之间的多个绝缘挠性电缆，或者是直径高达10毫米（尺寸大小35mm²）的多个绝缘实心电缆或者是16 x 7的扁平电缆。按照每分钟100米可缠绕0.7-1.5个线圈或线轴。挠性电缆的最小截面是3 x 0.75mm²，半实心电缆的最大截面是1 x 50mm²。最大线速度是400米/分。

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自适应模具匹配技术

精确、稳定工艺、有效的早期故障检测是生产力的关键因素。EW Menn以此为目标并与Brankamp合作，将EW Menn的按钮式模具匹配与Brankamp的工艺检测专业知识相结合，创造了ADM。ADM是指自适应模具匹配，即电子测量和评价模具匹配以及自动对其进行纠正的系统，此时，设备在运行之中，生产不中断，也不需要操作人员的协助，还同时对标准工艺进行监测。

只有结合Brankamp工艺控制系统的EW Menn设备才配备ADM。

EW Menn还活跃于特殊应用领域，例如在将坯料喂入轧辊模具前对坯料进行加热的热轧系统。这个系统原来开发用于钛金属和高特殊合金的航天应用，允许更高程度地对材质进行置换，因此，可用于不经加热就无法成型的成型工艺，从而扩大了扁平模具轧辊工艺的加工范围。

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配备ADM的EW Menn AF61型

软件合作伙伴

Cimteq是电缆设计软件CableBuilder的供应商，它与SAP签署了一份合作伙伴协议，以增强其软件生成专业报告、制造指令和在线编目的能力。

全球的线材和电缆制造商用CableBuilder进行设计、报价、成本估算和数据列表。现在，CableBuilder还拥有了以Crystal Reports为格式的一体化报告引擎。

Crystal报告软件能使CableBuilder用户设计交互式报告，并将其作为一个模板来格式化CableBuilder数据。这些报告可以是静态的，也可以是交互式的，并能涵盖从制造指令到数据表到报价性能分析的各种目的。

Crystal报告的主要效益在于它们拥有人们熟悉的、方便的拖放式用户界面，与大多数文字处理应用相类似。其次，也是重要的，它们能从相同的用户规定的报告格式生成PDF、Microsoft Office和HTML文件，从而减少报告时间和成本。

Nick Hirst是Cimteq的执行顾问，关于一体化，他说到：“Crystal报告能使客户以更好的格式、更精确的信息生成制造指令报告，因此，它们能减少不确定性，消除一些产生废品和返工的原因。”

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战略电缆业务联盟

American Superconductor Corporation (AMSC) 和 LS Cable Ltd (LS Cable) 已经结成促进超导体电缆商业销售的战略联盟，在此联盟下，在未来5年内，LS Cable 和 AMSC将在商业电网中合力部署至少10公里（6.2英里）的超导体电力电缆。

LS Cable超导体电缆系统采用AMSC专有的第二代（2G）高温超导体（HTS）线，商标名为344超导体。联盟将保证LS Cable能从AMSC获得持续的HTS线材的供应。

“LS Cable承诺：促进超导体电缆系统的广泛使用，以解决电力需求和当今电力设施所面临的电网可靠性的挑战，” LC Cable执行副总裁和技术总监Joon Hyung Cho说。

据说，用AMSC的HTS线制作的电力电缆的导电能力是传统的铜线电缆的导电能力的十倍。按照战略意图，它们将被设置在电力电网中，以分流负担过重的传统电缆或高架电缆中的负荷，降低城市中心的电网阻塞。还可用它们来自动抑制危险的电力冲击，使电网成为能恢复到原样的、‘自愈式’智能电网，能在冲击和自然灾害中存活，成为都市化电网的一种理想的现代化工具。

LS Cable正与韩国电工研究院 (KERI) 合作，开发一种100米、154千伏超导体电缆系统，将于2011年把这个系统安装在韩国的Gochang电网中。这个系统将采用大约13公里（8英里）长的AMSC 344超导体。这将是韩国第一次以输电电压（电压大于69千伏）来验证超导体电力电缆。

AMSC – 美国
网址: www.amsc.com

LS Cable – 韩国
网址: www.lscable.com

节约热量和能源

ILES Srl致力于开发节能热处理装置。

公司最近完成了一个型号为2.72R1的空气强制循环的输送带式加热炉。与传统的具有相同技术特征的加热炉相比，能节约35%的能源成本。

客户测试结果表明：在较低温度下有效地处理材质是可能的。

对操作人员来说，新的装置还很安全，它没有热的外部元件。



7.72R1型输送带式加热炉

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Bending and forming

An encyclopaedia entry on the metalworking processes observes that the bending of metal “takes significant but not Herculean effort.”

To the visitor to a state-of-the-art wire making plant, the high-speed bending and forming operation may appear to take no effort at all. A two-dimensional wire former producing directly from coil; a rotary air bender shaping sharp angles and radius bends; a CNC system turning out double-centred eye loops.

These, and a host of other marvels of smoothness and repeatability, are accomplished with no visible hand on the controls.

This degree of wire shop efficiency is of course the result of the patiently accumulated and applied expertise – the significant effort – of successive generations of dedicated bending and forming professionals.

Here, Wire & Cable ASIA reviews some of the outstanding products and services of the current crop of these specialists.

British wire bending equipment

British company Pave Automation Ltd, a designer and developer of wire bending and forming equipment for over 35 years, offers a range of high performance single- and twin-head CNC machines. Ongoing investment in research and development enables Pave to produce technically advanced machines at highly competitive prices.

Panther X3, the company's flagship 13-axis wire bending machine, is designed for sequential forming of three-dimensional components of 1.5mm to 6mm (0.236") diameter and up to 3m in length. Described as user-friendly and easy to program and operate using a twin screen control console and animated three-dimensional touch-screen icons – the Panther X3 offers carriage speeds of up to 80m per minute and ten programmable bending speeds, up to 0.05 seconds for 180°. Panther X3 incorporates Pave's patented 'Trueline' wire straightening system for reliable output of twist-free wire forms.



○ The Panther X3 13-axis wire bending machine for sequential forming of three-dimensional components of 1.5mm to 6mm

Pave's range also includes high-speed wire bending units such as the Huron. Robust and reliable, the compact Huron offers high output levels with reduced production costs on both short and long length products. Quick and easy to set up, the Huron incorporates user-friendly touch screen programming to minimise operator training and is equipped with Pave's front end wire stabiliser unit for accurate and twist-free finished wire products.

Ideal for production of extremely long surface length wire formed products, Pave's Zukron machine can produce simple or complex three-dimensional shapes in wire of up to 12mm diameter. Fast set up and changeover times, coupled with fully automated user-friendly CNC operation, are said to ensure economical production.

All Pave machines are designed and built to stringent quality standards at the company's production facility in the UK.

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Marlin invests in new robotic wireforming machine

Marlin Steel Wire Products of Baltimore, a large producer of metal baskets, recently made the largest investment in its history for a robot that can bend metal at the rate of nearly 500 feet per minute, more than twice as fast as conventional machines. Marlin president Drew Greenblatt said the company uses steel-wire bending robots, such as the one it recently purchased from AIM, to meet increasingly exacting standards for the baskets and wire forms the company produces. Precision is essential, Greenblatt said, because the baskets are often used to clean, dip, wash, autoclave, material handle, cure, protect, transport or store parts that have critical uses in industries ranging from pharmaceutical and medical to industrial and automotive. "We make custom stainless baskets and wire forms for clients that need solutions fast for their factories. This robot allows us to make the most precise parts in the industry."

The robot that AIM supplied to Marlin produced 100,000 stainless wire form parts in its first three weeks. Because of its speed, the company landed an order for an additional 300,000 parts that had to be produced and shipped in two weeks.

The robot also records an image of every part it makes. In 1/200th of a second, it compares the part to the original print to confirm the quality of the product. It also creates a spreadsheet of all the dimensions for every part produced, so the review is real time and exact, not a statistical sampling. Drew Greenblatt went on to say that, "PPAP is a thing of the past now because we measure every single part in the entire run. If the part is bad, the robot segregates the part. All good parts are digitally measured and we can email this to our client with the packing slip."

The robot's speed is enhanced with a second Fanuc robot that can 'handshake' with the wire bending robot, grab the parts as they are formed and perform complex operations that were once a manual operation. The Fanuc takes the part and can thread, punch, chamfer, swage, upset, drill or perform a myriad of other tasks consistently and fast.

AIM Inc – USA Fax: +1 630 458 0730 Email: info@aimmachines.com Website: www.aimmachines.com

Welded wire fabric

A new concept in wire mesh and screen technology is said to overcome the limitations of traditional mesh products based on a square or rectangle. New 3WF® (waved welded wire fabric) technology, developed from a physics theory by Ghattas Y Koussaifi and based on the research of two scientists, Gaspar Coriolis and Denys Fisher, offers a solution that the developer believes will “move the industry forward.” The attractive mesh designs produced using 3WF can be used as fences, screens, partitions and decorative items. The production process is based on an arithmetic equation that enables the design of an unlimited number of mesh patterns, produced from one continuous wire formed to shape and welded at intersection points, without cutting the wire during the production process.

3WF panels are ornamental but also rigid, providing security at a reasonable price. 3WF patterns or styles range from hand drawn designs to highly complex computer aided designs. The different patterns are grouped into families to suit any taste, purpose or customer need.

Using the 3WF concept each panel design can be made up of several segments, and for each segment there is an almost unlimited number of alternatives available. For example, a pattern divided into five segments, with 20 designs for each segment offers around 3 million mesh design alternatives. Every segment can have designs varying between curves (convex and concave), angles (obtuse, acute, and right) and straight lines (vertical and diagonal). Mesh can be produced to different specifications in terms of wire diameter, height length, mesh size and wire type (galvanized, black or stainless steel).

The 3WF patent covers concept, technology, machine and product, which gives solid protection and indicates the significance of this development. The patterns are registered industrial designs. The 3WF concept, offering ornamental design and security at a relatively affordable price, can solve the conflict between cost and aesthetics when looking for security fencing. The developer of 3WF is keen to find worldwide licensees for this technology.



○ An example of the new welded wire mesh technique

3WF – Waved Welded Wire Fabric – Lebanon Fax: +961 9 621444 Email: info@gkwire.com Website: www.3wf.com

U-bolt machinery

Since 1973 Videx Machine Engineering has manufactured machinery for U-bolts and other bent parts, working directly from wire coil. Two years ago, Videx introduced a new bending system with a slide bending die and an integral stripper mechanism. With this new line, the VAS-DBQ range of machines, users no longer need to make bending dies for each part: the machines are supplied with a floating bending die, that covers the entire range of round and square bottom U-bolts, enabling new sizes of U-bolts to be made in minutes.



○ A chamfered U-bolt made on a Videx machine

VAS-DBQ models are equipped with a positive stripper system that allows the machines to run at maximum speed without the risk of jammed parts.

The VAS machines pull wire from coil, straighten, cut to length, chamfer and thread both ends and bend to shape. They can also perform cold forming operations, such as heading and extrusion, and material removing operations such as drilling and pointing.

Chamfer cutting or rolling, thread or form rolling, knurling, collaring, grooving and flattening are among the other operations that can be performed by the machines in any sequence.

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弯曲和成型

百科全书的金属加工序评述金属弯曲是“需要相当但不是巨大的努力”。

对技术一流的线材加工厂的参观者来说，高速的线材弯曲成型生产可能看起来一点都不困难。两维线材成型机直接从线卷生产；旋转气动弯机成型尖角和半圆；CNC系统生产出双中心金属圈。这些和其它许

多令人惊叹的高质量重复的生产，完全看不见手来控制。

这种程度的线材加工效率当然是专业技术的不断积累和实践应用的结果- 不懈的努力 - 致力于弯曲和成型的专业人员一代又一代的成功。亚洲线缆的这一部分介绍在这一专业领域提供优质产品和服务的一些公司。

英国线弯曲设备

Pave Automation Ltd英国公司，是一家具有超过35年历史的线弯和成型设备设计厂家和开发商，提供一系列高性能单头和双头CNC机器。在研发上正在进行的投资使得Pave公司可以生产出具有高竞争力价格的技术领先机器。Panther X3是公司的



○ Panther X3 13轴线弯机，用于直径从1.5-6毫米三维部件的连续成型

旗舰产品13轴线弯机，它是为直径从1.5-6毫米(0.236")和3米长的三维部件的连续成形而设计的。有利于用户操作和方便编程——使用一个双滤网控制台和三维动画触摸屏图标——Panther X3能承受高达每分钟80米的速度及对于180°的，可承受高达0.05秒钟的10个可编程弯曲速度。Panther X3还融合了Pave的专利产品‘Trueline’线校正系统，用于无捻线成型的可靠输出。

Pave的产品系列还包括高速线弯单元，例如Huron。Huron单元机械化、可靠、小巧，产量水平高，从短期和长期产品来看都减少了生产成本。快速、设置简便，Huron融合了方便用户的可编程触摸屏

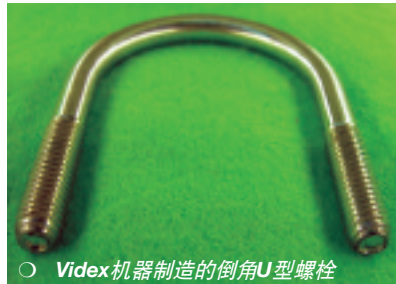
幕，尽量减少作业员培训，配备有Pave的前端线材稳定器单元，用于准确、无捻线材成品。理想的生产是极长线材成型产品，Pave的Zukron机器可以生产简单或复杂的三维形状，线材直径最大12毫米。设置和转换时间快速，并结合全自动的有利于用户操作的CNC作业，据说可以确保经济生产。所有的Pave机器都是在公司的英国生产设施工厂严格按照质量标准进行设计和制造的。

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U-型螺栓机械

自从1973年以来，Videx Machine Engineering公司已经生产U型螺栓和其它弯曲零件的机械产品，直接从线圈开始工作。两年前，Videx公司引进了一台新的弯曲系统，带一个弯曲模滑块和一个综合剥离机构。由于该条新产线，即机器的VAS-DBQ范围，使得对于每个零件，用户不再需要弯曲模：机器带有浮动弯曲模，覆盖圆底和方底U型螺栓的整个范围，在几分钟内就能处理U型螺栓的新尺寸。VAS-DBQ型号配置有固定的卸料板系统，可以使机器以最大速度运行，不存在卡住零件的风险。VAS机器从线圈中拉线、矫直、切割长度、倒角、两端穿孔和弯曲成形。也可以进行冷成形操作，例如接头和挤压；还可以移动材料，例如钻孔和定点。倒角切割或辊轧、穿孔或成形辊轧、滚花、加轭、打凹槽和弄平等其他操作都可以按顺序由机器执行。



○ Videx 机器制造的倒角U型螺栓

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Marlin投资新的机械线材成型机

巴尔的摩的Marlin金属制品公司，是一家大型金属筐生产厂家，目前迄今为止在机器上的最大投资就是按照几乎每分钟500英尺的速率弯曲金属，速度是传统机器的两倍多。Marlin公司总裁Drew Greenblatt曾说过公司使用的钢丝弯曲机，例如目前从AIM公司外购的机器，能满足公司日益严格的框和线材成形标准。他还说精度是最基本的，因为框通常都用来清洁、蘸浸、水洗、高压灭菌、材料处理、固化、保护、运输或储存在行业中起着关键作用的零件，行业范围包括从制药、医疗到工业和汽车。“我们为那些自己工厂需要尽快得到解决办法的客户提供了定制的不锈钢管和线成型产品。这些机械化操作可以使行业中的零件更精密。”AIM公司提供给Marlin公司的机器在前三周可以生产100,000个不锈钢丝部件。由于速度原因，公司开始着手另外300,000个零件的定单，这些零件需在两周生产出来并发货。

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焊接钢丝网

据说丝网和滤网技术的新概念就是克服方形或矩形传统丝网产品的局限性。新型3WF®(波形焊接钢丝网)技术，是根据Ghattas Y Koussaifi的物理理论和Gaspar Coriolis、Denys Fisher两位科学家的研究为基础而开发的，它提供的解决方案使得开发商相信“这将促进行业向前迈进。”

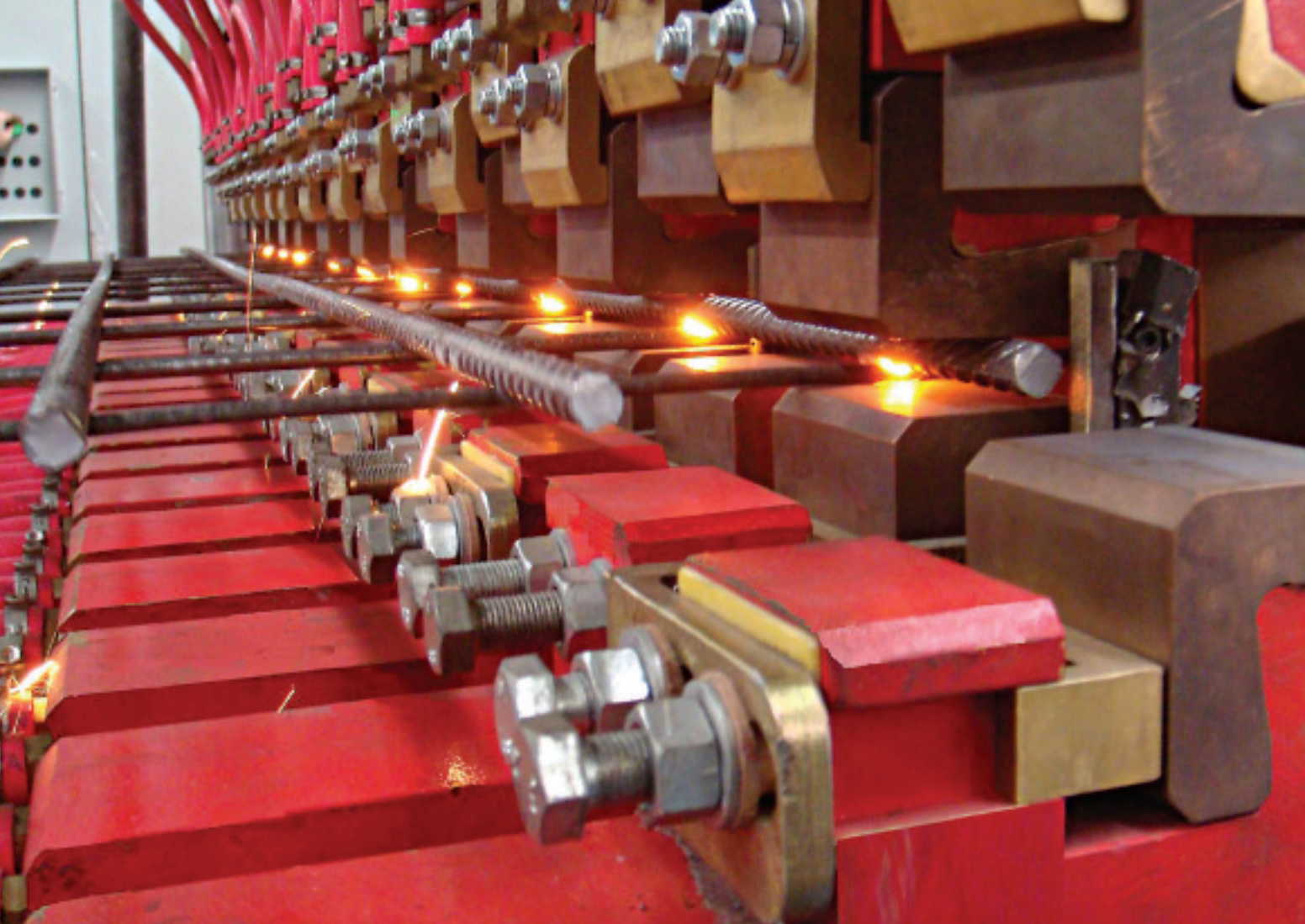
具有吸引力的丝网设计生产是利用3WF技术，可作为围墙、滤网、隔板和装饰使用。生产过程基于算术公式，可设计出无限量的丝网格局，一个连续线材成型并在交叉点焊接，在生产过程中无需切割线材。3WF面板是装饰用的，但是很牢靠、安全、价格合理。3WF格局或样式范围包括从手工控制设计到极复杂的计算机辅助设计。不同的格局形成一个家族系列，以适合不同品味、用途或客户需求。利用3WF概念，每种面板设计都是由几个部分组成，每个部分都有一个几乎无限量的可选择性方案。例如，一种布局分成五个部分，每个部分有20种设计，大约有三百万丝网设计可供选择。每个部分的曲线(凹凸)、角度(钝角、锐角和直角)和直线(竖直和对角线)之间的设计各有不同。根据线直径、高度、长度、丝网大小和线材类型(镀锌、黑色或不锈钢)能生产出不同规格的丝网。

3WF专利包括概念、技术、机器和产品，它们受到坚实的保护，这表明此项开发具有相当重要的价值。该格局是按工业设计注册的。3WF概念是在相对合理的价格下提供装饰设计和安全性，当寻求安全保障时，它可以解决成本与美学之间的冲突。3WF的开发商想该项技术获得全球性许可。

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○ 新焊接钢丝网技术的实例



Welding Machinery and equipment

The man-machine interface, so much discussed in the early days of computerised operation of machinery, has faded over the past few decades. That the huge machine on the plant floor will start and stop in response to a keystroke on a console is taken very much for granted.

But the man-machine interface is still a vital concept in welding, a process that can be automated – but not readily, and never casually. The joining of metal to metal has always required a high degree of judgment and always will. But whether the job at hand is the simple fabrication of metal supports for concrete pillars or a project as complex as a boiler or a heat exchanger, no amount of judgment will produce a sound weld in the absence of the highest-quality equipment.

The suppliers reviewed in this section of Wire & Cable ASIA are very much aware of this, and of the importance of their own contribution to the equation.

Portable automatic welders

Cold pressure welding offers manufacturers a fast, easy and cost effective way of joining non-ferrous material to create a bond, stronger than the parent materials, without sacrificing electrical integrity. British company PWM produces a comprehensive selection of cold welders to suit most applications.

Precision engineered to provide reliable welds every time, PWM low maintenance machines require little or no set up time and are said to be durable and simple to operate.

PWM's most recent innovations are the HP100 auto and HP200 auto models. These versatile, trolley-mounted machines can be used in either standard or automatic mode to produce strong reliable welds on wire and strip from 1mm to 6.5mm diameter. In standard mode, the operator depresses a foot pedal several times to activate the weld process. In automatic mode, the weld is completed at the touch of a button. Power consumption is minimal, requiring only a compressed air supply and electrical power source. Both machines are portable and can be wheeled quickly to the weld area, saving effort and reducing downtime. The HP100 can be supplied with a detachable welding head, ideal when space is limited.



○ The portable HP200 air/hydraulic cold welder

PWM also produces a range of powerful freestanding rod welders, which offer manufacturers a fast, economical way to weld large copper rod sections up to 25mm diameter and aluminium up to 30mm. Clean, quiet and user-friendly, these robust machines are easy to maintain and extremely energy efficient.

The PWM range includes hand-held and bench-mounted manual cold welders. Lightweight, designed to be comfortable to hold and easy to use, the hand-held machines have capacities of 0.1mm up to 1.8mm and are suitable for welding fine wire breaks quickly in confined spaces.

The larger bench-mounted BM10 and BM30 models, and the bench or trolley mounted M101, provide consistent welds on copper up to 3.6mm diameter and EC aluminium up to 5mm.



○ The powerful EP500 electro/pneumatic rod welder

PWM Ltd – UK
Fax: +44 1233 820591
Email: pwm@btinternet.com
Website: www.pwmltd.co.uk

Spot welding

Golden Spot Industry Inc is a manufacturer of a range of welding machinery, including wire mesh welding, butt-welding and its own microcomputer weld controller.

All equipment is CE certified with ISO 9001:2000.

Golden Spot Industry Inc – Taiwan
Fax: +886 4 2406 1060
Email: info@goldspot.com.tw
Website: www.goldspot.com.tw



○ Golden Spot's GSA-125C wire mesh welding machine

Welding flexibility for grating panels

A new model of GRG series has recently entered the CEMSA resistance welding machine family. GRG-JR-1000 is a line for the production of heavy grating panels, welding longitudinal steel bearing bars of 6,000mm length, with steel cross wires of 4mm to 6mm diameter and 1,000mm length.



○ CEMSA's GRG-JR-1000 welding machine

5-6 seconds for a cross wire of 1,000mm length and 5mm diameter (included one-step indexing). The CN towing system allows choosing the distances of the cross wires whilst for different pitch of the longitudinal bars, changing the tooling (if not multiple) is necessary. This system is chiefly targeted at medium and small companies, but large companies can also benefit from the flexible system of production.

CEMSA SpA – Italy

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Email: info@cemsa.it

Website: www.cemsa.it

The welding process is automatic; loading of the longitudinal bars and cross wires and wire cropping is manual.

The machine is available in different versions depending upon the working speed, power availability from the factory network and the aesthetic results that customers require.

The installed power is therefore linked to the working solutions, ranging from 300KW, in case of electrical cascade, up to 1,500KW in case of one-stroke welding (one wire at a time).

With the solution in electrical cascade, a multi-head scheme is used to achieve a productivity of

Butt welding

Ideal-Werk manufactures wire butt welding machines for wiredrawing mills, cable factories and wire fabricators.

A wide range of machines, Ideal models DSH 010 – DSH 180, is offered for welding steel, copper, aluminium or brass wire.

The welders are said to produce constant draw resistant welds and have a high welding capacity as well as superior reproducibility of welds in all material grades within a wide welding range from 0.1mm to 18mm wire diameters.

The machine is designed for ease of operation by unskilled labour with a common setting of jaw distance. The machine design is rigid and long lasting for tough working conditions. Low maintenance cost is combined with easy access to all machine components.

Ideal-Werk also offers butt welding machines for stranded copper and aluminium conductors, Ideal models LSF 001 – LS 1200, from 0.12mm up to 1,200mm². These machines are used by cable manufacturers in continuous extruding lines.

All Ideal butt welders are engineered to weld wire and stranded conductors as perfectly, as easily and as rapidly as possible.

Ideal-Werk – Germany

Fax: +49 2941 206 169

Email: info@ideal-werk.com

Website: www.ideal-werk.com



○ The DSH 130 butt welder with accessories

Automatic mesh welding lines

For over fifteen years TJK Machinery Co, a leading Chinese manufacturer of rebar processing equipment, has supplied mesh-welding lines for:

Reinforcing mesh

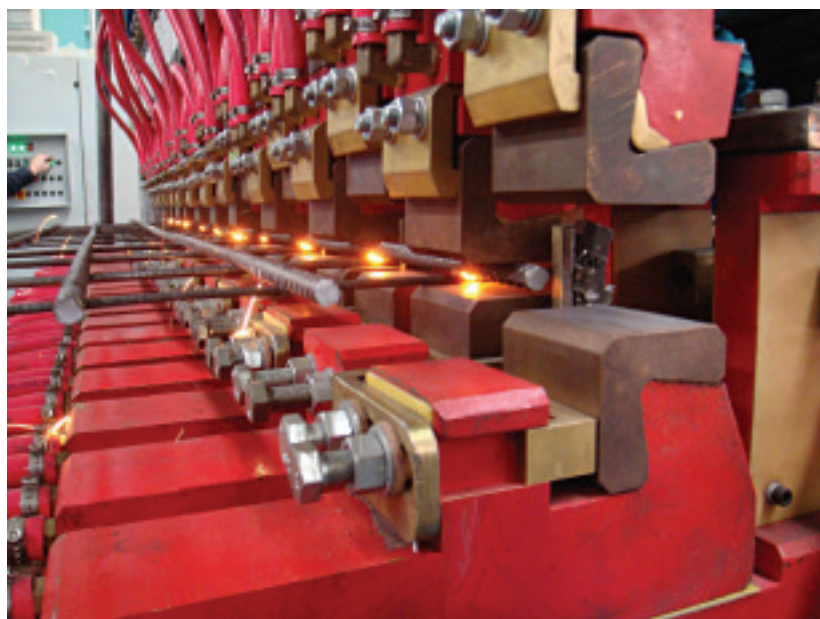
- For reinforcing mesh to standard and special mesh specifications using hot or cold rolled wire
- Welding system uses energising cylinders to ensure high quality welds at high speed
- Patented welding circuit design can weld 12mm diameter hot rolled deformed wires
- Cross wire feeding system, driven by servo motor and equipped with a new feeding unit, ensures precise positioning of cross wires on the line wires

Fencing panel

- For fencing mesh in large batches, using cold drawn wire, stainless steel or galvanized wire
- Line wire straightening system is suitable for processing different raw material
- Industrial PC control system. Mesh sheet specification, production data and welding parameters can be easily input and edited using the touch screen display
- High-speed mesh cutter has automatic start-stop control, synchronised with the welding line, at a maximum speed of 120 times per minute

Cage and security mesh

- For small diameter and small specification mesh in sheet or rolls, such as cage mesh
- Servomotor driven mesh-pulling system. Cross wire pitch is steplessly adjustable with high speed and high output
- Mesh cutter has automatic start-stop control, synchronised with the welding line. The mesh sheet can be cut to any length without overhang



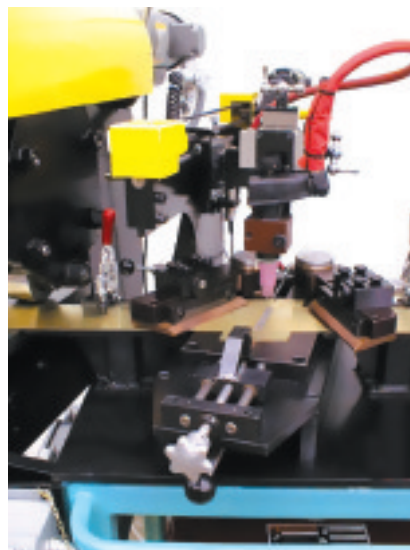
○ Close-up of a mesh welding line from TJK

TJK Machinery Co Ltd – China
Email: sales@tjkmachinery.com

Fax: +86 10 8492 8449
Website: www.tjkmachinery.com

End welding for cored wire lines

Guild International has recently developed a new welding machine for joining coil ends on production lines producing cored wire. Known as the HMA Welder, this machine produces complete edge-to-edge welds on a variety of materials on all types of lines producing cored wire from flat strip.



The HMA Welder is designed to accommodate a strip with widths from 0.250" up to 3", and thicknesses from 0.008" up to 0.060".

The HMA Welder is fast and easy to use. A shear cuts the coil ends on a bias, creating a precise edge for welding. The weld station is designed to use start and stop tabs allowing the weld to cover the entire strip width. This allows the weld to pass through the line and remain in the wire.

The machine also features swing weld clamps for easy viewing, an XY micrometer slide for torch adjustment, and optional roll planisher.

The entire weld process takes about 1-2 minutes, depending upon the size of the material. The welder is portable and compact, allowing it to be easily rolled between lines.

○ HMA Welder from Guild International

Guild International – USA
Fax: +1 440 232 5878
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焊接设备

人机接口，在早期的电脑设备中曾经大量的讨论过，但是在过去的几十年慢慢淡化了。主要是通过控制器上的按键可以启动和停止工厂里的巨大设备。

但是人机接口在焊接领域还是至关重要的概念，这个工序可以被自动化—但是不会容易和随便。金属和金属的连接一直而且永远要求高度精确的判断。但是不管要制做的是简单的水泥柱子的金属支撑结构，还是复杂的锅炉或者热交换器，如果没有高质量的焊接设备，再好的判断能力也生产不出可靠的焊接。

在亚洲线缆这一部分介绍的供应商对这些非常了解，以及他们的贡献对这一过程的重要性。

自动钢丝网焊接生产线

拥有超过15年经验的TJK机械公司，是一家中国钢筋加工设备的主要制造商，提供钢丝网焊接生产线：

钢筋网

- 针对钢筋网的标准和特殊网技术要求，使用热轧或冷轧钢丝
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 - 专利焊接电路设计可以焊接12毫米直径的热轧异形钢丝
- 十字交叉线送料系统，由伺服电机驱动并配置有新的送料单元，确保线路导线上的十字交叉线准确定位。

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- 针对大批次的护栏网，使用冷拉钢丝、不锈钢丝或镀锌钢丝。
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TJK Machinery Co Ltd - 中国
电子邮件: sales@tjkmachinery.com

传真: +86 10 8492 8449
网址: www.tjkmachinery.com

便携式自动焊机

冷压力焊接通过加入有色金属材料，从而创建一种比母材更硬硬的粘合剂，无需进行电气整合，就能为制造商提供一种快速、轻松、经济有效的方式。英国PWM公司生产出的冷焊机选型适合大多数应用。由于其精密性，PWM公司的低维护机器每次都能提供可靠焊接，设置时间少甚至不需要，还很耐用、操作简单。



○ 便携式HP200气动/液压冷焊机

目前，PWM公司最近的创新是HP100和HP200自动模式。由于其多样性，在标准或自动模式下都可使用安装有推车的机器，可对直径从1-6.5毫米的线材和带材进行可靠焊接。在标准模式下，操作员压几下脚踏板就可以激活焊接过程。在自动模式下，只要触摸按钮就能完成焊接。功耗最小，只需供应压缩气体和电力来源。两种机器都是便携式，可以用手轮迅速推到焊接区域，节省人力、减少了停机时间。当空间有限时，HP100配有一个可拆焊接头。

PWM还生产一系列强大的独立棒焊机，为焊接直径高达25毫米的大型铜棒型材和30毫米铝材的制造商提供了一种快速、经济型方式，清洁、安静、用户方便使用都使得这些机器维护简单、非常节能。PWM系列括手持式和台式手动冷焊机。轻质设计、把持和使用都很舒适，手持式机器的能力为0.1-1.8毫米，适合于在有限空间内迅速焊接细钢丝。较大的台式BM10和BM30型号、台式或安装有推车的M101可提供直径高达3.6毫米的一致铜焊接和5毫米的EC铝焊接。

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网址: www.pwmltd.co.uk

栅板焊接的灵活性

目前，新型GRG系列融入了CEMSA电阻焊接家族产品。GRG-JR-1000是重型栅板生产线，焊接6000毫米长的纵向钢轴承棒、直径4-6毫米和1000毫米长的十字钢交叉线。焊接过程是自动的，纵向棒材、十字钢丝装载和钢丝剪切都是人工的。因工作速度、工厂网络电力供应和客户需要的审美效果不同，机器有不同的型号。因此，装机功率与工作解决方案有关联。遇到电级联，功率范围从300KW开始；遇到一次冲程焊接，功率范围高达1500KW（一次一根钢丝）。

由于采用电级联解决办法，使用多头方案可以使1000毫米长、5毫米直径的十字交叉线的生产率到5-6秒（包括一次分级）。对于不同节距的纵向棒，CN修边系统允许选择十字交叉线的间距，更换刀具也是必须的（如果不是多头）。系统的主要目的是针对中小型企业，但是对于大公司而言，灵活性的生产系统也十分有益。

CEMSA SpA - 意大利
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网址: www.cemsa.it



○ CEMSA的GRG-JR-1000焊机

钢丝网焊接设备

Ideal-Werk公司是线处理行业领先市场的工业钢丝网焊接和自动生产线设计、制造商。Ideal钢丝网焊接机从料斗中取出预切割线材自动送料。由于是模块化设计，Ideal钢丝网焊接机灵活多样、更换产品时切换时间短。根据客户要求，机器配置有双料斗、剪切单元、十字交叉线纵剪切机或卸堆装置。该机器生产出的典型产品包括护栏丝网、线架、陈列品、动物笼、电缆桥架和超市手推车。除了钢丝网焊机，Ideal公司还提供自动生成线，用于大量的焊接成形护栏网、冰箱架、隔板、洗碗机篮和其他大规模钢丝部件生产。Ideal公司还提供型号Versaweld CSR的数控夹具焊机，用于中小型产量的夹具框线材产品的灵活生产。

IDEAL-Werk - 德国
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网址: www.ideal-werk.com

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○ Golden Spot公司的GSA-125C钢丝网焊接机

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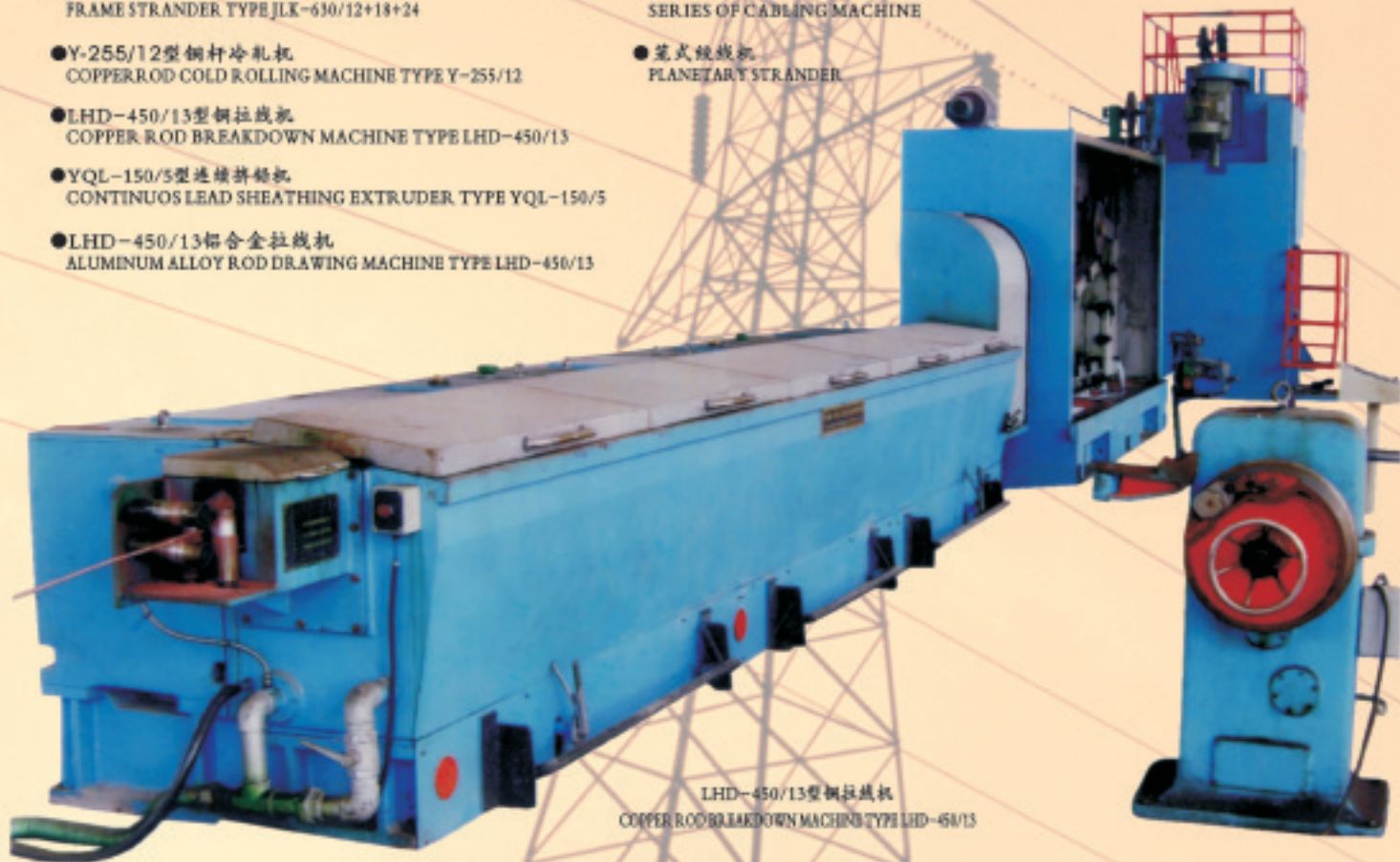
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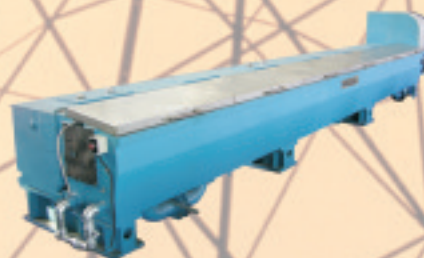
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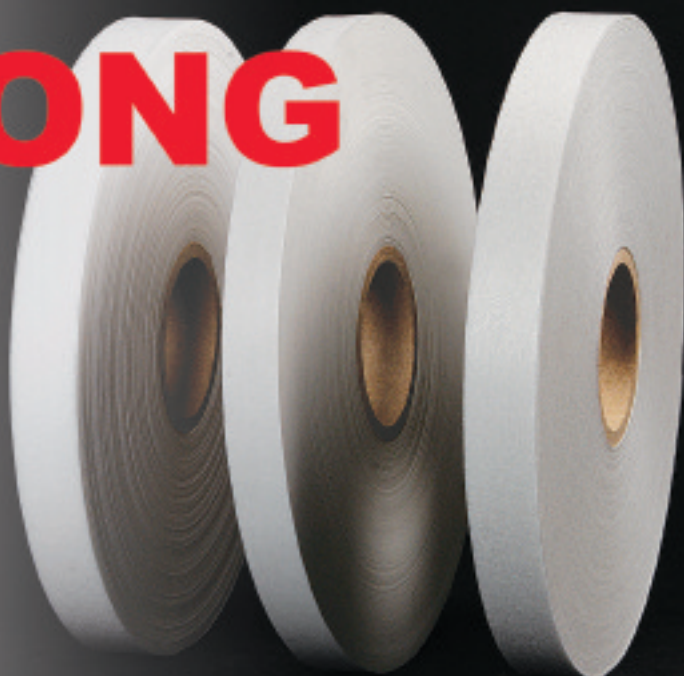
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- SEMI-CONDUCTIVE BULKY BUTYL RUBBER TAPE

OTHER PRODUCTS:

- LOW SMOKE NON-HALOGEN FLAME RETARDANT TAPE
- NON-CONDUCTIVE TAPE
- COPPER WIRE SHIELDING TAPE
- WATER BLOCKING YARN
- WATER BLOCKING ROPE
- POLYESTER FILM

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