

Wires • Cables • Fibre Optics • Springs • Fasteners • Precision Parts

# Wire & Cable ASIA 线缆

January 2009 • US\$33\*

» Our research pays off for you. With savings of 200,000 euros per year.«

Do you want to know more?  
[www.sikora.net](http://www.sikora.net)

Dr. Hilmar Bolte, Research SIKORA AG



## X-RAY 2120

Diameter, wall thickness and eccentricity measuring system for insulating and jacketing lines

**Significant cost reduction**  
**Optimized productivity**  
**Continuous quality control**

  
**SIKORA**  
Technology To Perfection

- **COST SAVING**
- **ACCURATE**
- **HIGH SPEED**



### **ODEX<sup>®</sup> 10** All-In-One Measuring System for:

- Concentricity / Eccentricity
  - Diameter, Ovality
  - Minimum Wall

For Cat. 5...8, Coax, Telephone, Building, Automotive, Special Wire, from 0.08 up to 10 mm (.003 up to .4 in.) O.D.

- Insensitive to wire vibration thanks to high speed scanning
- Extremely compact and fully static, no moving mechanisms
- Automatic inductor control allows for installation in tight areas

Visit us at:  
**INTERWIRE** Cleveland, USA  
 TRADE EXPOSITION April 27-30, 2009  
 Booth # 2026

#### Worldwide Zumbach Customer Service and Sales Offices in:

Switzerland (H.Q.): Tel. +41 (0)32 356 04 00, E-mail: sales@zumbach.ch  
 Argentina: Tel. +54 (0)11 4701 0774, E-mail: ventas@zumar.com.ar  
 Belgium: Tel. +32 (0)2 478 16 88, E-mail: info@zumbach.be  
 Brazil: Tel. +55 (0)19 3829 6000, E-mail: vendas@zumbach.com.br  
 China: Tel. +86 (0)21 542 60 443, E-mail: office@zumbach.com.cn  
 France: Tel. +33 (0)1 64 24 46 31, E-mail: ventes@zumbach.com.fr  
 Germany: Tel. +49 (0)2238 8099-0, E-mail: verkauf@zumbach.de

India: Tel. +91 20 2432 9129, E-mail: joseph@zumbachindia.com  
 Italy: Tel. +39 0332 870 102, E-mail: zumit@zumbach.it  
 Spain: Tel. +34 93 666 93 61, E-mail: gestion@zumbach.es  
 Taiwan: Tel. +886 2 2630 5530, E-mail: zumfareast@giga.net.tw  
 UK: Tel. +44 (0)870 774 3301, E-mail: sales@zumbach.co.uk  
 USA: Tel. +1 914 241 7080, E-mail: sales@zumbach.com

[www.zumbach.com](http://www.zumbach.com)



## SANP MACHINERY

Try to be the best one of braiding machines manufacturer in the world

**三普机械** 做世界优秀的电线电缆设备



HANGZHOU SANP MACHINERY CO.,LTD: NO.261, North Yingbin Road,Fuyang,Zhejiang,China

杭州三普机械有限公司

地址: 浙江省富阳市迎宾北路261号

Tel:+86-571-63369241 Fax:+86-571-56906333 E-mail:fytd@hztongda.com

CABLE KOREA CORP: Room 502, CJ Plaza ,645,Doojung-Dong,Cheonan-City,Choongnam-Do,Korea 330210

Tel: +82-(0)41-622-5100 Fax: +82-(0)41-622-5101 E-mail:cablekorea@kornet.net

Jay Enterprise: B-301, West View,117,Bajaj Road, Vile Parle (West)Mumbai - 400 056 India

Tel: +91-22-65753409 Fax: +91-22-26112381 E-mail:jaybombay@gmail.com

BilmakGroup Corperation Address: Zeytinlik mah.Omer Naci sk. No:4/1 34140 Bakirkoy - Istanbul / TURKIYE

Telefon (+90 212) 4662016 4662017 Fax (+90 212) 5613748 koray@bilmakgroup.com



# China International Wire & Cable Industry Exhibition



www.**wireshow**.com

A Grand Wire & Cable Event

线缆行业盛会

Shanghai Everbright Convention & Exhibition Center  
No. 88, Caobao Road, Shanghai, China  
22-24 Sept. 2009

- China Wire & Cable Industry Conference will be run in conjunction with the exhibition WireShow
- WireShow is the 2nd biggest exhibition in China wire & cable industry

**WireShow - The Way To Wire Industry**

## Organizer



Shanghai Electric Cable Research Institute

Tel: 86-21-65483517 65387930

For details, please contact:  
exhibition@secr.com

We are interested in exhibiting.

Please reserve \_\_\_\_\_ sqm

Name \_\_\_\_\_ Tel \_\_\_\_\_

Email \_\_\_\_\_ Fax \_\_\_\_\_

Company \_\_\_\_\_



# 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 $\leq 75$ 分贝。



GSB-Z系列

重型机方面，GSB-Z系列高速编织机主要适用于大直径、大长度线缆及管材的钢丝编织。GSB-1Z, 2Z, WGSB-3, WGSB-3B型（16锭，24锭，32锭卧式，36锭卧式钢丝编织机）的最大编织丝直径可达0.4mm\*12股（钢丝）。最大编织芯线直径 $\phi$ 100mm。



绕包机系列

本系列产品可分单头，双头或三头绕包，绕包分为卧式或立式，是生产通讯电缆、控制电缆、防火电缆等专用设备。绕包盘最大转速可达1500r.p.m，绕包节距0.5mm~30mm，绕包盘最大外径 $\phi$ 300mm。绕包带可分为片式和筒式两种。

## 上海南洋电工器材有限公司

地址：上海南汇区鹿达路110号

电话：0086-21-33896306

33896307 33896308

传真：0086-21-33896305

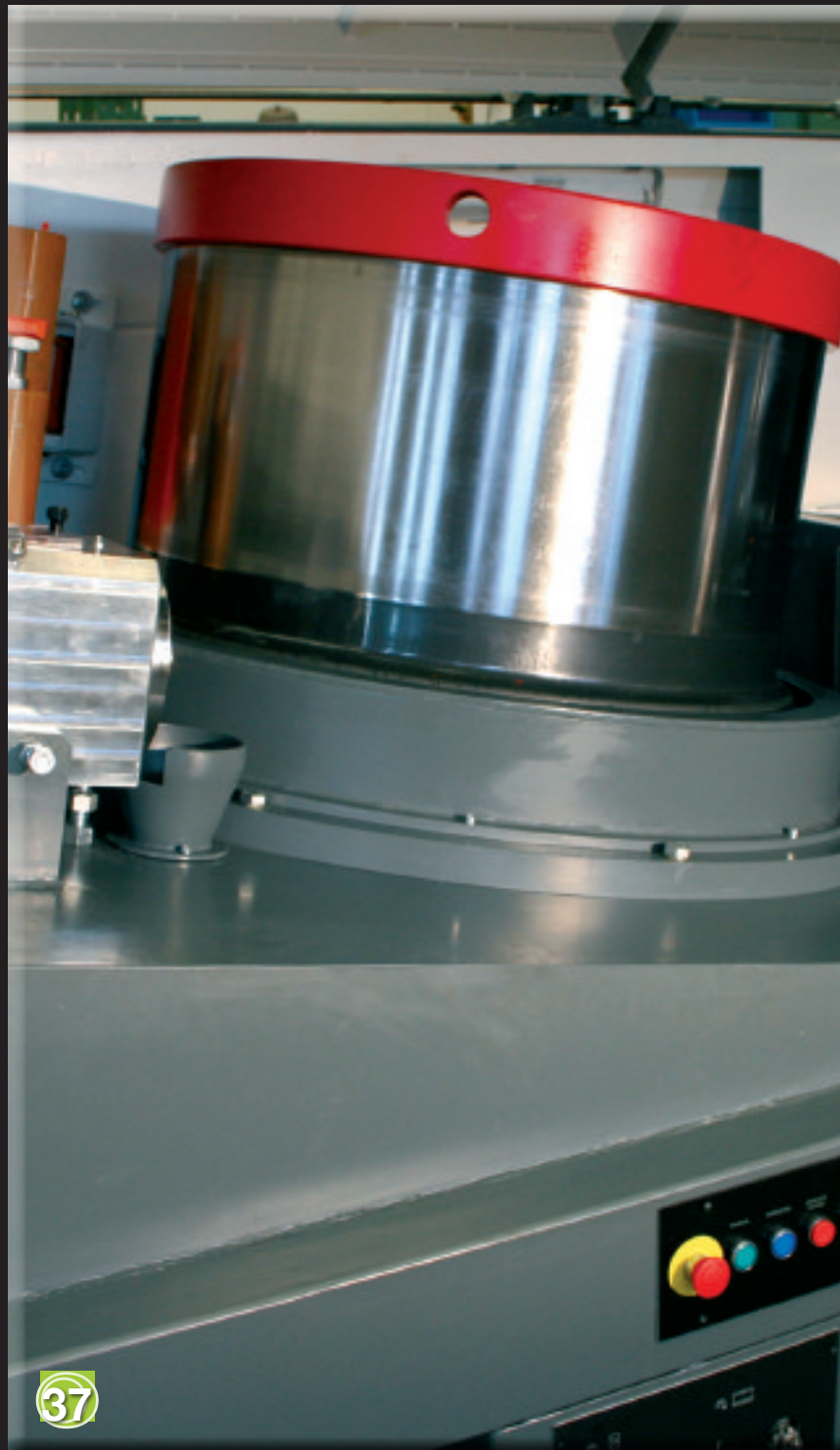
http: www.shanghai-nanyang.com


E-mail: sales@shanghai-nanyang.sina.net

# Contents

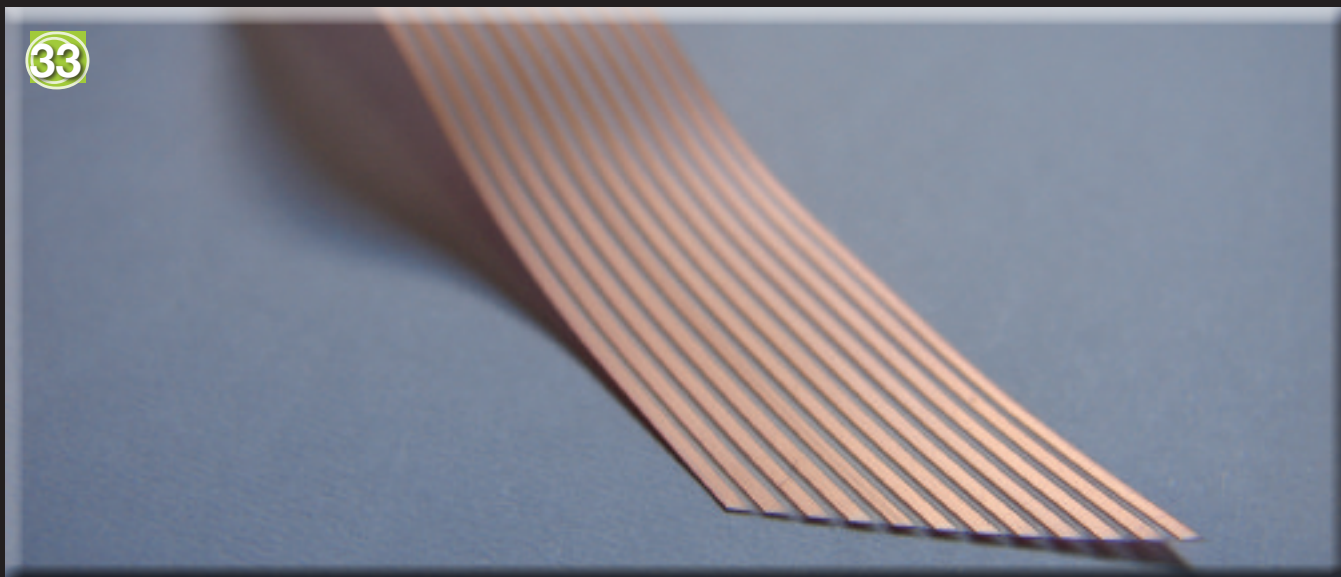
## in this issue

- 6 Industry News
- 14 行业新闻
  
- 18 Telecom News
- 19 通信新闻
  
- 20 From the Americas
- 23 来自美国的消息
  
- 28 Technology News
- 34 技术与产品
  
- 37 Wire drawing machinery & technology
- 44 拉丝设备和技术
  
- 49 Furnaces & heat treatment
- 53 热处理和熔炉
  
- 63 Editorial Index
- 63 通讯目录
  
- 63 Advertisers Index
- 63 广告索引



When you have finished with this magazine please recycle it 

33



30

## Technical Articles

- 56** New optical fibre coating system optimised for FTTx applications  
By Bob J Overton, Draka Comteq, Claremont, North Carolina, USA;  
and Xavier Meersseman, Draka Comteq, Billy Berclau, France
- 60** 新型优化的光纤涂层系统，用于FTTx应用 作者：美国Draka Comteq公司Bob J Overton和法国Draka Comteq公司Xavier Meersseman

**Editor (编辑):**..... Gill Watson  
**Features Editor – USA**  
**(专栏编辑 – 美国):**..... Dorothy Fabian  
**Editorial Assistant**  
**(助理文字编辑):**..... Christian Bradley  
**Design/Production (设计/制作):**..... Julie Tomlin  
**Production (制作):**..... Lisa Benjamin

**Translation (翻译经理):**..... Tony Zhou  
 Jianye Yang

**Sales Manager (广告销售经理):**..... Paul Browne  
**Advertising/Marketing (广告/营销):**..... Giuliana Benedetto  
*Italian speaking sales*  
 Hendrike Morriss  
*German speaking sales*  
 Linda Li  
*中文区域营销*  
 Jeroo Vandrevala  
*Indian sales*

#### Advertisement Coordinator

**(广告联络人):**..... Liz Hughes  
**Accounts Manager (财务经理):**..... Richard Babbedge  
**Subscriptions (订阅)**..... Liz Hughes  
**Publisher (发行人):**..... Caroline Sullens  
**Founder (创办人):**..... John C Hogg

#### Europe (欧洲)

##### Advertising/Marketing & Editorial

**(广告、营销及编辑部)**  
 46 Holly Walk, Leamington Spa  
 Warwickshire CV32 4HY, UK  
 Tel (电话):..... +44 1926 334137  
 Fax (传真):..... +44 1926 314755  
 Email (电子邮箱):..... intras@intras.co.uk  
 Website (网站):..... www.read-wca.com

#### USA (美国)

##### Editorial (编辑)

Intras Ltd – Dorothy Fabian  
 272 First Avenue, Apt 12G  
 New York, NY 10009, USA  
 Tel (电话):..... +1 212 614 9266  
 Fax (传真):..... +1 212 614 9266  
 Email (电子邮箱):..... dfabian@rcn.com

#### India (印度)

Jintras Ltd – Jeroo Vandrevala  
 Subarna (Ground Floor), P21/N, Block A  
 New Alipore, Kolkata 700 053, India  
 Tel (电话):..... +91 33 2407 07 01  
 Fax (传真):..... +91 33 2407 07 00  
 Email (电子邮箱):..... jeroov@vsnl.com  
 Website (网站):..... www.jintras.com

This publication and its full contents of layout, text, images, and graphics is copyright protected. No part of this publication may be reproduced in any form or by any means, electronic or mechanical including photocopying, recording or any other storage or retrieval system without the publisher's written permission. The publisher, owners, agents, printers, editors and contributors cannot be held responsible for and hereby exclude all liability whatsoever for errors, omissions or the accuracy and claims printed or inferred in the editorial or advertisements published in this, previous or subsequent editions or for any damages, costs or losses caused thereby. Wire & Cable ASIA reserves the right to edit, reword and subedit all editorial submissions in accordance with editorial policy. Wire & Cable ASIA expressed graphically or by text is a registered name and style trademark of Intras Ltd, UK. All matters relating to this Disclaimer are governed by the laws of England.

《亚洲线缆》杂志所有图文受版权保护。未经书面授权不得全部或部分以任何方式转载。出版商、编写者、代理商、印刷商及投稿者对在本期、以前、以及将来刊登的稿件或广告的真实性和提出的索赔不承担责任。英国Intras Ltd 公司拥有《亚洲线缆》(Wire & Cable ASIA) 图像和文字注册商标。

Wire & Cable ASIA is published six times a year. It is circulated throughout North and South-east Asia to registered readers in wire, cable and wire component producer and consumer industries. An annual subscription is available from Intras Ltd at Euros 140, £95, US\$195 or Rupees 7,880.

《亚洲线缆》一年出版六期，面向整个北亚、东南亚地区的电线、电缆和线材制品的生产商和用户发行。订阅一年：欧元140；英镑95；美元195；卢比7,880。



#### April 2009

27–30: **Interwire** – trade exhibition – Cleveland, USA

##### Organisers:

Wire Association Intl  
 Email: info@wirednet.org  
 Website: www.wirednet.org



#### May

12–15: **wire Russia 2009** – trade exhibition – Moscow, Russia

##### Organisers:

Messe Düsseldorf GmbH  
 Fax: +49 211 4560 7740  
 Email: info@wire-russia.com  
 Website: www.wire-russia.com

#### June

10–12: **Wires & Fasteners Ukraine (TDS)** – trade exhibition – Kiev, Ukraine  
**Organisers:** TDS – Expo  
**Email:** olga@welding.kiev.ua  
**Website:** www.weldexpo.com.ua  
 www.wire-ukraine.com

#### September

18–21: **Wire Turkey** – trade exhibition – Istanbul, Turkey  
**Organisers:** Media Force  
**Fax:** +90 212 465 7417  
**Email:** info@mediaforceonline.com  
**Website:** www.mediaforceonline.com

#### October

6–8: **Metaltech/Tubotech** – trade exhibition – Sao Paulo, Brazil  
**Organisers:** Grupo Cipa  
**Email:** international@cipanet.com.br  
**Website:** www.cipanet.com.br

13–15: **wire/Tube SE Asia** – trade exhibition – Bangkok, Thailand  
**Organisers:** Messe Düsseldorf Asia Pte Ltd  
**Email:** wire@mda.com.sg  
**Website:** www.wire-southeastasia.com

#### November

9–11: **58<sup>th</sup> IWCS** – technical conference – Charlotte, NC, USA  
**Organisers:** IWCS Inc  
**Fax:** +1 732 389 0991  
**Email:** admin@iwcs.org  
**Website:** www.iwcs.org

#### 2010

##### April

12–16: **wire/Tube Düsseldorf** – trade exhibition – Düsseldorf, Germany  
**Organisers:** Messe Düsseldorf  
**Fax:** +49 211 45 6087 7793  
**Email:** wire@messe-duesseldorf.de  
**Website:** www.wire.de

##### September

TBA: **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



**June 10 - 12, 2009, Kyiv, Ukraine**

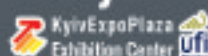
**WIRES  
& FASTENERS  
UKRAINE 2009**



**Want to extend your  
business into the growing  
Ukrainian marketplace?**

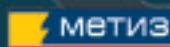
- Ukraine is in the center of Europe
- Ukraine is a member of WTO
- Ukraine and Poland will host Euro 2012  
(The 2012 UEFA European Football Championship)
- Visa-free regime for Europeans
- Low-cost accommodations/customs brokerage service
- Rapidly developing national economy
- Open to new foreign investments
- Main production sector - machine building, ferrous  
and non-ferrous metal industry

**Kyiv**



**Exhibit at the Wires & Fasteners Ukraine 2009 show!**

For the first time alongside the Kyiv Technical Trade Show 2009 will be held  
**International Forum "Anticor Ukraine 2009"**



General media sponsor

Official support:  
Ministry of Industrial Policy of Ukraine

Show organizers:  
UKRMETIZ Association  
UKRCZVETMET Concern  
UKRELECTROCABEL Association  
TDS-Expo Ltd.  
Trade House Welding



International Sales and Marketing - INTRAS Ltd. (Great Britain)  
Tel: +44 1926 334137 E-mail: intras@intras.co.uk

**Austrian**

Official Carrier



Visa support - Royal Mile Travel Company  
Tel: +38 044 493 9898 E-mail: travel@royalmile.com.ua



Customs clearance and on-site services for exhibition cargo -  
SK-EXPO LTD  
Tel: +38 044 526 9451 E-mail: sk-expo@w-mail.com.ua

**For further information and to reserve your booth space please contact Intras Ltd.**

**Tel: +44 1926 334137 Fax: +44 1926 314755 E-mail : intras@intras.co.uk**



## Industry news

Arnd Willmann (architecture office Reindl & Partner, Nuremberg), Heinz Rockenhäuser (president of Maschinenfabrik Niehoff), Matthias Thürauf (mayor of Schwabach), Hans-Hermann Kroher, delegate of the shareholder families Niehoff and Kroher, Dr. Michael Schwarzer (chairman of the supervisory board), Richard Schwager (finance director and economic counsellor of Schwabach) (from left to right)

# New Niehoff plant

Maschinenfabrik Niehoff GmbH & Co KG is building a completely new plant at the company's headquarters in Schwabach near Nuremberg, Germany. The mid-September groundbreaking ceremony marked the beginning of the development.

The company's departments will be relocated in three stages. The first phase of construction will include the new locations for assembly, test stand, trials, shipping, paint shop and apprentices workshop. The first construction stage, which has been started, comprises a production area of 17,000m<sup>2</sup> and production-related offices of 1,500m<sup>2</sup>.

The company is investing €25 million, not including the property purchase, in this first construction phase. Dependent upon business conditions, the company is planning a second phase of construction consisting of a further 8,000m<sup>2</sup> production area.

Niehoff continuously invests in the development of new products and in machinery, equipment and manufacturing and organisational methods. During the last few years the company has expanded its portfolio by adding braiding machines, stranding machines for data cables and inductive annealers to its product line.

The buyout of Hacoba rewinders and Bongard coilers completed Niehoff's production portfolio and considerable worldwide investments were undertaken in the USA (2004), India (2006), Czech Republic (2007) and in Brazil (2008).

The forthcoming headquarters relocation in Schwabach is another contribution to the company's capacity expansion. Spacious shop floors with optimally designed workplaces will enable a more efficient organisation of process flows and savings for material handling and order processing.

The new plant will include a state of the art paint finishing system.

This investment is aimed at increasing the company's competitiveness – which is no longer possible at its present site – and at reducing lead times in high demand conditions.

Over four hundred employees, plus more than forty apprentices, work for Niehoff in Germany. Niehoff group worldwide comprises five subsidiaries and four representative and service offices with about two hundred fifty employees.

Of current revenue, about 80% is still generated at the company's headquarters.

**Maschinenfabrik Niehoff GmbH & Co KG – Germany**  
**Fax:** +49 9122 977 155  
**Email:** info@niehoff.de  
**Website:** www.niehoff.de

## Concast contract to supply ArcelorMittal tyre cord facility

ArcelorMittal Brasil SA, Belo Horizonte, Brazil, has placed an order with Concast AG of Switzerland, a company of the SMS group, for the supply of a secondary metallurgy centre and of a continuous caster for the production of SBQ billets (special bar quality) for the manufacture of wire for tyres (tyre cord).

Commissioning is scheduled for June 2010.

The facilities to be supplied – a ladle furnace and a continuous caster – will be incorporated into the existing integrated iron and steel works at Monlevade, Brazil. This will serve to increase the present capacity of 1.2 million tons to 2.4 million tons of liquid steel per annum.

A wire-rod rolling mill connected to the continuous caster has been ordered from another SMS group company, SMS Meer.

The ladle furnace, with a capacity of 130 tons and a 24 MVA transformer, allows a heating rate of around 4.5°C/min. With six strands and a casting radius of 10.25m, the continuous caster produces square billets in the section sizes 130 x 130mm and 155 x 155mm. The caster is equipped with mould stirrers and a hydraulic compact oscillation system.

The continuous caster will represent the latest in state of the art facilities for the group's production of wire for tyre carcasses.

**Concast AG – Switzerland**  
**Email:** sales@concast.ch

**Fax:** +41 44 202 81 22  
**Website:** www.concast.net

## Atkin Automation is looking to the East

In a move designed to benefit its Eastern European customers and prospects, Atkin Automation has enhanced its website to offer Russian, Polish, German and French language options.

Atkin Automation, an international supplier of coil handling equipment and systems, is also offering a selection of pre-owned Atkin and BHP coil handling equipment that can be viewed and ordered through the website. The company believes that in the current world economic climate some companies will need to purchase pre-owned and refurbished equipment, priced to meet their reduced capital equipment budgets.



○ Atkin Automation coil handling equipment

“Interest in Atkin Automation products from Eastern Europe has grown significantly over the last year or so, meaning the development of a multi-lingual website was very important,” explained managing director, Chris Ward.

He continued, “While many companies are finding it nearly impossible to obtain budget for new capital equipment purchases, we felt it was appropriate to include pre-owned and refurbished equipment on the website. These initiatives are designed to encourage the growth of interest from Eastern Europe, whilst giving companies...a greater number of capital equipment purchase options.”

**Atkin Automation Ltd – UK**  
**Email:** sales@atkinautomation.com

**Fax:** +44 1842 763614  
**Website:** www.atkinautomation.com

## clean wire before annealing



## candor

### can do wire equipment

- ◆ Electrolytic plating
- ◆ Candojet hot water cleaning
- ◆ Electrolytic & Ultrasonic degreasing
- ◆ Welding wire cleaning and copper coating
- ◆ Pickling & phosphating



**CANDOR Sweden AB**  
 Tel: +46 11 21 75 00 Email: info@candorsweden.com  
 Fax: +46 11 12 63 12 Website: www.candorsweden.com

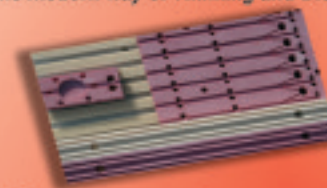
**isolmax** CONTACT  
 Mr Andrea Priati  
 Via F. Magglio, 20 - 20096 Piatelle (BT) - Italy  
 Phone: +39 02 92140728 - Fax: +39 02 92142266  
 Email: info@isolmax.it - Website: www.isolmax.it

### Fiberglass and Thermoplastic Components for Drawing Machines



Flanges, coils and Plates annealing furnaces in thermosetting material for wire drawing machines

The modern way of Thinking and Drawing



**isolmax** also produces other components in fiberglass and thermoplastic material (Teflon, nylon, brass, PVC, glass epoxy, polyester glass and many other materials) for applications like drilling shafts, tubes, pulleys, plates, washers, spacers, and others. All our components can fit our customers' designs.

## Relocation to Lakewood

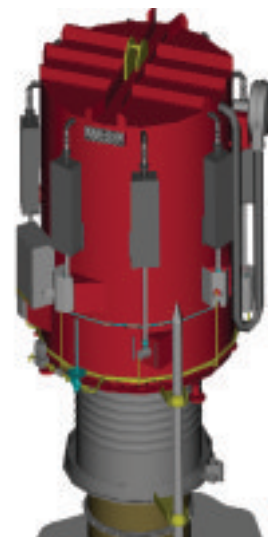
Rad-Con Inc, manufacturer of industrial furnaces since 1966, has moved its corporate offices to Lakewood, Ohio USA, from its previous location in nearby Bay Village. The space has been configured to accommodate Rad-Con's growing staff of engineers and programmers, as well as to consolidate its warehouse activities.

Rad-Con is among the leading suppliers of bell-type batch annealing furnace (BAF) equipment, using a 100% hydrogen protective atmosphere. In addition to the equipment, Rad-Con provides design,

installation, and operational support of complete annealing facilities.

Rad-Con's business also involves increasing the efficiency of annealing facilities through software models. Its CAPS™ software predicts furnace heating and cooling performance, and directs the batch scheduling. The result is said to be improvement in throughput while reducing utility costs and improving quality.

**Rad-Con Inc – USA**  
**Fax:** +1 440 871 2948  
**Email:** sales@rad-con.com  
**Website:** www.rad-con.com



○ Rad-Con supplies bell-type batch annealing furnaces for the wire industry

## Day of celebration for Eurolls Group

10<sup>th</sup> October 2008 was a big day for the Eurolls group – a celebration in the town of Valbrembo (Lombardy, Italy) to mark the grand opening of the new headquarters of Cortinovis Machinery and the inauguration of a new industrial pole. There are now three companies of the group (Cortinovis Machinery, Team Meccanica and Vitari) working in the same industrial area, thus improving synergy in production and commercial management.

The programme included a conference: “Strategies for addressing global markets and the recession.”

President of Eurolls group, Mr Renato Railz, welcomed over 200 people (authorities, specialist press, representatives of trade associations and customers) to focus on what he called the ‘E factor’ – the enthusiasm that comes from a policy of friendly incorporation, enhancing the specific know-how and identity of each firm while optimising productive and commercial activities with a group strategy.

“Eurolls Group has today a sound position on an international scale in the wire, cable and tube sectors; in particular the associated firm Cortinovis Machinery is definitely a leading company as for the cable industry, especially referring to rotating machines,” Mr Railz told the conference. “So it seems there is no need for celebrations.”



○ Speaking: Mr Renato Railz, president of Eurolls Group Sitting, from the left: Mr Giampaolo Bozzetto, president of Cortinovis Machinery and head of the ‘Bergamo’ industrial pole of Eurolls Group; Mr Federico Bussola, sales manager of Cortinovis Machinery; Mr Anthony DeRosa, president of Cortinovis America; Mr Raul Pascoareli, president of Cortinovis do Brasil

“But I think that celebrations are always important if they can enhance and improve enthusiasm towards new challenges.

“Today, technology, product innovation and after sales service are undoubtedly the key words for success, but in twenty-one early years of activity I realised that no project and goals can be achieved without a solid group of people around you, which does not only mean reliable and skilled professionals, but also positive thinking, enthusiastic people.

“The results prove that I am right: the three companies of the industrial pole are going to double the sales proceeds of 2007. That is why I wanted this celebration day: to show how a period of general recession can be overcome by hard work and confidence in the future, turning worldwide and fast changes of the market into opportunities of new business.”

**Eurolls – Italy**  
**Fax:** +39 0432 79650 1821  
**Email:** info@eurolls.com  
**Website:** www.eurolls.com

# Underground powerlinks in Qatar

A new contract has been signed between Nexans and KAHRAMAA for the phase VIII expansion and development programme of Doha's electricity network, following the order worth €80 million announced in June.

Nexans has been awarded a turnkey contract worth 58 million euros by the Qatar General Electricity and Water Corporation (KAHRAMAA) to implement six underground powerlinks, ranging from 34 to 250 MVA, to reinforce and extend the high voltage (HV) network serving Doha, the capital of Qatar.

These powerlinks, which will connect substations serving the Al Wajbah area of Doha, form part of KAHRAMAA's phase VIII projects for the expansion and development of Qatar's electricity network to increase its capacity to meet the rapid increase in demand created by the country's urban and

economic development. Nexans will provide a complete turnkey package for this project, which is due for completion in July 2009. This includes design, development, supply and installation of a total of 96 km of 66kV and 132kV single core cables and accessories.

This project is the latest in Nexans' long history of collaboration with

KAHRAMAA, with the first contract dating back to the 1970s.

The cables will be manufactured in Nexans factories in France and Belgium.

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

## New Draka appointment

Draka Communications has appointed Peter Ludin, an experienced executive in the European IT and telecoms industry, as director of business development. He will report to Karel Helsen, vice president for broadband for the optical fibre technology and network solutions specialist.

Mr Ludin, a Swiss national, has worked with senior management in the telecommunications industry across Europe and the Middle East in a career spanning 25 years. He has held high-level positions in international companies including Global Crossing, BT and Digital Equipment Corporation.

Draka Communications has considerable experience in managing broadband infrastructure projects, such as the Citynet FTTH deployment in Amsterdam, now moving into its second phase.

**Draka Holdings NV – Netherlands**  
**Fax:** +31 2056 89899  
**Email:** info@draka.com  
**Website:** www.draka.com

## SINGLE SOURCE FOR CABLE EXTRUSION SYSTEMS.



Supermac offers state of the art manufacturing for all your Wire & Cable needs. Backed by a team of highly motivated & qualified engineers. Supermac is a world renowned player exporting to some major countries.

- CCV LINE FOR LV/MV POWER CABLES
- TRIPLE EXTRUSION LINE FOR (SIOPLAS) XLPE CABLE
- INSULATING & SHEATHING LINE FOR POWER CABLES
- INSULATION LINE FOR CONTROL CABLES
- TANDEMISED TELEPHONE WIRE INSULATION LINE
- SHEATHING & JACKETING LINE FOR PIJF TELEPHONE CABLES



**SUPERMAC INDUSTRIES (INDIA) LIMITED**  
 An ISO-9001 Company

Office : A-29, Naraina Industrial Area, Phase-I, New Delhi-110 028, INDIA	Phone : Office : 011- 25990411, 42	e-mail : supermac@satyam.net.in
Works : Plot No. 2, Sector-6, IMT Manesar, Gurgaon, Haryana, INDIA	Works : 0124-2291417, 0124-5527652	website : www.supermacindia.com
	Fax : Office : 011-25799674	
	Works : 0124-2291417, 0124-2291517	

Marketing Office : 301, 'SARGAM' Plot No. 4, Sector - 1, Charkop, Kandivli (W), Mumbai - 400 067  
 Phone : 022-29696652, 26681525 Fax : 022-29891934 E-mail : sajeetan.dsoxoa@gmail.com

# New technology in global markets

The next major biennial conference jointly organised by the Wire Association International (WAI), Associazione Costruttori Italiani Macchine Per Filo (ACIMAF) and the IWMA will take place in Istanbul 2<sup>nd</sup>-3<sup>rd</sup> November 2009. Since 2003 these three key wire and cable associations have collaborated in organising high quality conferences in Stresa, Prague and Bologna.

In preliminary discussions with leading organisations in the Turkish industry there has been an enthusiastic welcome for the choice of Istanbul. Its geographical location, with a foot in both Europe and Asia, and ease of travelling to and from makes Istanbul attractive to potential delegates from

Europe, the CIS and former Soviet Union republics, the Arab States and the Middle East, India and Africa.

It is expected that the conference will be conducted in Turkish and English and possibly Russian.

There are important and developing industries in the wire and cable sectors, which should result in a healthy local attendance, notwithstanding the anticipated high level of interest from other countries in the region. The growth rate in the Turkish economy was approaching 10% last year and industry data indicates that exports by Turkish companies increased significantly in 2007.

The market potential for prospective speakers and tabletop exhibitors will be excellent. The International Tube Association will be holding a concurrent tube conference, Pipe & Tube Istanbul 09, mirroring the Prague event in 2006.

Local costs in Istanbul are competitive with other major European cities and good quality hotel accommodation is certainly better value than in many other major cities. The city of Istanbul itself is an attractive venue to visit with ample opportunities for sightseeing tours.

**IWMA – UK**  
**Fax:** +44 1926 314755  
**Email:** info@iwma.org  
**Website:** www.iwma.org

## Stabiloy™ aluminium alloy a first for China

Alcan Cable, part of Alcan Engineered Products – a business unit of Rio Tinto Alcan – has made Stabiloy™ brand wire the first aluminium alloy building wire available in China. Stabiloy is designed for residential, commercial, power utility, industrial and institutional market applications.

“We are excited to offer our Stabiloy aluminium alloy building wire to the Chinese market,” said Ian Hewett, president of Alcan Cable. “Stabiloy is a proven and reliable alternative to copper feeder conductors and [we believe] delivers significant cost savings.” Stabiloy aluminium alloy building wire is lightweight and flexible, which translates directly into ease of installation. Stabiloy’s alloy is formulated specifically for electrical feeder conductor applications in residential and commercial buildings.

Alcan Cable’s newest manufacturing plant is under construction in the Tianjin Airport Industrial Park, with operations dedicated to Stabiloy aluminium alloy building wire scheduled to begin in early 2009. Alcan Cable also operates six manufacturing facilities in the US and Canada, and has been manufacturing aluminium cable in North America for over 100 years.

**Rio Tinto Alcan – Canada**  
**Fax:** +1 514 848 8115  
**Email:** alcancable@alcan.com  
**Website:** www.cable.alcan.com

## Allied relocation in Wisconsin



○ Allied Wire & Cable’s new Wisconsin offices

Allied Wire and Cable, wire and cable distributor, has relocated its Wisconsin office and warehouse from Elkhorn, WI to a larger 20,000 square-foot facility in Pewaukee, WI. The new space allows for the addition of new machines and employees while leaving room for future expansion.

**Allied Wire & Cable – USA**  
**Email:** info@awcwire.com

**Fax:** +1 800 615 9473  
**Website:** www.awcwire.com

## www – Welding and Wire Website

bedra’s new website provides a clearly designed navigation tool to access detailed information about its product portfolio.

A new content management system allows for continuous updating of the four product fields of bedra EDM, bedra Welding, bedra Specialities and bedra Electronics.

In addition, a wide-range of downloadable product data is available, including end user applications and recommendations and assistance in using the wire in the fields of bedra Welding and bedra EDM.

**bedra – Germany**  
**Website:** www.bedra.com

# First Fastener Fair success

“With over 1,400 people attending, including 1,012 qualified buyers, Fastener Fair Budapest has been the catalyst for a large volume of profitable trade,” said Fastener Fair exhibition organiser Jerry Ramsdale, announcing “An outstanding success.”

The staging of Fastener Fair Budapest, on 22<sup>nd</sup> and 23<sup>rd</sup> September 2008 attracted 1,012 visitors, of whom 45% were distributors, 35% were fastener manufacturers or wholesalers; and 13% were fastener end-users. 68% came from the ‘target’ market of central and Eastern Europe, including countries like Russia, Estonia and Latvia, and almost 80% were decision-makers with purchasing authority.

Of the 166 exhibiting companies from 26 countries, 69% were from Europe, 28% from Asia and the rest from North America and the Middle East.

As for the future of the show, Ramsdale confirms that early feedback from both exhibitors and visitors means that a follow-up show, probably in late 2009 or sometime in 2010, is inevitable. “We’re continuing to consult with the industry,” says Ramsdale, “and I can promise we’ll be back. Whether that’s in Hungary again, or another country in central or Eastern Europe, will depend

on our ongoing research into what the industry wants and, equally importantly, where the most profitable business opportunities lie for exhibitors and visitors alike.”

**Fastener Fairs Group – UK**  
**Fax:** +44 1727 831 033  
**Email:** jerry@fastfair.net  
**Website:** www.fastenerfair.com

## Bermuda to USA cable link

Alcatel-Lucent in partnership with Cable Co, a Bermudian company, has installed the new Challenger submarine cable network in Bermuda.

Challenger is expected to enhance Bermuda’s international voice, video, data and broadband services. Spanning 1,445 km, Challenger will link Bermuda to the United States. With an initial capacity of 20Gbps, the new network can be scaled up to 320Gbps. The system is scheduled to start operations by early 2009.

Alcatel-Lucent will oversee the project and provide a turnkey network for the Challenger roll-out, including responsibility for the network design, installation and commissioning. Alcatel-Lucent will also deploy its 1620 Light Manager submarine line terminal, cables and power feed equipment, along with its 1678 Metro Core Connect.

**Alcatel-Lucent – France**  
**Website:** www.alcatel-lucent.com

**QED WIRE LINES**  
*The Process Line Specialists*

**FastHeat™ Fluidbed**

**Galfan® Systems**

**HighTurbulence® Pickling**

**Modular N<sub>2</sub> Wiping**

*Building both customer trust and quality equipment for the steel wire industry*

**New Central Office:** QED Wire Lines Inc.  
 5361 route Harwood, Hudson, Qc, Canada J8P 1H0  
 sales@qedwire.com

**Tel:** +1 450-458-1100

**Fax:** +1 450-458-0300  
**www.qedwire.com**



○ 破土仪式: Arnd Willmann (纽伦堡建筑办公室, 合作伙伴)、Heinz Rockenhäuser (Maschinenfabrik Niehoff总裁)、Matthias Thürauf (施瓦巴赫市长)、Hans-Hermann Kroher (Niehoff和Kroher的股东家庭代表)、Michael Schwarzer博士 (监事会主席)、Richard Schwager (财务总监及施瓦巴赫市经济顾问) (从左到右)

## 空地新起厂房

Maschinenfabrik Niehoff GmbH & Co KG正在德国纽伦堡附近的施瓦巴赫的公司总部新建全新的厂房。9月中旬的破土动工仪式标志着工程的启动。

公司部门的搬迁分三步走。第一步是组装车间、测试台、试车车间、装运部门、油漆车间、学徒车间。第一步的建筑工程已经启动, 建筑面积1.7万平方米, 与生产有关的办公面积1,500平方米。一期建设阶段公司的投资额为2500万欧元, 不含地产。根据将来的业务情况, 公司计划进行二期建设, 建筑面积8,000平方米。

Niehoff持续投资于新产品、新机械设备以及生产和组织方式的开发。在过去数年中, Niehoff的产品线增加了编织机、数据电缆成缆机、感应式退火机。

通过购入Hacoba的重绕机和Bongard的卷线机, Niehoff的产品系列得以完善。Niehoff还进行了大量的国际投资, 包括美国(2004年)、印度(2006年)、捷克(2007年)和巴西(2008年)。

即将在施瓦巴赫进行的总部搬迁是对公司产能扩张的另一项贡献。

宽敞的车间场地, 加上优化设计的工作场合, 实现了更加有效的组织流程, 并可以节省材料加工和订单处理成本。新工厂还添加了一套新的现代化喷漆系统。

公司的竞争能力受到了目前厂址的限制, 新投资的目标在于增强公司的竞争能力, 以降低备货时间, 特别是在需求紧张的情况下。

Niehoff在德国雇有400多职工以及40多名徒工。Niehoff集团在世界各地有五个子公司、四个代表处和服务办事处, 雇员大约250人。

公司的收入80%来自公司总部。

**Maschinenfabrik Niehoff GmbH & Co KG - 德国**  
传真: +49 9122 977 155  
电子邮箱: info@niehoff.de  
网站: www.niehoff.de

## Alcan Cable在华推出 Stabiloy™ 铝合金线缆

力拓Alcan工程产品部下属的Alcan Cable已在中国推出Stabiloy™牌铝合金建筑电缆。Stabiloy™电缆适用于居民、商业、电力、工业和机构建筑市场。Alcan Cable的总裁Ian Hewett表示: “我们很高兴向中国市场推出Stabiloy铝合金建筑电缆。Stabiloy久经考验, 是铜馈线的理想替代产品能显著节约成本。”

Stabiloy铝合金建筑电缆重量轻、弹性好, 安装方便。Stabiloy铝合金建筑电缆根据设计, 特别适合作居民和商业建筑电力馈线。Alcan Cable最新的生产厂目前正在天津机场工业园区中建设, 预计从2009年初起开始生产Stabiloy铝合金建筑电缆。多年来, Stabiloy建筑电缆在北美地区的成千上万个项目中得到了广泛应用。Alcan Cable在美国和加拿大有六个生产厂家, 在北美生产铝电缆的历史长达100多年。

**Rio Tinto Alcan - 加拿大**  
传真: +1 514 848 8115  
电子邮箱: alcancable@alcan.com  
网站: www.cable.alcan.com



## 面向国际市场的新技术

由线缆国际协会、意大利线缆设备制造商协会和国际线材机械协会共同组办的两年一度的大型会议将于2009年11月2日到11月3日在伊斯坦布尔举行。自2003年以来，这三家主要的线缆行业协会已经成功地在斯特雷萨、布拉格和波隆纳成功合作，举办这个高质量的会议。在与土耳其线缆行业的主要企业初步商讨会事务的时候，土耳其线缆企业对选择伊斯坦布尔表示由衷的高兴。伊斯坦布尔具有绝佳的地理位置。它位于欧亚大陆桥上，交通非常方便，非常适合面向来自欧洲、独联体、前苏联加盟国、阿拉伯国家、中东、印度和非洲的代表。预计会议语言将采用英语、土耳其语和俄语。

土耳其有繁荣的线缆行业，估计本地厂商会比较踊跃地参会，另外该地区其他国家的厂商也会积极参加。土耳其经济去年的增长率接近10%，而且根据工业数据显示，2007年土耳其公司的出口也大幅度增长。会议为厂商发言和桌面展示提供了充分的机会。国际管材协会同期将举办一个管材会议“2009年伊斯坦布尔管材会议”。这两个会议将反映着两个行业自2005年布拉格会议以来的发展情况。与其他主要欧洲城市相比，伊斯坦布尔的成本相对较低，而宾馆质量显著高于很多其他主要城市。伊斯坦布尔同时也是一个非常有吸引力的旅游城市，有很多值得观光的地方。

IWMA - 英国  
电子邮箱: info@iwma.org

传真: +44 1926 314755  
网站: www.iwma.org

## Chem Polymer手册及数据表

Teknor Apex Company下属的Chem Polymer为公司的工程热塑(ETP)化合物提供了新的手册，介绍该系列产品的详细情况。Chem Polymer还针对这些材料在汽车、电气和电子领域的应用出版了相关的数据表。

该热塑化合物手册有八页，列出了Chemlon®尼龙6、66、66/6共聚物和12种化合物的性能数据。根据数据表，该公司的热塑化合物产品多种多样，有强化型、填充型、防磨损型和阻燃型，配方经修改后可以增强耐磨、流动和其他特性，并可在产品中综合实现这些特性。所有的化合物提供之前均已着色。

汽车数据表详细注明了Chem Polymer生产的化合物在汽车的各个部位的应用情况，并出示了克莱斯勒、通用和福特产品准入证书。

电气和电子数据表列明了Chemlon的非填充型和玻璃填充型6和66化合物的非卤素阻燃等级。该数据表还介绍了现有的应用情况，例如连接头、终端块、配电组件、连线设备、家居设施和设备外壳。

三个数据表都可以从Chem Polymer的主页www.teknorapex.com上下载。

Teknor Apex Company - 美国  
电子邮箱: info@chempolymer.com  
网站: www.teknorapex.com

## Eurolls举办庆典

2008年10月10日对Eurolls集团来说是一个大日子。在Valbrembo(意大利伦巴第)举办的庆典标志着Cortinovis Machinery的新总部正式投入使用及一个新的产业极的诞生。

自此，在该工业区经营的公司达到了三家(Cortinovis Machinery、Team Meccanica和Vitari)，可以形成生产和商业管理方面更好的协同。

这次活动包括一个题为“应对全球市场和衰退的战略”的会议。Eurolls集团的总裁，Renato Railz呼吁莅临的200多名客人(政府、专业媒体、贸易协会代表和客户)重点关注他所称的“E因素”——某种在达成友好合作政策、强化专业知识和突出各公司特性的同时，通过集团战略优化生产和商业活动的热情。

“Eurolls集团今天在国际线缆和管材市场上占据着显赫的位置，特别是关联公司Cortinovis Machinery在线缆行业处于毫无疑问的领导位置，特别是在旋转机械方面。”

“所以看上去似乎没有必要举行庆典。不过我认为庆典一直都具有重要意义，如果它们能够激发应对新挑战的热情的话。”

“今天，技术、产品创新和售后服务无疑是成功的关键点，不过从之前21年的发展历程中，我认识到如果身边没有



○ Railz 总裁的照片：发言中：Eurolls 集团总裁 Renato Railz 先生。从左到右，按座次：Cortinovis Machinery总裁暨Eurolls集团“Bergamo”工业区负责人Giampaolo Bozzetto先生；Cortinovis Machinery销售经理Federico Bussola先生；Cortinovis America总裁Anthony DeRosa先生；Cortinovis do Brasil总裁Raul Pascoareli。

一群坚实的人，没有项目能够成功，没有目标能够实现。坚实这里不仅仅指可靠，技能出众，还指积极思考，激情洋溢。”

“我们的业绩证明我是对的：这个工业区的三家公司2007年的销售收入翻了一番。这就是为什么我今天要在这里举办

庆典：展现如何在将来通过努力工作和信心来克服衰退期，把世界范围内市场上的快速变动转变为新业务的机会。”

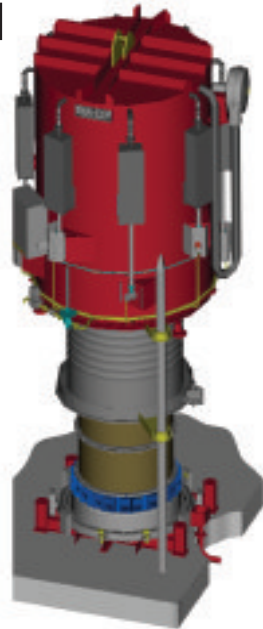
Eurolls - 意大利  
传真: +39 0432 79650 1821  
电子邮箱: info@eurolls.com  
网站: www.eurolls.com

## Rad-Con迁至Lakewood

Rad-Con Inc 从1966年起就开始生产工业炉具，已经把公司的办公机构从之前靠近BayVillage的地方搬迁到了美国俄亥俄州的Lakewood。新地址可以容纳Rad-Con不断增加的工程师和程序员，还能合并仓储业务。Rad-Con是生产贝尔型批量退火炉(BAF)设备的主要厂家之一，采用100%氢保护工艺。

退化工艺可以让金属软化，满足生产盘条和线圈的冷轧机和精轧机的工艺要求。有了对金属的100%氢保护，工艺效率大为提高。除了设备，Rad-Con还提供全套退火设备的设计、按照和营运支持。Rad-Con的业务还包括通过软件模型增强退火设备的效率。其CAPS™软件可以预测炉具加热和冷却性能，对批量调度进行相应安排，从而大大提高产量，同时降低能耗成本，改善质量。CAPS™一般作为各种品牌OEM炉具的配套供应。

**Rad-Con Inc - 美国**  
 传真: +1 440 871 2948  
 电子邮箱: sales@rad-con.com  
 网站: www.rad-con.com



○ Rad-Con为线缆工业提供的贝尔型批量退火炉具

## 为ArcelorMittal轮胎钢丝生产线配套的连铸机

巴西贝洛奥里藏特的ArcelorMittal Brasil SA与瑞士SMS集团下属的Concast AG签订了一个合同，提供第二套冶金设备和生产SBQ坯段(特种杆材质量)的连铸机，用于生产轮胎钢丝。试车时间定于2010年6月。准备提供的设备包括一个钢包炉和一个连铸机，将安装在巴西Monlevade现有的钢铁厂内。

设备安装到位后，钢水的年产量将从目前的120万吨增加到240万吨。与连铸机配套的线杆轧机将从SMS Meer订购。SMS Meer也是SMS集团下属的公司。钢包炉的容量为130吨，配24兆瓦的变压器，升温速度每分钟4.5摄氏度。连铸机为六流，铸造半径10.25米，能生产截面面积130 x 130mm和155 x 155mm的方坯。连铸机配有模具搅拌机和液压紧凑型震荡机。订单的内容包括供应整套机械和电气设备，第一级和第二级自动化，培训、安装和试运行。该连铸机代表着SMS集团生产的轮胎钢丝制造设备的最高水平。

**Concast AG - 瑞士**  
 传真: +41 44 202 81 22  
 电子邮箱: sales@concast.ch  
 网站: www.concast.net

## Nexans赢得卡塔尔地下超高压电缆交钥匙工程合同

在六月份赢得价值8,000万欧元的订单后，Nexans与KAHRAMAA签订合同，进行第八期扩建以及多哈的电力网络建设。

世界电缆行业的领袖Nexans赢得了吉大通用电力和水业公司的价值5,800万欧元的合同，进行六条地下电力电缆的实施工作，容量从34兆瓦到250兆瓦不等，以增强和扩大现在为卡塔尔首都多哈服务的高压电网。

这部分电网将把为多哈的Al Wajbah区服务的变电站连接起来，是卡塔尔电网开发扩建第八期项目的组成部分，目的是满足卡塔尔城市和经济带来的需求快速增长。

Nexans将负责实施该交钥匙工程，工程预计2009年7月完工。工程内容包括设计、开发、供应和安装96千米的66千伏和132千伏单芯电缆和附件。

本项目是Nexans与KAHRAMAA的长期合作中的最近一个项目。双方的合作可追溯到上个世纪70年代。

本项目的线缆由Nexans设在法国和比利时的工厂生产。

**Nexans - 法国**  
 传真: +33 15669 8484  
 电子邮箱: nexans.web@nexans.com  
 网站: www.nexans.com

## 阿尔卡特-朗讯携手Cable Co在百慕大部署海底电缆

阿尔卡特-朗讯与KeyTech、North Rock Communications和Transact联合组建的百慕大电信公司Cable Co已经在百慕大水域完成名为“挑战者”的海底电缆网络安装。“挑战者”预计可以增强百慕大的国际语音、视频、数据和宽带业务。“挑战者”总长1,445公里，连接百慕大和美国，初期容量20Gbps，可扩容到320Gbps。电缆预计从2009年初投入运行。根据该协议的条款，阿尔卡特-朗讯将负责项目管理，并进行网络的交钥匙建设，包括网络设计、安装和试运行。阿尔卡特还将安装其1620 Light Manager海底电缆线路终端，线缆和电力引入设备，以及其1678 Metro Core Connect。

**Alcatel-Lucent - 法国**  
 网站: www.alcatel-lucent.com

## 向东欧寻找市场

为了满足东欧客户的需求，同时拓展东欧市场，Atkin Automation进行了网站强化建设，提供俄语、波兰语、德语和法语选择。Atkin Automation是线圈处理设备和系统的国际供应商，目前在网站上提供二手的Atkin和BHP线圈处理设备，顾客可以通过网站查看和订购。该公司认为在目前的世界经济状况下，部分企业可能需要购买二手和翻新的设备，来达到削减资本设备预算的目的。据公司执行董事Chris表示：“



○ Atkin Automation线圈处理设备

在过去一年左右，东欧对Atkin Automation产品的兴趣大幅度增长，这说明开发多语种网站是非常必要的。”他补充说：“在世界其他地区的许多企业认为几乎没有可能为新资本设备采购提供预算的时候，我们认为在网站上提供二手设备和翻新设备正是时候。”

“这些措施的目的是鼓励东欧订单的增长，同时给预算紧张的公司提供更多资本设备购买选择。”

**Atkin Automation Ltd - 英国**  
 传真: +44 1842 763614  
 电子邮箱: sales@atkinautomation.com  
 网站: www.atkinautomation.com



THE 10th CHINA (GUANGZHOU) INT'L EXHIBITION OF PLATE METAL, BAR, WIRE, METAL PROCESSING AND SETTING EQUIPMENT

# INVITATION



## Host

Guangzhou Julang Exhibition Design Co., Ltd  
China Iron and Steel Association (CISA)  
China Non-ferrous Metals Industry Association  
Metallurgical Council of China Council for the Promotion of  
International Trade (MC-CCPIT)  
Guangdong Metal Institute

## Organizer

Guangzhou Julang Exhibition Design Co., Ltd

Date: June 23-26, 2009

Venue: China Import and Export Fair Pazhou Complex  
(380, Yue Jiang Zhong Road, Guangzhou, China)



巨浪展览有限公司  
JULANG EXHIBITION CO., LTD.  
Tel: 86-20-38010792 34420781 800-816-1058  
Add: Room 2604, 3A-30 Building A1, Galaxy City,  
Huangpu Road 29, Pearl River New City,  
Guangzhou, 510623, China  
E-mail: [www@julang.com.cn](mailto:www@julang.com.cn)

THE 10th CHINA (GUANGZHOU) INT'L METAL & METALLURGY EXHIBITION

**Trying again for support from national regulators, EU telecom chief retools an unpopular proposal**

The European Union's telecommunications commissioner, Viviane Reding, is scaling back her plan to create a new Europe-wide telecommunications agency. Ms Reding's proposal for an agency with the power to intervene in national markets to mandate consumer-friendly changes in regulation and pricing has faced opposition in Brussels. The new agency – the Body of European Telecommunications Regulators – has achieved no traction in the European Council of Ministers, the upper chamber of EU government.

Writing from Berlin in the International Herald Tribune, Kevin J O'Brien reported that documents obtained by that newspaper indicate Ms Reding's compromise would reduce the staff of the new agency to from 50 to 20 people. It would also give telecommunications regulators from the 27 EU countries an effective veto over any decisions taken by the new agency. Most of the EU members are known to oppose the idea of a new overseer. ("Commissioner to Offer Concessions to EU Telecommunications Regulators," 23<sup>rd</sup> October)

The scaled-back Reding plan was to be outlined in Venice on 25<sup>th</sup> October during a two-day meeting of the European Telecommunications Network Operators' Association, which tends to reflect the interests of countries in the Council of Ministers.

The purpose of the conference was to gather EU lawmakers and chief executives of the largest telecom operators – including BT, Deutsche Telekom, France Télécom, Telefónica, and Telecom Italia – to deliberate the future of the industry.

The Herald Tribune cited these factors as prompting Ms Reding's call for a European telecommunications regulator:

- ⓐ The creation of such a post would enable the European Commission to enforce EU law on its members, many of which defy significant directives from Brussels – including some rules aimed at weakening the dominance of former monopolies
- ⓑ The commission has the power to recommend remedies in the 27 national markets but not the power to enforce those remedies. The result is a patchwork of sometimes conflicting regulation as countries protect former monopolies, most of which are still partly owned by their governments

Mr O'Brien wrote, "The compromise plan would rename the new agency the Office for the European Telecoms Regulators to underscore its control by the regulators, who would appoint a managing director and half of the staff members. If an EU country failed to follow EU law, the commission and the new agency would have to agree jointly before intervening in national markets. The national regulators would set policy for the agency and reach decisions by majority vote."

**Elsewhere in telecom . . .**

- ⓐ Nokia Siemens Networks announced it has increased its workforce of TD-SCDMA qualified engineers in China to over 1,200, in advance of the deployment of China Mobile's new network.

The Finland-based telecom solutions supplier had already secured Chinese approval for deployment of its TD-SCDMA radio access solution. Nokia reported weaker-than-expected sales and profits for its

third quarter, ended 30<sup>th</sup> September. Net profit dropped to \$1.46 billion, from \$2.10 billion a year earlier, and sales declined 5.1%, to \$16.42 billion, but the world's top cell phone maker retains a positive outlook on prospects for that market.

Handset makers have started to feel the pinch from slowing economies, with sales falling in Western Europe. But booming demand from emerging markets has so far balanced that out, and the Finnish company said it expects mobile industry volumes

to rise around 10.5%, for a total of 1.26 billion phones in 2008. Nokia will continue to concentrate on profits and cash flow rather than on driving market share higher for its own sake, the company's chief financial officer told Bloomberg TV on 16<sup>th</sup> October. "We don't manage for volume or market share for the sake of market share," Rick Simonson said. "We manage for market share that's sustainably profitable."

- ⓐ South Korean fixed line and broadband provider LG Dacom attributed strong third-quarter 2008 results to increased demand for its Internet and VoIP services. For the three months through September, net profits were up 28% year-on-year to \$29.9 million. Revenues climbed 21.8% from the same period of 2007. Most notably, 12-month revenues from the operator's VoIP business rose 178%. According to TeleGeography (23<sup>rd</sup> October), LG Dacom previously announced having reached the one-million-subscribers mark. In other news of LG Dacom, Reuters reported that a subsidiary, the broadband provider LG Powercom, hoped to raise up to \$99 million through an initial public offering in November.

- ⓑ Could the instant popularity of its newest product actually hurt AT&T? Apparently so. On 23<sup>rd</sup> October the US telecommunications giant reported that stronger than expected sales of its eagerly awaited iPhone 3G, which went on sale 11<sup>th</sup> July, cut into third-quarter results as earnings were impacted by subsidies for the 2.4 million iPhones sold. AT&T pays a subsidy of about \$375 per iPhone, selling in stores for \$199 or \$299 depending on the model.

The company thinks the subsidy arrangement will justify itself over time, as iPhone buyers go on to pay up to 60% higher service fees on the Apple phones. AT&T also estimates that 40% of those 2.4 million iPhones were snapped up by new wireless customers – good news for the company's future earnings.

In the meantime, earnings were down \$900 million in the July-September quarter, costing AT&T in three months what it had budgeted for the full year 2008.

## 为赢得各个电信当局支持, 欧盟电信专员推出缩水版提案

欧盟电信专员 Viviane Reding 女士正在压缩她组建新的全欧电信管理机构的计划。Reding女士提出组建新的电信管理机构, 对欧盟成员国市场进行干预, 在监管和定价方面做出对消费者有利的调整, 但在欧盟总部遇到了阻力。提议的新机构名为欧盟电信监管总局(Body of European Telecommunications Regulators), 在欧盟部长理事会得到的支持甚微。

《国际先驱者论坛报》记者 Kevin J O'Brien 在柏林报道称根据报社获得的消息, Reding女士在新提案中把新监管机构的职员人数从50人砍到了20人。而且欧盟27个成员国各国的电信监管当局也有权否决新管理机构的决议。多数欧盟成员国对成立新的监管机构持反对意见。(见10月23日《电信专员对欧盟各成员国电信监管当局妥协》)

欧洲电信网络运营商协会从10月25日起将在威尼斯召开为期两天的会议, 会议将为缩水计划拟定能反映欧洲部长理事会代表的各国利益的概要。这次会议的目的是召集欧盟立法人员和欧洲最大的电信运营商的高层, 包括英国电信、德国电信、法国电信、西班牙电信和意大利电信, 共同商讨行业发展事宜。

《论坛报》认为下列因素是Reding女士呼吁成立全欧电信监管当局的原因:

- ① 这个机构的设立可以让欧盟委员会在成员国中推行欧盟法律。许多欧盟成员国对欧盟的重大方针政策持抗拒态度, 包括部分旨在削弱前垄断企业的垄断行为的政策。
- ② 委员会对27个成员国的国内市场有提出调整政策的权力, 但没有执行这些调整政策的权力。结果就是由于各国对垄断企业的保护, 且大多数仍然政府部分持有股份, 政策相互冲突, 拆东补西。

O'Brien的报道称: “缩水计划准备把新机构命名为欧洲电信监管当局办事处, 以强调各国监管机构对该机构的控制权。办事处执行董事和一半的职员将由各国监管机构决定。如果某个欧盟国家未能执行欧盟法律, 委员会和新机构在对该国市场实施干预之前, 必须取得一致。各国监管当局将为新机构制定政策, 决策采用少数服从多数原则。”

话的用量首次超过了固定电话。排除VoIP(IP语音), 固定电话的用量占比为43.3%, 而在2007年固定电话还比移动电话领先5.7%。

## 其他电信新闻...

① 诺基亚西门子网络公司宣布在中国移动通信公司部署新网络之前, 把中国具有TD-SCDMA资质的工程师数量增加到1,200人。这家芬兰电信设备公司刚刚与中移动签约部署TD-SCDMA无线接入项目。

诺基亚宣布截止9月30日的三季度销售和利润低于预期。净利润从一年前的21亿欧元下降到14.6亿欧元, 销售下降到164.2亿欧元, 降幅5.1%。不过, 作为世界最大的手机制造商, 诺基亚对市场的前景仍然持积极态度。手机厂家开始感受到经济下滑带来的疲软, 西欧的销售开始下降。不过, 新兴市场旺盛的需求形成了某种平衡。诺基亚预计2008年的手机销量将上升10.5%, 达到12.6亿部。

诺基亚的首席财务官Rick Simonson在10月16日接受彭博电视频道采访时表示, 诺基亚将继续注重利润和现金流, 不刻意追求力所能及之外的市场份额增长。他表示: “我们不为销售额而追求销售额, 或者为市场份额而追求市场份额, 我们管理的目标是实现利润可持续的市场份额。”

② AT&T是否会自己推出的新产品迅速走红所伤?似乎如此。10月23日, AT&T称, 由于众人渴求已久的3G版iPhone 7月11日面市后销售超过预期, 公司三季度的业绩受到了给售出的240万部iPhone提供的补贴的影响。AT&T给每部iPhone提供的补贴为大约375美元, 这样iPhone的商店销售价格依据型号为199美元或者299美元。AT&T认为补贴是合算的, 因为iPhone用户的服务资费水平比正常水平高60%。

AT&T还估计在240万部iPhone中, 40%是被无线用户买下的。这对公司将来的收入是个好消息。不过, AT&T三季度的收入下降了9亿美元, 而且AT&T在三季度的开支相当于2008年全年预算。

③ 韩国固话和宽带运营商LG Dacom表示, 由于对公司提供的互联网和VoIP服务的需求的增长, 公司2008年三季度业绩喜人。在到9月末结束的三季度中, 净利润达2,990万美元, 比一年前增长28%。收入较2007年同期增长21.8%。

最值得一提的是, 公司VoIP业务的年收入增长了178%。据TeleGeography10月23日报道, LG Dacom此前还宣布用户数达到了一百万。另外, 据路透社的报道, LG Dacom下属的宽带运营商LG Powercom准备在11月公开上市, 筹资9,900万美元。

## 索尼新任首席执行官誓言行动计划

整个手机行业都进入了一个艰辛时段。价格战、全球金融危机、美国厂商苹果和Google新加入激化的竞争, 可能会让索尼爱立信付出沉重的代价。根据10月17日公布的三季度业绩, 索尼爱立信在二季度的销量增加了100万部, 严格的成本控制措施使公司避免出现大范围的亏损。但是, 由于大幅度的打折, 二季度索尼手机的平均销售价格下降了6%。因此毛利率从一年前的31%下降到了大约22%, 使利润基本为零。

《商业周刊》驻巴黎记者 Jennifer L Schenker女士认为日本索尼电子和瑞典电信设备巨头爱立信联合组建的索尼如今显得更加脆弱, 原因不仅仅是产品线方面的问题。她报道称: “索尼的销售仍然过度集中于西欧。但西欧的市场已经饱和, 而且不断扩散的激光机问题也在削弱需求。索尼在低端市场表现疲软, 但低端市场是新兴市场最为活跃的板块。”(见10月18日《索尼还需要进行大量改进》)

索尼的新任首席执行官小宫山英树已誓言要制定扭转公司局势的时间表, 实施相应的行动计划, 具体内容包括大幅度调整索尼的结构和管理。不过, 鉴于任务的艰巨性, 小宫山英树在接受《商业周刊》采访时表示: “公司局势到2009年下半年才会好转。”

④ 国际电信联盟表示: “市场自由化通过推动竞争和降低价格, 在普及移动通信方面发挥着关键性作用。”在9月26日的发言中, 国际电信联盟还预计: 在发展中国家增长的带动下, 到2008年年底全球移动电话用户数量将达到40亿。中国在2008年年中就超过了6亿关口, 成为世界上最大的移动电话市场。同期印度的用户数量也达到了大约2.96亿。此前国际电信联盟称表示全球的移动电话用户数(与个人用户有区别)在2007年年底达到了33亿。

⑤ 根据位于伦敦的Tariff咨询公司的研究结果, 虽然人口众多的中国和印度今后五年仍然是世界上最大的移动通信市场, 不过从增长率来看, 印尼、阿富汗和伊拉克的发展会更快。Tariff预计新兴市场的移动渗透率将大幅增长, 2013年将达到95%。纳入研究范围的34个新兴市场的用户数将从当前的21亿增长到2013年的43亿。纳入Tariff在10月中旬发表的这项研究报告的亚洲国家有中国、印度、马来西亚、越南和菲律宾。亚洲国家的移动宽带渗透率也在增长, 但速度可能不及欧洲。同在伦敦的市场调研公司Analysis Mason认为到2013年, 一般的欧洲家庭的宽带将通过移动方式连接。

⑥ 根据日本总务省提供的消息, 在截止9月份的上个财年, 以电话使用时长计算, 移动电话呼叫数占电信语音通信总量的44.8%。这标志着日本移动电

## The US economy in crisis

### What does the Japanese experience of the 1990s augur for the United States today?

"Japan saw repeated years of low or negative growth, but the final tally was something short of a decade-long recession, with the ten years leading up to 2000 averaging out at almost 1% growth. Companies like Toyota would prosper in adverse times, forced to sharpen their competitive edge. Emerging in the 2000s as the leader in hybrid cars, Toyota found itself on stronger footing than its US counterparts."

This excerpt from Washington Post staff writer Anthony Faiola's recapitulation of Japan's 'lost decade' of economic growth is a reminder that fiscal crises can have happy endings. Mr Faiola noted that – some 18 years after the stock market meltdown that began in September 1990, when the Nikkei stock index dropped almost 20% in a month – leading experts agree that the impact was not as severe as originally thought. Moreover, today the Japanese economy remains the world's second largest. ("Studying Japan's dark decade to see how US might fare," 11<sup>th</sup> October)

This long view in hindsight has the support of Adam Posen, deputy director of the Washington-based Peterson Institute for International Economics, a nonpartisan think tank established in 1981. "We are all spooked out of our minds because of the last three weeks," Mr Posen told the Post. "But just as we've seen in Japan, this doesn't have to be that tough."

Americans, however, live at the epicentre of a crisis that has policymakers worldwide struggling to restore confidence in financial institutions and markets. They are not much disposed to look on the bright side; and Mr Faiola's Japanese retrospective includes plenty of material for pessimists. These are among the factors economists see as arguing against a US recovery on the Japanese model:

- ❖ In contrast to the debt-burdened Americans of today, the Japanese – despite steep losses in their housing and stock markets – maintained one of the highest savings rates in the world. Throughout the crisis this was also true on a national basis
- ❖ Unlike the United States, export-driven Japan enjoyed a huge trade surplus
- ❖ Of greatest importance, the crisis was largely confined to Japan, which could rely on global demand for Japanese goods. This demand came chiefly from the US but also from a fast-growing China, and kept Japan's economy afloat. The crisis now is global, with Europe and Japan joining the US in slipping toward recession

Japan's advantages did not save its people from what one Post respondent called "the long, dull economic pain – as opposed to the sharp pinch in the United States."

It will never be known whether a faster response on the part of the government of Japan would have abbreviated the period of pain, or whether a little Japanese reticence might

have served the US better in 2008 than the prompt sounding of alarms, setting off panic in Wall Street. "Economists still fault the regulators in Japan for their slow reaction," wrote Mr Faiola. "In some instances, government officials colluded with financial institutions to hide the extent of the problems. Yet in light of how quickly the US financial crisis has exploded, there is new debate about whether there may have been some method to Japanese madness."

### One of the outgoing president's men uses a forbidden word in public: recession

Speaking from California in an interview broadcast 19<sup>th</sup> October, the chairman of the White House Council of Economic Advisers used a word that, to that point, had been studiously avoided by White House attachés. On CNN's "Late Edition," Ed Lazear, one of President George W Bush's top aides, said, "We are seeing what I think anyone would characterise as a recession in certain parts of the country."

Mr Lazear made particular reference to California, where unemployment rates are somewhat higher than elsewhere across the US. To the broader, national economy he was applying, in advance, the technical definition of a recession: two consecutive quarters of economic contraction. Many analysts expect the American economy to show contraction over the final three months of 2008 and the first three months of 2009.

Mr Bush's economic adviser was otherwise more upbeat, suggesting that a significant impact from a \$700 billion rescue package cobbled together by the White House and Congress would be felt in "a few months." The intention is to recharge the economy by injecting cash and confidence into the shattered American lending industry.

Some of what Mr Lazear said was distinctly representative of the Republican administration he served, notably his suggestion that some projects under consideration for funding, such as road and bridge construction, are too slow and too centred on one industry to give the economy a measurable boost.

Of course these comments came before the presidential election, held 4<sup>th</sup> November. The decisive Democratic victory will mean that such undertakings are seen through a different prism. An earlier Democratic president, Franklin Delano Roosevelt, brought the US out of the Great Depression of the 1930s by spending heavily on just such projects. Many of them – although the worse for wear – are still in service.

- ❖ Northeast Ohio provides an example of an area that would stand to benefit from significant outlays on public infrastructure. According to a recent Cleveland State University study, lifting the economy of the region will take at least a decade, given its low ranking in vital growth measures. As reported in the Cleveland Plain Dealer (2<sup>nd</sup> October), the study from CSU's Center for Economic Development ranks the metropolitan areas of Cleveland, Akron, Canton, and Youngstown in the lower half of metros across the US on measures of growth in employment, per capita income, productivity, and gross metropolitan product.



In the important Legacy of Place gauge, which looks at share of manufacturing employment, among other factors, the Cleveland metro ranks low; Akron, lower. Brad Whitehead, director of the regional Fund for Our Economic Future, told the Plain Dealer, "We're too dependent on slow-growth industries," like auto manufacturing.

**Automotive**

**The 'Big Three' persuade Washington, but critics of a timely aid package are unconvinced**

The US Congress in late September voted in favour of \$25 billion in low-interest (around 5%) loans for the ailing domestic auto industry, enabling the car makers to address immediate needs in a period of tight credit and flux in the capital markets. The boost from Washington was construed, in loftier terms, as a means of helping General Motors, Ford Motor, and Chrysler to modernise their plants for the development and production of fuel-efficient vehicles.

The aid package does, indeed, require auto makers to invest in cars that achieve 25% better fuel mileage than similar vehicles in the same class, and much early commentary emphasised that goal – together with job security.

"American auto companies are facing huge challenges," said Sen Carl Levin, the Michigan Democrat whose constituency includes Detroit. "[The loans] will help our companies stay competitive in the global marketplace and ensure that these technologies enter the market place and continue to be manufactured in America."

"It's a huge victory for our members, for US manufacturing companies, and for American consumers," said United Auto Workers (UAW) president Ron Gettelfinger. "This is a smart investment that will speed the introduction of more fuel-efficient vehicles and also create tens of thousands of good-paying US manufacturing jobs." But critics of the congressional beneficence point out that many foreign auto makers with factories in the US face similar problems to those confronting the domestics. As noted by Antonio Perez in the Epoch Times ("US Gives \$25 Billion to Auto Industry," 30<sup>th</sup> September), these voices assert that the US auto industry "should face market realities and stop portraying itself as a victim."

That view was expressed in an editorial in the Christian Science Monitor: "Despite a slowing US economy, Toyota and Honda saw only single-digit losses in their August sales. Nissan's sales were up. Those companies know how to run successful auto manufacturing plants in the US and aren't asking for help." ("How Not to Rescue the Big Three," 5<sup>th</sup> September). Detroit, the Boston-based editors claim, "is no more deserving than many other US industries – textiles, furniture, toys – that have failed to compete well against foreign companies."

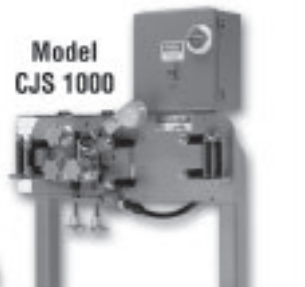
❖ The same Ron Gettelfinger quoted above also welcomed another piece of news affecting the union he heads. But this time the UAW membership at a Mitsubishi plant in the central Illinois city of Normal ratified a contract

# STRIP WITH PRECISION



**Model BJS 1000\***

*\*Model BJS 1000 is bench-mounted. All other models are free-standing. Strippers can be customized to meet your specific requirements.*



**Model CJS 1000**



## Huestis Industrial Cable Jacket Strippers — Cable Core Salvage System —

Stripping faulty cable jackets from costly cable cores demands precision and protection. Huestis Industrial Cable Jacket Strippers remove jackets quickly and easily without damaging the valuable core.

A protective stripping tool and rotating blade work together to lift, cut and separate the jacket from bare or braided cable cores. Free-standing, bench-mounted or custom models quickly remove jackets from various cable cores from .030"–4.0" (.76–102 mm) diameters.

**HUESTIS INDUSTRIAL**  
making it affordable™

[www.huestis.com](http://www.huestis.com)

Air Wipes, Pay-offs, Take-ups, Buncher Pay-offs, Accumulators, Spoolers, Cable Jacket Strippers, Custom Machinery

68 Buttonwood Street, Bristol, Rhode Island 02809 U.S.A. ISO9001:2000 REGISTERED  
401-253-5500 800-972-9222 Fax: 401-253-7350



calling for pay cuts in exchange for job security. For its part, Mitsubishi Motors North America on 4<sup>th</sup> October agreed to impose no involuntary layoffs at the plant, and guaranteed to keep it open through August 2012 when the new contract expires. Some 1,200 workers at Normal were let go in 2004 as part of a global cutback that the Tokyo-based parent company Mitsubishi Motors Corp called its last chance at survival. The plant, which was opened in 1988, now employs fewer than half the workers it did at its peak about a decade ago.

## Serious about electric cars, Warren Buffett turns to China for battery expertise

The American billionaire investor Warren E Buffett has agreed to buy a 9.89% stake in BYD Co, a Chinese battery manufacturer that plans to sell electric cars in the US by 2010. Based in Shenzhen, the mainland China city that lies just north of Hong Kong, BYD is one of the world's largest makers of rechargeable batteries for cell phones and other uses.

The company also has a fast-growing auto-making unit, and makes fuel-efficient compact and subcompact cars for the Chinese market.

Mr Buffett's investment company, Berkshire Hathaway, owns 87.4% of MidAmerican Energy Holdings Co, which will pay about \$230 million for the BYD stake.

"If BYD were to enter the North American market, Mr Buffett's investment would enhance the BYD brand name," the president of BYD, Wang Chuanfu, said at a news conference in Hong Kong on 29<sup>th</sup> September. Mr Wang added that BYD might even, by using Berkshire's money to accelerate research, move up its plans for entering the US market. Mr Buffett, whose \$62 billion fortune made him the world's richest or second-richest individual in 2008, is indeed a valuable connection. He is also, like JP Morgan at the time of the Great Depression in the US, a steadying influence in the midst of financial turmoil.

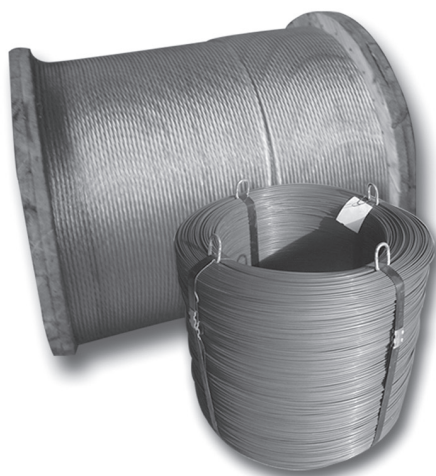
Mr Buffett now finds himself "at the centre of things, [drawing] headlines and inspiring confidence," said Robert F Bruner, dean of the Darden School of Business at the University of Virginia and co-author of "The Panic of 1907: Lessons from the Market's Perfect Storm" (2007).

For its part, MidAmerican, a collection of electric utilities in the Midwest and West, sees plug-in electric cars as superior to hydrogen-fuelled vehicles for curbing automotive emissions of carbon dioxide.

David Sokol, the chairman of MidAmerican, noted at the news conference with Mr Wang that the US has the infrastructure to supply electricity for recharging almost anywhere. Plans for hydrogen-fuelled cars would require the installation of many hydrogen-fuelling centres.

**Dorothy Fabian**  
Features Editor

Galvanized Steel Strands and Cable Armouring Wire  
ASTM, IEC, BS Standard



**Anbao (Qinhuangdao) Wire & Mesh Co., Ltd.**  
Add: No. 231, Gangcheng Street (west), Qinhuangdao, P.R.China, 066004  
Tel: +86-335-3893600 Fax: +86-335-3870760  
Email: [anbao@anbao.com](mailto:anbao@anbao.com) Website: [www.anbao.com](http://www.anbao.com)

## Stainless Steel Wire from China

Dia.0.025mm-18mm, hard and soft,  
different application and packing  
material: 304,304L,316,316L,302,310,



**Anbao(Qinhuangdao) Wire & Mesh Co.,Ltd**  
Add.:No.231 Gangcheng St.(West), Qinhuangdao P.R. China 066000  
Tel: +86-335-3893600 Fax:+86-335-3870760  
Email:[anbao@anbao.com](mailto:anbao@anbao.com) Web: [www.anbao.com](http://www.anbao.com)



## 美国经济陷入危机

### 日本上个世纪90年代的经历对美国有何启示？

“日本曾经连续数年低增长或者负增长，但要说十年衰退还是有点夸大。到2000年为止的10年间，日本经济平均增长了大约1%。类似丰田这样的公司逆流而上，在环境的逼迫下强化竞争能力。到2000年以后，丰田发现自己比美国竞争对手基础更加牢靠，并一跃成为混合动力车厂家的领袖。”

这段话来自《华盛顿邮报》特约撰稿人Anthony Faiola对日本经济增长“失去十年”的简要评述，意图在于提醒大家金融危机也可能有美好的结局。Faiola指出，18年前的1990年9月，日本发生股灾，日经指数单月跌幅达到20%，但今天的专家一致认为金融危机造成的影响不如原先估计的严重。另外，今天日本仍然是世界第二大经济体。（见10月11日《日本的黑暗年代揭示美国的前途》）

这种事后诸葛亮的意见还得到了华盛顿彼得逊国际经济研究所负主任Adam Posen的支持。彼得逊国际经济研究所是一个中立的智囊机构，成立于1981年。Posen在接受《邮报》采访时表示：“过去三个星期我们每个人都该被吓得魂不附体。不过正如我们在日本所看到的，情况并不是那么严重。”

不过，美国人终究是生活在一场危机的中心。这场危机让世界各地的决策者都在为重建金融机构和市场的信心而忙碌。美国人现在心中充满阴郁，几乎看不到光明，Faiola对日本的经历的回顾可以充分激起乐观人士的信心。不过，由于下列原因，经济学家们不太同意美国经济的恢复会因循日本模式：

- ❖ 与债务缠身的美国人不同，日本人虽然在住房和证券市场蒙受了惨重损失，但他们的储蓄率始终在世界上居于前列。在整个危机过程中，从国家的层面来看也是如此。
- ❖ 与美国不同，出口导向的日本有高额贸易盈余。
- ❖ 最重要的是，日本的危机只是日本自身的问题，可以靠全球对日本商品的需求来舒缓。这种需求主要来自美国，快速发展的中国出力不少，使日本的经济得以摆脱危机。目前的危机是全球性的，欧洲和日本都尾随美国进入衰退。

日本的优势未能使日本人免于某位《邮报》记者所称的“长期单调的经济隐痛——与美国式剧痛相反”。也许永远无法说清如果日本政府采取迅速反应是否能缩短那场危机的持续时间，或者如果美国人在2008年以日本人式的隐忍对待危机，而不是拉响警报，让华尔街恐慌蔓延，结果会好一些。Faiola指出：“经济学家们仍然在指责日本的监管当局反应迟缓。在某些情况下，政府官员与金融机构串通掩盖问题的严重性。不过鉴于美国金融危机的快速引爆，也有新的观点认为貌似疯狂的日式举动也有不无道理之处。”

### 布什总统助手公开使用禁词：衰退

10月19日在加州举办的一个电视访谈上，白宫经济顾问委员会主席说出了白宫助手刻意回避的词语。在CNN的“最新版本”（Late Edition）节目中，身为布什总统高级顾问之一的Ed Lazear表示：“在美国的某些地方，我们可以看见任何人都可以归之为衰退的现象。”Lazear特别提到了加州，加州的失业率比美国其他地方高。之前他对全国经济使用了衰退的广义技术定义：连续两个季度经济紧缩。许多经济学家预计美国经济会在2008年4季度和2009年1季度紧缩。

Lazear的态度相对比较乐观，表示白宫和国会制定的7,000亿救市计划产生的重大影响将在“数月之内”发生作用。救市计划的目的是向遭受沉重打击的美国信贷行业注入现金和信心，重振经济。

Lazear的部分言词明显代表了他任职的共和党政府的意见，特别是他提到部分准备投资的项目，比如道路和桥梁建设，进展过于缓慢，也过于侧重于单个行业，难以给经济带来可观的动力。

当然，他的这番发言是在11月4日举行的总统大选之前。民主党获胜，这些措施的视角发生变化。历史的的民主党总统富兰克林-德拉诺-罗斯福就是通过在这些项目上大笔开支，把美国带出了30年代的经济大萧条。许多道路和桥梁虽然经年累月，仍然在使用。

❖ 俄亥俄州北部就是可能从公共基础设施大幅投资中获益最大的地区的典型。根据克里夫兰州立大学近期的研究，由于该地区的主要发展指标的水平较低，振兴该地区的经济需要至少十年时间。据《克里夫兰实话报》（Cleveland Plain Dealer）10月2日的报道，克里夫兰州立大学经济发展中心按照就业增长、人均收入、生产效率、城市生产总值，认为克里夫兰、阿克伦、坎顿和扬斯敦处于美国城市的中下游位置。

在以制造业就业为重点的“本地遗产”项，克里夫兰市的分值是低，阿克伦是较低。当地经济未来基金（Fund for Our Economic Future）主任Brad Whitehead在接受《实话报》采访时表示：“我们过度依赖增长缓慢的行业”，比如汽车制造。

### 美国经济不景气之际，贸易伙伴增长也不乐观

美国稳定银行和信贷市场的紧迫性掩盖了其他对美国经济的严重威胁。Bernard Condon在《福布斯》杂志上撰文指出，欧洲购买美国产品的能力在出口对美国经济至关重要之际正在下降。欧洲过去十年购买美国出口产品的平均比例为12%，目前为15%，但欧洲的经济增长预计2009年仅为2007年的四分之一。

Condon还指出：“中国也指望不上，增长率已经从12%下降到8.5%。这意味着商品和服务的产量将降低1,000亿美元，超过其他125个国家任一国的全年产值。日本呢？在二季度已经有所紧缩，并徘徊在衰退的边缘。”（见10月27日《受伤的世界》）

这种放慢的情形在世界各地都已经出现，并预示工业七国2009年可能面临1982年0.2%以来的最低年增长率。《福布斯》引用美林对2009年工业化七国的经济的增长预期——0.4%。

## 相邻国家情况

### 加欧贸易协定，加对美经济依赖可望下降

美国是加拿大的近邻，也是加拿大最大的贸易伙伴，最近十年来支撑着加拿大GDP的将近65%。虽然加拿大为摆脱对美国的经济依赖，也曾经进行过零星的努力，但从来没有像这次走得这么远。不管现在，随着美国经济陷入低谷，加拿大准备扩大加拿大的贸易关系。

加欧贸易协定的前期谈判的主要推动者是时任欧盟轮值主席的法国总统萨科齐。萨科齐代表欧盟和加拿大总理于10月17日签署了一项协定，这项协议是加欧最终达成内容比北美自由贸易协定（缔约国包括加拿大、美国和墨西哥）更广泛的协议的先导。

在渥太华举办协议签字仪式后的第二天，加拿大和欧盟公布了长达192页的研究报告，建议双方正式签署协议，这样到2014年加拿大对欧洲的出口可增长20.6%。如果该报告被采纳，可以消除政府间贸易的壁垒，开放航空客运市场，以及加拿大和欧盟公民互免工作签。

加拿大方面负责推动贸易协议的人士魁北克省省长Jean Charest。协议背后的另一个动因是萨科齐与蒙特利尔金融



家 Paul G Desmarais爵士的长期关系。通过加拿大电力公司, Desmarais爵士及其家族控制着多家知名欧洲公司的投资,包括全资拥有法国石油和天然气公司。

由于相隔大西洋,与欧洲的协议可能不会在加拿大国民中激起1993年达成北美自由贸易协定时被吞并感。这种被吞并感曾经延缓了北美自由贸易协定的达成。但这并不意味着所有人对这个协定都有萨科齐和Charest式的热情。

前高级贸易官员,渥太华卡勒顿大学的贸易政策教授Michael Hart,对萨科齐是否能通过欧盟的审核存有疑虑。在接受《纽约时报》记者Ian Austen采访时,他表示希望在欧洲开展业务的加拿大公司一般是希望继续在欧洲投资,而不是向欧洲出口加拿大货物。(见10月17日,《加欧掂量贸易协定》)

Hart表示:“加拿大与欧洲有生意可做,但并不意味着需要达成全面协议。”

## 墨西哥工人返乡潮涌

与加拿大人一样,许多墨西哥人现在也不再指望美国,不过他们不是在眺望欧洲,而是把目光放在了国内。据《大纪元时报》报道,位于华盛顿的非盈利性研究机构普优西语裔研究中心认为美国经济的下滑对移民家庭造成重创。

普优还表示,由于两国边界的工作地点频遭警方搜查以及安保工作加强,寻觅工作对墨西哥人难上加难。这种雪上加霜的情况对美国境内的1,200万非法移民形成了更加严峻的情况。这些人有可能因为违反美国移民法规被判长期监禁。(见10月16日《墨西哥人在危机中离开美国》)

《大纪元时报》还指出美国经济下滑对依靠海外工作人员汇回现金的墨西哥和其他拉美国家造成严重影响。仅以墨西哥为例,8月份的汇款额就下降了12%。萨尔瓦多18%的国内生产总值来自这个渠道,8月份出现了六年来的首次下滑。危地马拉的汇款额也有下降。

虽然目前还没有对离境的非法移民人数的准确统计,普优表示,2000年到2007年间,美国非法移民的人数增加了40%,不过过去一年里,似乎出现了下降趋势。如果是这样,这意味着大约10年里美国的非法移民人数首次从增长转为下降。

路透社的Michael O'Boyle表示,这个趋势存在另一个不利的方面:据墨西哥某些移民人数上万的州的官员预测,原来的移出国会突然出现大规模的返乡潮。在报道中,Michael O'Boyle称墨西哥中北部州Zacatecas的州长Amalia Garcia曾要求联邦立法机构建立5.7亿美元的基金,以帮助返回贫困地区的移民。

虽然回到墨西哥以后的前景尚不明朗,回归的墨西哥人的情绪都有所改善。一位返回墨西哥农村的移民曾因为不能提供工作需要的文件,被迫躲在特拉华郊区的房屋中,成天焦虑不安。这位移民在接受Michael采访时表示:“虽然回到墨西哥穷是穷点,不过比像只老鼠似的困在笼子里强很多。”

## 汽车新闻

### “三巨头”求援华盛顿,批评方不为所动

美国国会9月底投票通过给陷入困境的汽车行业提供总额250亿美元的低息(大约5%)贷款,让汽车生产厂家能够在信贷紧缩和资本市场动荡的情况下满足紧急需求。美国政府的这项政策,从正面来看,是想帮助通用、福特和克莱斯勒进行工厂改造,用于开发和生产节能车辆。

根据初期的意见,这项援助要求汽车生产厂家进行投资,生产比同级别类似车型节能能力高25%的车型,同时保障工人的工作。

选区包括底特律的密歇根州民主党人Sen Carl Levin表示:“美国的汽车生产厂家正面临巨大困难,这些贷款可以帮助我们的公司在全球市场保持竞争力,确保这些技术进入市场,并继续在美国生产制造。”

汽车工人联合会(UAW)主席Ron Gettelfinger表示:“对我们的会员来说,对美国的制造业公司来说,对美国消费者来说,这是一次重大胜利。这是一项理智的投资。有了它,更加节能的汽车的推出速度会加快,成千上万薪酬良好的美国制造业岗位得以创造。”

不过,有批评人士指出国会有所偏袒,因为许多国外汽车制造厂家在美国设立的工厂与国内厂家面临着类似的问题。如Antonio Perez在《大纪元时报》所指出的(见9月30日《美国250亿美元资助汽车行业》),这些意见认为美国汽车行业“应该面对市场现实,停止把自己打扮成受害者。”

这种看法在《基督教科学观察报》的社论中也有体现:“虽然美国经济在下滑,丰田和本田8月份的销售额仅出现了一位数的下降。尼桑的销售额不降反升。这些企业知道如何在美国营运成功的制造厂家,而不是呼吁援助。”(见9月5日《为啥不拯救三大巨头》)

《基督教科学观察报》的编辑表示,底特律“与许多其他在与外国公司竞争中败下阵来的美国行业,例如纺织品、家具、玩具一样,不应该有特殊性。”

❖ 汽车工人联合会主席对另一个影响他带领的工会的消息也表示欢迎。这次是伊利诺斯州中部城市Normal的松下工厂的汽车工人联合会通过了一个以降薪换取工作岗位的协议。松下北美发动机厂10月4日表示不进行主动裁员,并保证这种情况到新协议失效。在2004年的全球裁员中,由于母公司东京松下发动机公司自称是最后的求生机会,在Normal总共裁员1,200人。该厂建立于1988年,目前的雇员数量不足10年前的一半。

## 相关新闻...

❖ 由于在美销售日益恶化,通用从控制经营成本的角度出发,准备在今后几个月中再裁去1,600人。通用底特律Hamtramck 轿车厂从1月12日起将裁员500人,同期密歇根州Pontiac皮卡厂将裁员700人。此外,通用发言人Chris Lee在接受《芝加哥论坛报》(10月16日)采访时,表示特拉华州的威灵顿运动轿车组装机在12月8日前将裁员400人。

❖ 《论坛报》提到的其他准备裁员的公司有生产工具和泰克测量设备的Danaher Corp。这是一家位于华盛顿的综合性生产和技术企业,泰克是其最大的采购方。Danaher准备裁员1,000人,关闭12家工厂;准备好面对美国经济下滑“可能带来的状况”,如其首席执行官Lawrence Culp所说。

## 沃伦巴菲特看好电动汽车,投资中国比亚迪

美国亿万富翁,投资专家沃伦巴菲特已同意购买准备从2010年起在美国销售电动汽车的中国电池生产厂家比亚迪9.89%的股份。比亚迪位于香港北面的中国城市深圳,是世界上最大的手机和其他用途可充电电池生产厂家。公司还成立了高速发展的汽车生产部门,为中国市场生产节能型小型轿车和微型轿车。巴菲特的投资公司Berkshire Hathaway拥有MidAmerican Energy Holdings Co 87.4%的股份,后者准备出资2.3亿美元购买比亚迪的股份。

# JIANGSU JINTAILONG

江苏金泰隆



1

2

江苏金泰隆作为中国最大的钢帘线成套设备生产厂家，在持续数年为客户提供高性价比设备的同时，还致力于高新产品的创新和研发。并和世界一流的轮胎帘线公司建立了长期稳定的合作关系，快速将研发成果投向市场。为中国和全球各大轮胎钢帘线公司提供高质、价廉、世界领先水平的成套设备。

JIANGSU JINTAILONG is the largest equipment manufacturer in China for the steel cord making industry. Over the years we have made high-quality, cost-effective machinery for some of the best-known steel cord producers in the global tyre market. Long-term relationships with our customers have been built upon our proven innovation and our ability to take designs through development and into real-time production. Come to JIANGSU JINTAILONG for high-quality, cost-effective steel cord equipment.

3



3



4



5

1  
电镀收放线机组  
plating line

2  
12/560 直进式拉丝机  
dry drawing machine

5  
23 水箱拉丝机  
23 Wet drawing machine

4  
双捻机  
double twisting strander

5  
25p 水箱拉丝机  
wet drawing machine

6  
CL 外绕机  
wrapping machine

## 江苏金泰隆机电设备制造厂

JIANGSU JINTAILONG MECHANICAL AND  
ELECTRICAL EQUIPMENT MANUFACTURER

地址：中国江苏省泰兴市大庆东路 288 号  
ADDRESS: NO.288 DAQING E. RD. TAIXING CITY,  
JIANGSU PROVINCE P.R.CHINA

邮编 (AREA CODE): 225400  
电话 (TEL): 0086-523-7668197  
传真 (FAX): 0086-523-7760660  
EMAIL: jstl@vip.163.com  
cellphone: 0086-13905264693  
网址 (website): www.jsjintai.cn

6





比亚迪董事长王传福在9月29日的香港新闻发布会上表示：“如果比亚迪要进入北美市场，巴菲特先生的投资将为比亚迪品牌助一臂之力。”王传福还表示，比亚迪甚至准备引入Berkshire的资金加快研发工作，推动进入美国市场的计划。

身价620亿美元，2008年世界数一数二的大富豪巴菲特对比亚迪来说确实是很有价值的关系。他与JP Morgan在美国经济大萧条时的地位类似，也是金融动荡中的定海针。据弗吉尼亚大学达顿商学院院长，《1907大恐慌：绝对市场经济风暴的教训》（2007年）著者之一Robert F Bruner表示，巴菲特现在“成为瞩目的中心，忙于起草纲领，激发信心。”

中西部和西部电业公司MidAmerican认为充电电动汽车在减少二氧化碳排放方面比使用氢燃料的车辆具有更大优势。MidAmerican的董事长David Sokol在与王传福一同出席新闻发布会的时候表示，美国的基础设施能够支持在任何地方为车辆充电。氢燃料汽车需要安装许多氢燃料加油站。

## 替代能源

### 澳大利亚博士为美国政府献一石两鸟之策

在经历数年的高速增长后，美国的再生能源行业正在失去发展动力。为先进的太阳能项目提供资金的风险投资公司日渐稀少。至少已经有两家的风能公司因为筹资困难不得不拖延项目。可能令环保人士大为失望的是，Tesla Motors宣布不得比延迟全电的S型轿车的生产，关闭两个办事处，并解聘工人。

作为澳大利亚人头脑的展示，物理学博士、位于阿克顿（邻近堪培拉）的身份识别服务公司Edentiti的首席技术官Kevin Cox草拟了一个解决方案，能在美国政府为堆积如山的经济问题而焦头烂额之际推动美国的再生能源发展。Cox博士敦促美国政府“为特别的目的增加特别的货币供应”。

由政府以零利率发行货币，仅用于再生能源融资。这种货币可以用于贸易，但价值较普通货币略有折扣。这种能源优惠将有利于低耗能用户。由于优惠的幅度与能耗水平呈反比，可以进一步减少耗能，而且大众也会认为这是合理的。此外，它还可以帮助保护对金融危机面承受能力差的人群。这样，再生能源的价格将低于化石能源，因为再生能源的主要成本是融资成本。最终，再生能源的成本将接近零成本，对大多数系统而言，大约每千瓦时一美分。这种方法是否同样适用于经济的其他领域呢？

Cox博士认为没有理由表明这种方法不适用于其他公共基础设施投资。不过，他告诫说：“如果这种资金花费在不能直接产生价值的防务、行政管理、执法或者消费产品上，就不能产生效果，因为这些领域应该由税收支付。”

这个体系如果按Cox的公式运作，银行只能用存入的存款进行贷款发放。国民经济要发展，总需要新的货币供应。为什么不发行这种新货币，让人们生产出有价值的资产，同时保护环境？Cox博士称：“这样就可以建立低利率、零通胀、有目的地让有利于美国社会的领域发展的系统。”他还表示：“这个方法可以开辟未来。”

对美国政府：澳洲的这个主意如何？

专栏编辑：Dorothy Fabian

## New from Wire & Cable ASIA: The digital E-Zine online magazine



**Brings your Advertisement to Life!**  
To see a FREE demonstration  
visit [www.read-wca.com](http://www.read-wca.com)  
Tel: +44 1926 334137 Email: [paul.b@intras.co.uk](mailto:paul.b@intras.co.uk)

- **Simple to use**  
It looks like the magazine, reads like the magazine, and even turns pages like the magazine, but it's all done digitally and is totally interactive for online readers.
- **FREE to Read!**  
Anyone, anywhere can log on to the website to read the digital version of Wire & Cable ASIA magazine\*, giving added value to your advertisement in a format where it can be seen all over the world, 24/7 (\* without technical articles).
- **Added Value**  
If you are an advertiser in Wire & Cable ASIA, we can add links from your advertisement direct to your website, making navigation easy for readers and buyers - direct to your sales department if you wish.
- **Multi Media Ready**  
We can embed video and other media content into the e-zine to enhance your advertisement by showing working machinery or equipment on screen - giving online readers an insight into your company's technology and experience.
- **Options**  
Regular readers and international subscribers may also purchase an annual e-subscription to receive all 6 editions of Wire & Cable ASIA magazine (including full technical articles) sent direct to their inbox with every issue.

**Wire & Cable ASIA** 线缆世界



# Hit Your Target Audience Every Time

## Advertising Benefits – Targeted, Tangible, Cost-Effective

### The Magazine:

- Wire & Cable ASIA is distributed to over 9,200 companies throughout PR China and North & South East Asia.
- Printed in English & Chinese languages.
- Every issue is filled with essential wire and cable industry corporate and technology news.
- Contains technical articles in English & Chinese languages in every issue.
- Distributed at every major wire and cable exhibition around the world.

### The Ezine version

- Every issue is also available FREE online to read as an E-zine, which means anyone, anywhere can log on to read the E-zine 24/7 and see your advert in the magazine – at no extra cost to you!
- Advertising can be hyperlinked direct to your website.
- Embedded video facility that can show your machine working.
- Email link direct to your sales team.

To find out more, call your Account manager today to see how advertising in Wire & Cable ASIA can work best for you.

**Wire & Cable ASIA** 线缆 ASIA

Tel: +44 1926 334137

Email: [wca@intras.co.uk](mailto:wca@intras.co.uk)

Web: [www.read-wca.com](http://www.read-wca.com)

**Wire & Cable ASIA – More News, More Features, More Readers**



Processing lines from SAS

## CDM from SAS

SAS Engineering & Planning has been in business for 30 years, manufacturing equipment and lines for rod processing.

Now, to suit the changing production requirements of its customers, SAS has a new generation of machinery based on the most advanced technology in the field of coil-to-bar and bar-to-bar cold processing lines.

SAS Engineering & Planning's combined drawing machine (CDM) has been designed to provide technological value, reliability and ease of use.

The combined drawing lines are equipped with twin cams, hydraulic carriages and hydraulic flying shear and are said to work at very high speed with maximum accuracy.

CDM can be supplied complete with the most advanced accessories to provide a totally automated line including pay-off group, pre-straightening device, draw bench, chamfering machine, bundle strapping,

weighing and handling, all managed automatically.

The comprehensive SAS range includes coil-to-bar combined drawing lines, bar-to-bar drawing lines, double tilting pay-offs, motorised or idle pay-offs, pre-straighteners, hydraulic

push pointers, pulling benches, in-line and off-line shape straighteners.

**SAS Engineering & Planning Srl  
- Italy**

**Fax:** +39 031 657223

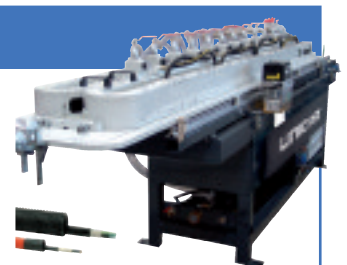
**Email:** info@sas.it

**Website:** www.sas.it

### In-line cable insertion

Unicor GmbH has developed new corrugators for quick and easy in-line production of protective pipes for PEX, ALU-PEX-pipes and protective pipes for cables. The UC 58/90 (V) and UC 58/120 (V) are Unicor's solutions for pipe-in-pipe production and cable insertion within pipes from 8mm inside diameter and up to 58mm outside diameter.

The in-line production of pipe-in-pipe or the direct insertion of electric wire into corrugated pipe saves a cost-intensive step in the production process. By integrating the final fabrication into the production cycle additional handling costs are saved. The technology is also available with the medium-sized corrugators UC 75 and UC 100.



Unicor's UC 58/120 V corrugator

**Unicor GmbH - Germany** Email: sales@unicor.de Website: www.unicor.com

## Search and develop – not to get burned

For the purposes of fire prevention and to ensure the safety of people and assets, a number of laws, decrees and regulations have been introduced, to which engineers, manufacturers, technicians and users must comply.

Electrical cables are among the structural elements that need to satisfy fire resistance requirements. In particular, their behaviour has been analysed under fire conditions and reference standards have been established through the development of international norms. These standards specify the relevant test apparatus to be used to simulate fire conditions in order to test and analyse reactions of the electrical cables as if they were in their working condition. This apparatus allows cable manufacturers to test products and ensure they comply with international standards where necessary.

In particular, these tests focus on flame spread (reference standard: IEC 60332-1-1) fire spread (IEC 60332-3-10), emission of toxic smoke and gases (reference standards: IEC 60754-1 / IEC 60754-2 / IEC 61034-1) and fire resistance (IEC 60331-11).

In recent years many companies have purchased test equipment to test their products, and therefore to guarantee the necessary requirements and to sell in specific sectors, and as part of a research and development strategy. SIF MDC produces the complete range of test equipment, not only respecting the standard requirements, but also adding or customising any piece of equipment to further improve its performance or ease of use.



○ SIF MDC

**SIF MDC – Italy**  
Email: info@sifmdc.com

Fax: +39 035 4559358  
Website: www.sifmdc.com

## BritNed contract for ABB

ABB is providing the cables for a high-voltage connection between the power grids of the United Kingdom and the Netherlands. The company began manufacturing the high voltage direct current (HVDC) cables in August 2008 and expects to complete the needed 500km of cable in April 2010.

The 260km BritNed link will allow energy trading between the two countries and increase the reliability of electricity supplies to both. "BritNed is another step towards an integrated electricity network for Europe," said Peter Leupp, head of ABB's Power Systems division.

The cables will provide a link between the Isle of Grain in Kent and Maasvlakte in the Netherlands. Laying of the land-based sections was scheduled for late 2008, while the marine cable installation is expected to begin in April 2009. The 119mm diameter cable sea cables will weigh approximately 44kg per metre and will be installed by cable-laying vessels. The system will have a total capacity of 1,000 megawatts (MW) and will be in operation by 2011.

HVDC technology is used to transport electrical power over long distances with low losses using underground or submarine cables. ABB pioneered the technology in the 1950s, when the company built the world's first commercial HVDC transmission link in Sweden and has since supplied more than half of the world's HVDC projects, providing an installed transmission capacity of more than 45,000 MW.

ABB's HVDC projects include the world's longest underground power link (in Australia) and the world's longest underwater connection, the NorNed project between Norway and the Netherlands.

**ABB Ltd – Switzerland**

Website: www.abb.com

## ZHANGLI MACHINE FITTINGS CO., LTD

Bearing tower pulley & idler pulley for wire & cable



\* Chrome oxide ceramic coated tower pulley for fine-extension machine



\* Mid-extension tungsten carbide coated tower pulley & steel ring



\* Precision ceramic idler pulley

Tel: +86-769-87094491/87094492  
Fax: +86-769-87094490  
www.dgzhangli.com.cn  
E-mail: zlf@changnan.net  
Add: 中国广东省东莞市长安镇沙头管理区

**GAUDER GROUP**  
BOW TECHNOLOGY

400+ customized models developed with major cable makers

Bekaert	Krupp
Brondel	Lesmo
Caballé	Maillefer
Ceaco	Nicro
Cigiemme	Niehoff
Cortinovis	NMC
Dick	Pourtier
Diger	Samp
GCR	Selecta
Goddardage	Setic
Hamana	Tecalsa
Kabelkraft	Trafalgar
Kinrei	Yukwang

Tel.: +33 4 77 23 25 55 - Fax: +33 4 77 21 15 65  
bow@gaudergroup.com

www.bowtechnology.fr

## Rigid cage stranding machine

Rigid cage stranders from Cortinovis Machinery can produce copper, aluminium or aluminium alloy conductors, from 7 to 91 wires in a single pass and up to 169 wires using a second pass. Strand constructions can be round, sector shaped, straight or pre-spiralled, compressed or compacted, and be made from single round, trapezoidal or specially shaped wires. The machines have the option of screening with bobbins of multi-wires or a single wire on each bobbin, and armouring with steel wires. A full range of accessories is available for all products.

The process is fully controlled from a central PLC with a main operator interface and remote operator interface using Profibus with a controlled stop in the case of power failure. Recipes, predictive maintenance and production reports are included. The machine has automatic multiple loading and unloading of bobbins, using lifting platforms with side conveyors or side trolleys. Different versions of compact design rigid stranding cage are available for bobbin diameters of 500, 560, 630, 710 and 800mm. Fail-safe safety devices lock the bobbin in the machine and provide unbalanced load detection and alarm. The machines are designed for easy access for wire string up and welding.

The table shows working speeds, with automatic tension control, from full to empty bobbins. Wire material can cause variation.

Automatic re-charging of the air tank and the bobbin braking circuit is carried out at every loading operation, without intervention of the operator; at the same time the pintles pneumatic circuit is connected and allows the loading/unloading of the bobbins.

Number of bobbins	speed up to	
diameter 630mm standard DIN 46397	[rpm]	
6 and 12 bobbin cage	320	320
18 bobbin cage	280	280
24 bobbin cage	265	230
30 bobbin cage	220	190

The pneumatic pintles are actuated by air with a separate circuit from the bobbin braking system. The pintle locking is fail-safe and is mechanically locked during rotation. An electrical interlock is also provided. A wire break detection system checks for breaks in each individual wire, by monitoring the rotation of each bobbin; the control desk displays which bobbin is involved and the machine automatically stops.



○ Rigid cage stranding machine from Cortinovis

Wire tension is maintained by pneumatic disc brakes; the friction pads are easily changeable. Tension is set up at the control desk and can be changed while the machine is running.

### Loading platform with rotating turntable:

The cage is automatically positioned in the loading position. An hydraulically-operated lifting platform is fitted in the floor. The platform lifts and moves the full bobbins in between the open pintles. In each sequence a full row of bobbins is loaded; the sequence is automatic with safety interlock controls at all steps. As an option, the platform can include rotating turntables that assist the operator in the positioning of full bobbins.

### Loading platform with conveyors:

Chain conveyors, on which the operator puts all the full bobbins while the machine is running, move a complete row of full bobbins onto the lifting platform.

### Using the side loading trolley:

Side loading trolleys are installed on rails on the floor, and do not require foundations. All the bobbins are prepared in position while the machine is running. The trolley automatically takes and lifts the bobbins, and places them between the open pintles. Safety interlocks are in force at all steps.

**Cortinovis Machinery – Italy** Fax: +39 035 313211 Email: cortinovis@cortinovis.it Website: www.cortinovismachinery.com

## Celsa Atlantic coil handling contract for Siemens

Spanish steel maker Celsa Atlantic, a company of the Celsa Group, has awarded a \$5million contract for a second compactor and coil handling extension to Siemens VAI in order to increase productivity and improve product quality. This represents the expansion of an existing system. Celsa Atlantic expects delivery in the first quarter of 2009.

The coil handling extension includes a combination vertical and horizontal system and a second compactor, and provides increased on-line coil storage as well as an increase in surge

capacity. The greater cooling times will enable Celsa Atlantic to produce higher quality products, such as thermo-mechanically treated ribbed rebar for concrete reinforcement, at its plant in La Coruña, Spain. The contract with Morgan Construction, the US based specialist of Siemens VAI for high speed wire rod mills, also includes a reloading station that can route coils back into the system for offline processing.

**Siemens VAI Metals Technologies GmbH & Co – Germany**  
Website: www.siemens.com/metals



# Marta modular system

MARTA system is a fully automated two-axis welding machine, manufactured by the Italian company GEM, in sizes up to 4,800 x 1,500mm. The rigid machined frame ensures high accuracy, absence of vibrations during working and resistance to external stresses. The modular design meets individual requirements and improves manufacturing flexibility for frequent product changes.

The welding gun is of the C type, with two opposed cylinders in the standard version, fitted with electrode bars in order to weld several crosses at the same time. The machine can be fitted with a rotary welding head to follow irregular shapes, and a lower NC axis for changing the electrode height so that it is possible to weld components with different working levels. The C gun can have more cylinders, working individually or two by two. The electrodes can be mounted at 90° or side by side, in order to speed up the production. A medium frequency inverter (1,000 Hz) is available on request for high welding quality. The steel linear slides are of the re-circulating ball type while a Siemens brushless motor coupled with pinion and precision rack provides the system drive.



○ The MARTA system from GEM

The machine is fitted with two working stations, side by side. This system increases the productivity of each operator as the machine welds while the operator unloads/reloads. The constant current welding control will store up to 63 different welding programs. The CNC is connected to an ergonomic terminal, which is used to manually operate the machine, especially for the teach-in programming. A fixed guard protects the working area, while the loading/unloading station is fitted with a double photoelectric cell barrier.

**GEM Srl – Italy**  
Email: info@gemwelding.com

Fax: +39 011 9241002  
Website: www.gemwelding.com

## Camera cables with BendBright-XS

Draka Communications' BendBrightXS technology is now an integral feature of its SMPTE 311M hybrid camera cables with integrated optical fibres. It is believed that this enhancement will make transmission cables for video signals considerably more robust and more appropriate for HDTV broadcasting environments. BendBright-XS is a technology for optimising optical fibres in which a special field-confining trench ensures that the optical beam remains in the centre of the cable even when the latter is subject to extreme stress – for instance by bending and pressure.

As BendBright-XS effectively eliminates faults originating in fibre optic cables, loss of transmission during live broadcasts can be virtually excluded.

Introduced in 2002 as "BendBright", the XS-variant is the latest upgrade to the technology, offering, it is claimed, a hundred times bending improvement over standard single mode fibre cables. The Society of Motion Picture and Television Engineers has defined SMPTE 311M as an official transmission standard. The standard specifies that such camera cables are capable of transmitting high-resolution HDTV signals in addition to the usual standard television images. They are also suitable for high-speed recording, such as that used for the extreme slow-motion sequences taken at sports events.

**Draka Holding NV – The Netherlands**  
Email: info@draka.com

Fax: +31 2056 89899  
Website: www.draka.com

**GUANBIAO ELECTRICAL MACHINERY CO., LTD**  
WIRE-DRAWING MACHINES

FINE WIRE DRAWING MACHINE

INTERMEDIATE WIRE DRAWING AND ANNEALING MACHINE

ANNEALING (TREND) MACHINE

**GUANBIAO ELECTRICAL MACHINERY CO., LTD**  
TEL: +86-755-85253900/85253902 FAX: +86-755-85252685  
HT TP: www.guanbiao.com © MAIL: info@guanbiao.com  
A02 General Industrial Zone, Chiguan, Guangdong 520021 China

**LOCTON**

Manufacturers of both  
'HUSH' & 'LOCK ON'  
PULLING IN DOGS

T: +44 (0)1527 570977 F: 882423  
E: sales@locton.co.uk  
www.locton.co.uk

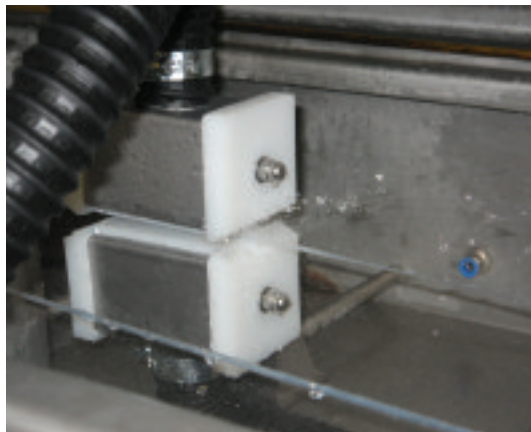
# New drying system for wire and cable

Air Control Industries (ACI) has introduced a new energy-efficient drying unit for water-cooled, insulated cable and wire.

Called the 'DRI-Line Powerpack', ACI's system is said to achieve superior drying efficiency compared to both compressed air and other blower-driven solutions. The drying design delivers air at high velocity very close to the surface of the product, breaking the surface tension of the retained water and allowing it to be removed.

Utilising high efficiency blowers, ACI's DRI-Line Powerpack delivers warm (80° C/176°F) clean, contaminant-free air at constant volume and pressures to ensure the drying process is consistent and reliable. It also has the advantage of being 'plug and play' as it runs off a 230V, single phase supply. A version with a 110V supply will also be available shortly.

The unit can dry extruded products from 5mm to 25mm diameter at speeds in excess of 300 m/min. Its drying effectiveness is achieved by passing extruded product through a pair of hinged drying heads that deliver the high velocity airflow directly to the product. The hinged heads are sprung allowing any defect/knot to pass through without any requirement for adjustment.



○ DRI-Line Powerpack wire and cable dryer from Air Control Industries

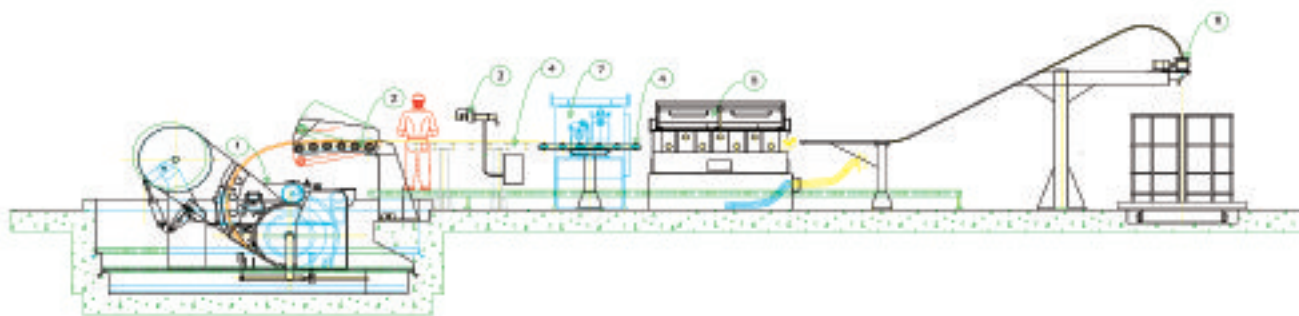
The blowers used in the Powerpack are housed in a sturdy, stainless steel acoustic chamber that keeps noise levels well below 85dB(A). The drying heads are predominantly fabricated from stainless steel, but also utilise polyethylene for the main facing plates and plenum chamber end-caps for its hardwearing properties.

Extensive customer field trials of the DRI-Line Powerpack suggest significant energy savings are possible, compared to compressed air systems, and short payback times. ACI is offering free on-site trials to potential UK users.

**Air Control Industries Ltd – UK** Website: [www.aircontrolindustries.com](http://www.aircontrolindustries.com)

## Aluminium and copper rod lines for any demand

The aluminium and copper market is continuously evolving. International aluminium customers are looking for improvements while focusing their demand on special sizes to be applied to aluminium and copper production lines. During the past five years the rod producers' main interest has been in medium (8 T/h) and large (13 T/h) capacity rod lines. Properzi has manufactured and installed lines of this type throughout the world, while extending its production range at the opposite ends of the spectrum with an XS and an XXL line. Two years ago, during this wave of evolution and increased production, Continuus-Properzi designed an aluminium line to produce approximately 1.6 T/h of grade rod in the standard diameter of 9.5mm. This small line was nicknamed the Properzi Baby line and its main components are shown in the diagram.



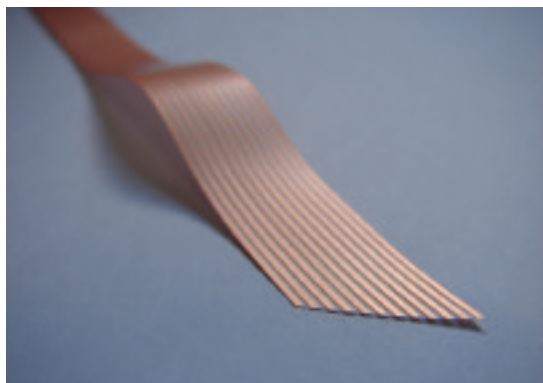
○ (1) Casting machine, (2) sensor arm, (3) manual bar shear, (4) conveyor, (5) Micromill 69/7 – based on the use of 7 three-roll stands model 69 (6) rod deflector and basket coiler, (7) Additional breakdown mill to upgrade production in a second step.

Giulio Properzi, president of Continuus-Properzi, is designing and developing XXL rod lines, to complete the range of Properzi rod lines. These include an aluminium rod line for 20 T/h, a copper rod line for 45 T/h and an ingot casting machine for 30 T/h. At present there are over 24 sizes and models of aluminium and copper rod lines in the Properzi repertoire, ranging from XS up to XXL.

**Continuus-Properzi SpA – Italy** Fax: +39 02 98 10 358 Email: [sales@properzi.it](mailto:sales@properzi.it) Website: [www.continuus-properzi.com](http://www.continuus-properzi.com)

## New manufacturing concept for precision micro flexible flat cables (FFC)

Flexible flat cables (FFCs) have found widespread use in the automotive and IT industries. Lamination and extrusion are the processes most commonly used for the production of FFCs but the disadvantage of lamination is its extremely low production speed. Extrusion is unsuitable for the production of micro FFCs due to the high temperatures and pressures encountered in the extruder head, and these make it impossible to maintain accurate geometrical dimensions and precise positioning.



○ FFC with 12 Cu conductors 0.035 x 0.600mm

Medek & Schoerner has developed a new un-pressurised cold process for the production of FFCs using UV cured resins, thus ensuring the perfect geometrical accuracy of the cable at high production speeds.

The procedure can also be employed inline with an extruder to position the individual flat cables accurately as they enter the extruder head.

The same system, with some detail modification, also allows the coating of fine steel wire in varying colours.

**Medek & Schoerner GmbH – Austria**  
 Email: m+s@medek.at

**Fax: +43 1 982 72 96**  
**Website: www.medek.at**

## High-capacity wire rod mill with FRS® technique

ArcelorMittal Hochfeld GmbH has placed an order with SMS Meer for the supply of a complete high-capacity wire rod mill with FRS® technique for high-grade steels. The annual capacity will be 690,000t. Of this, the major portion of the products will be cold heading steel grades. The mill will be designed for producing wire rod in high-grade steels and will go into production in August 2010.

The SMS Meer order comprises a walking-beam furnace, the mechanical and electrical equipment of the mill train, all of the supply systems, the finishing facilities for the wire-rod coils, the entire rolling and cooling equipment, and the erection and installation. The walking-beam furnace for billets up to 155mm square will reach an output of 120t/hour.

The wire rod outlet comprises a cooling and equalising section in a loop arrangement, a six-stand wire rod block and a four-stand FRS® (Flexible Reduction and Sizing) block – both in UHD (Ultra-Heavy Duty) arrangement. The wire-rod block and the FRS® block are each followed by a water-cooling line. The core component of the mill is the FRS® block together with the cooling and equalising section. The supply scope therefore also includes the 104m long LCC® (Loop Cooling Conveyor) for forced and retarded cooling, a total of three water cooling lines and the CCT® (Controlled Cooling Technology) system developed by SMS Meer.

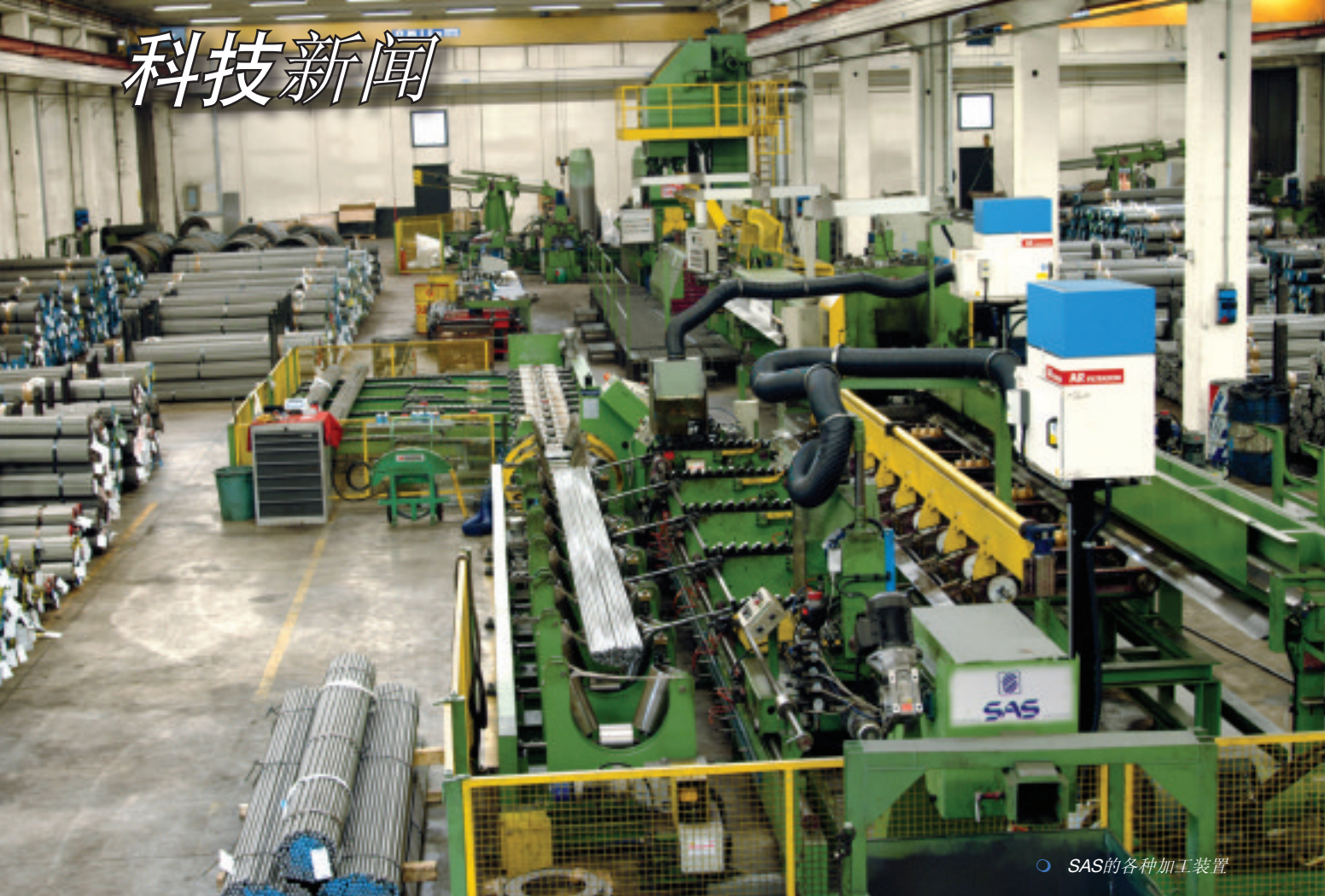
These facilities allow wire rod to be produced over the entire dimensional range of 5.5mm to 25mm by means of temperature-controlled rolling. Ultra-fine microstructures can be achieved especially for cold-heading grades by thermomechanical rolling. The maximum rolling speed for 5.5mm wire rod is 120m/sec.

**SMS Meer GmbH – Germany**  
 Email: info@sms-meer.com

**Fax: +49 2161 350 1667**  
**Website: www.sms-meer.com**

**rautomead**  
 Continuous Casting Technology  
 www.rautomead.com

**Sampat Heavy Engineering Ltd.**  
 Manufacturing Of Cable & Conductor Machines  
 Regd Office: Doots Avenue, 28 Bahadur Road, Marollogni, Mumbai-40 (India)  
 Phone: 0091-79-25420752 Fax: 0091-79-25420972  
 Email: contact@sampatgroup.com Website: www.sampatgroup.com



○ SAS的各种加工装置

## 来自SAS的CDM

SAS Engineering & Planning公司已有30年历史，制造辅助件和整套棒材加工装置。现在，为了适应其客户变化的产量需求，SAS拥有了新一代装置，该装置基于线卷-棒材以及棒材-棒材冷加工装置领域中最先进的技术。

SAS Engineering & Planning的拉伸集成装置(CDM)设计用来提供技术价值、可靠性和使用便捷性。CDM配备了最先进的辅助件，是全自动的装置，包括送卷装置、预拉直装置、拉伸台、倒角机、成束捆卷机、承重和搬运装置，全都自动化管理。SAS的产品范围包括卷-棒拉伸集成装置、棒-棒拉伸装置、双向倾斜送卷装置、电动或慢速送卷装置、预拉直装置、液压推动机、牵引台、在线和离线成型拉直装置。

SAS Engineering & Planning Srl – 意大利  
电子邮箱: info@sas.it

传真: +39 031 657223  
网站: www.sas.it

### 在线电缆插入

Unicor GmbH开发出新型轧波纹机，以便快速便利地在线生产PEX、ALU-PEX管保护管和电缆保护管。UC 58/90(V)和UC 58/120(V)是Unicor的管中管生产以及电缆插入管的解决方案，管子直径从8毫米内径到58毫米外径不等。

在线生产管中管或电线直接插入波纹管节约了生产工艺中高成本工序。在将最终织物纳入生产循环中后，还节约了额外的处理成本。技术还能提供中等尺寸的波纹管，UC 75和UC 100。

Unicor GmbH – 德国 电子邮箱: sales@unicor.de 网站: www.unicor.com



○ Unicor的UC 58/120轧波纹机

### Celsa Atlantic线卷处理合同授予Siemens

西班牙钢铁制造商Celsa Atlantic是Celsa集团下的一家公司，授予Siemens VAI一份5000万美元的合同，供应一套二次压紧机和钢卷处理装置扩建，增加其生产率，改进产品质量，即扩建其现有系统。

Celsa Atlantic期望在2009年第一季度交付。

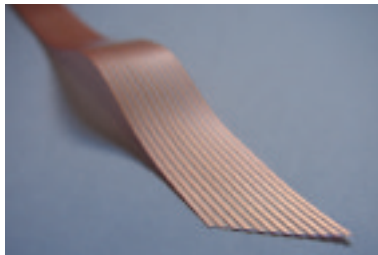
线卷处理装置扩建包括一个综合的垂直和水平系统和一套二次压紧系统，并增强其在线线卷储存能力，提高缓冲能力。更大的冷却倍数能使Celsa Atlantic在西班牙的La Coruña工厂产出更高质量的产品，例如用于钢筋混凝土的热力机械预处理钢筋。

合同是与Morgan Construction公司签订的，它是Siemens VAI基于美国的专业生产高速线棒生产装置的公司，合同还包括一个再装载站，能将线卷送回系统进行离线处理。

Siemens VAI Metals Technologies GmbH & Co – 德国  
网站: www.siemens.com/metals

## 精密微型挠性扁电缆 (FFC) 的新制造概念

挠性扁电缆 (FFCs) 在汽车工业和 IT 领域具有广泛的应用。复合和挤出工艺是生产 FFCs 的最常用工艺, 但是, 复合工艺的不足之处在于生产速度低。而挤出头的温度和压力很高, 所以挤出并不适合于微型 FFCs 的生产, 它难以保证精确的几何尺寸和准确的定位。



含有 12 根 0.035 x 0.600 毫米铜导线的 FFC

Medek & Schoerner 开发出新型的无压冷处理工艺, 用紫外线固化树脂来生产 FFCs, 保证能高速生产具有完美几何精度的电缆。它还采用与挤出机连线的程序, 精确定位通过挤出头的各根扁电缆。经过细致的修改后, 这个系统还可以用各种颜色对细钢丝进行涂层。

**Medek & Schoerner GmbH - 奥地利**  
 传真: +43 1 982 72 96  
 电子邮箱: m+s@medek.at  
 网站: www.medek.at

## BritNed 合同授予 ABB

ABB 是一个电力和自动化技术集团, 为英国和荷兰之间的电网提供高压电缆线路。公司于 2008 年 8 月开始制造高压直流 (HVDC) 电缆, 预计在 2010 年 4 月完成合同所需的 500 公里电缆。260 公里 BritNed 线路将使两国能够进行电力贸易, 增加两国的电力供应可靠性。“BritNed 是朝着欧洲电网一体化方向又跨进了一步” ABB 电力系统领导人 Peter Leupp 说道。

电缆将英国肯特郡谷岛和荷兰马斯弗拉克特连在一起。计划在 2008 年后期铺设陆基部分的电缆, 预计在 2009 年 4 月开始铺设海基部分的电缆。119 毫米直径的海上电缆重约 44 公斤/米, 由电缆铺设船进行铺设。该系统竣工后的总能力将达到 1,000 MW, 预计从 2011 年开始运行。

采用 HVDC 技术, 用地下或海底电缆进行长距离低损耗的电力输送, 能精确地控制电流。ABB 从 1950 年开始率先开发这种技术, 当时公司在瑞典建造了世界上首个商用输送线路, 从此以后, 世界上半以上的 HVDC 项目采用了这种技术, 装机输送能力共达 45,000 MW。

**ABB Ltd - 瑞士** 网站: www.abb.com

## 刚性笼式绞缆机

Cortinovis Machinery 的刚性笼式绞缆机能生产铜、铝或铝合金导体, 单通道合并 7 到 91 股线, 采用第二通道后能合股 169 根线。缆芯的构造可以呈圆形、扇形、直通或预螺旋形、紧凑型, 可以用圆形、梯形或特殊形状的线材制作。设备可选用多线轴或单线轴屏蔽和钢丝铠装。可以为所有产品提供各种辅助件。工艺完全由中央 PLC 控制, 配备一个采用现场总线的主操作界面和远程操作界面, 若发生供电故障时, 能控制设备停车。还包括配方、预防性维护和生产报告。设备采用配备侧面输送机或侧面滑轮的起重平台, 能自动进行多重装卸和卸载线盘。

线盘数量	速度可达	
直径 630 毫米标准 DIN46397	[转/分]	
6 到 12 线盘笼	320	320
18 线盘笼	280	280
24 线盘笼	265	230
30 线盘笼	220	190

拥有各种设计紧凑的刚性笼式绞缆机, 采用直径为 500、630、710 和 800 毫米的线盘。故障安全保护装置将锁定设备线盘, 并拥有不平衡负荷探测和报警装置。设备的设计便于操作员进入设备, 以便装线和焊接线材。上表显示了工作速度, 从满盘到空盘都有自动张力控制, 不同的线材材质会有不同。



Cortinovis 的刚性笼式绞缆机

每个装载操作都能自动执行空气罐充气 and 线盘制动回路, 不需要操作员干预; 同时, 配备了枢轴气动回路, 以便进行线盘装载/卸载。气动枢轴由空气执行, 空气回路是独立的, 来自线盘制动系统。枢轴锁定是故障安全型, 在转动期间被机械锁定。还配备了电气连锁。断线探测系统监测每个线盘的转动, 探测每根线的断裂, 控制台显示是哪个线盘, 而且设备将自动停车。由气动制盘保持线材张力; 能容易地进行摩擦垫更换。由控制台设定张力, 而且在设备运行时可以调节张力。

**转台的装载平台** - 线梭笼自动定位于装载位置。地面上装有液压操作的提升平台。平台提升和移动敞开心轴中的满梭。每道工序都装载一排满满的线盘; 工序是自动进行的, 所有的工作步骤都有安全连锁控制。作为一种可选项, 平台能包括协助操作员进行满盘定位的转台。

**带输送机的装载平台** - 这是一种链式输送机。当设备运行时, 操作员将所有的满盘都放在链式输送机上, 将一整排满盘移到提升平台。

**采用侧面装载滑轮** - 侧面装载滑轮在地面导轨上, 不需要基础。在设备运行时将所有线盘准备到位。滑轮将自动提取和提升线盘, 并放在敞开心轴之间。所有步骤都有安全连锁。

**Cortinovis Machinery - 意大利**  
 电子邮箱: cortinovis@cortinovis.it

传真: +39 035 313211  
 网站: www.cortinovismachinery.com

## 采用 BendBright-XS 技术的摄影用电缆

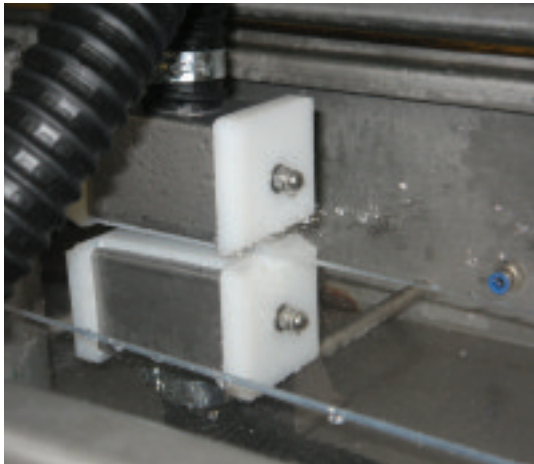
Draka Communications 宣布, 其 SMPTE 311M 混成摄影机集成光纤电缆采用了其专利的 BendBrightXS 技术。据信, 这种增强将使视频信号变送电缆更加稳健、更加适合于 HDTV 广播环境。BendBright-XS 是一种优化光纤的技术, 其特殊的磁场约束槽能使光束保持在电缆中心, 即使当后者受制于极端应力时也是如此, 例如弯曲或压力。由于 BendBright-XS 能有效地消除光缆内部产生的故障, 所以, 能最终剔除实况转播中的变送损失。“BendBright-XS”是在 2002 年推出的, XS-variant 是其最新一代技术, 其抗弯曲次数比标准的单模式光缆提升了一百次。国际电影与电视工程师协会已规定 SMPTE 311M 为正式的变送标准。标准规定这种摄影用电缆能变送高分辨率的 HDTV 信号和通常的标准电视图像。它们还适合于高速记录, 例如, 极慢速播放体育运动。

**Draka Holding NV - 荷兰**  
 电子邮箱: info@draka.com

传真: +31 2056 89899  
 网站: www.draka.com

## 线材和电缆的新型干燥系统

Air Control Industries (ACI)推出一种新型节能的水冷、绝缘电缆和线材干燥装置。该装置称为‘DRI-Line Powerpack’。据悉，与压缩空气和其它风机驱动式解决方案相比，ACI的这个系统能达到更加优秀的干燥效率。干燥设计提供高速空气，空气非常贴近产品表面，能打破水的表面张力，并将其消除。



○ Air Control Industries的DRI-Line Powerpack线材和电缆干燥装置

ACI的DRI-Line Powerpack采用高效风机，提供干净、不含污染物的热空气(80°C/176°F)，空气流量和压力恒定，保证干燥过程始终一致和可靠。其优点还在于它的即插即用，采用230伏单相电源。不久，公司就能供应可采用110伏电源的这种装置。

该装置能以300米/分以上的速度干燥直径为5毫米到25毫米的挤出产品。使挤出产品通过一对铰链式干燥头，高速流动的干燥空气直接作用在产品上，达到干燥的效率。铰链式干燥头有弹性，允许缺陷/节头通过，而不需要调整。

Powerpack所使用的风机外面有结实的不锈钢隔音罩，噪音水平在85分贝以下。这种干燥头主要由不锈钢制作，主面板和气室端帽利用了聚乙烯，使其具有耐磨特性。

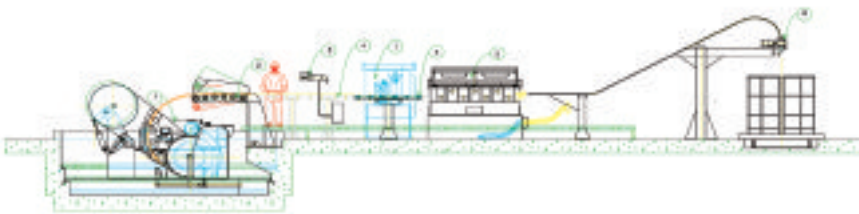
经过广泛的客户现场试验，与压缩空气系统相比，证明DRI-Line Powerpack具有显著的节能效应，而且投资回报快。ACI为潜在的英国用户提供免费的现场试验。

Air Control Industries Ltd – 英国

网站: [www.aircontrolindustries.com](http://www.aircontrolindustries.com)

## 适合于任何需求的铝棒和铜棒生产装置

铝和铜市场变化不断，国际铝客户正在寻求改进，同时将需求集中在特殊尺寸的铝棒和铜棒生产装置上。过去的5年间，棒材生产商的兴趣主要在中型和大型(13吨/时)的棒材生产装置。Properzi制造和安装的此类装置遍布全世界，而且，还将其产品范围向两端扩展，即超小和超大装置。



○ (1) 铸锭装置, (2) 传感臂, (3) 手动剪切机, (4) 输送机, (5) Micromill 69/7 - 基于7辊台型号69, (6) 棒材偏转机和蓝式卷线机, (7) 提升第二步产量的辅助开坯机

两年前，在这波演变期间，随着产量的不断上升，Continuus-Properzi设计了一套铝棒生产装置，产能约为1.6吨/时棒材，标准直径为9.5毫米。这套小装置被昵称为Properzi小宝贝装置，其主要组成如下图所示。

Continuus-Properzi公司总裁Giulio Properzi正在设计和开发超大棒材生产装置，扩展Properzi的棒材生产装置范围。这些包括20吨/时的铝棒装置、45吨/时的铜棒装置和30吨/时的铸锭装置。目前，Properzi的产品范围包括从超小到超大、24种尺寸和型号以上的铝材和铜材装置。

Continuus-Properzi SpA – 意大利  
电子邮箱: [sales@properzi.it](mailto:sales@properzi.it)

传真: +39 02 98 10 358  
网站: [www.continuus-properzi.com](http://www.continuus-properzi.com)

## 研究和开发—不被烧着

为了防止火灾，保证人员和财产安全，已经引入了工程师、制造商、技术人员和用户必须遵循的许多法律法规和规定。

电气电缆位于结构元件中，需要满足阻燃要求。尤其是，已分析了它们在火灾条件下的行为，通过制定国际标准，建立了参考标准。

这些标准规定了用来模拟火灾条件的相关测试设备，测试和分析电气电缆的反应，就像它们在真的工作环境中一样。

这种设备允许电缆制造商测试产品，并保证它们符合必要的国际标准。



○ SIF MDC

尤其是，这些测试集中于：

- 无火焰扩散  
(参考标准: IEC 60332-1-1)
- 无火灾扩散  
(参考标准: IEC 60332-1-10)
- 有毒烟雾和气体的低排放  
(参考标准: IEC 60754-1 / IEC 60754-2 / IEC 61034-1)
- 阻燃  
(参考标准: IEC 60331-11)

近年来，许多公司已使用这种设备来测试其产品，以保证满足必要的要求，销售给特定的领域，并作为研究和开发战略的一部分。

基于此原因，SIF MDC生产了整个范围的测试设备，不仅符合标准要求，而且还可以增添或定制任何设备，进一步改进性能和方便使用。

SIF MDC – 意大利  
传真: +39 035 4559358  
电子邮箱: [info@sifmdc.com](mailto:info@sifmdc.com)  
网站: [www.sifmdc.com](http://www.sifmdc.com)



# *Wire drawing machinery & technology*

The entry 'Wire Drawing' in the Britannica Concise Encyclopedia is brief, thorough, and unassailable:

Making of wire, generally from a rod or bar. The wire drawing process consists of pointing the rod, threading the pointed end through a die, and attaching the end to a drawing block. The block, made to revolve by an electric motor, pulls the lubricated rod through the die, reducing it in diameter and increasing its length. Fine wire is made by a multiple-block machine, because the reduction cannot be performed in a single draft.

It may seem remarkable that this remains a useful definition when so much more equipment has found a home in the corner of the plant reserved to drawing: flattening mills and closers; breakdown machines; bull blocks and motor blocks; draw benches and drawing frames and Turk's-heads; rigid, tubular, and planetary stranders. To say nothing of the exotic – deadbeat and dieless – and the auxiliary: welders, straighteners, payoffs, cutters.

In fact, wire drawing retains its integrity, in concept and in practice, because every addition to the process, every enhancement, represents an answer to a need. The Britannica has it right. Wire making and wire drawing are one and the same. The wire and cable industry has enjoyed steady, organic growth for one reason only: the development, in parallel, of the technology and machinery of wire drawing.

## Cold rolling lines

This is Teurema's rolling line for the production of smooth and/or ribbed wires. The line is extremely compact and equipped with protections to safeguard the operator. In the basic version, the line is provided with vertical or horizontal spooler for the production of spools or coils. It can also be used for the in-line supply of the wire mesh lines.



○ Teurema's LG cold rolling lines

The wire rod, from the coil positioned on the tilting fingers, will run through the vertical static payoff, the mechanical descender, the lubricant adding unit and the Euroolls rolling cassettes, until it reaches the capstan that guarantees the necessary pulling force for the cold rolling deformation. A spooler positioned after the bullblock will collect the wire.

Type: LG
Maximum coil weight: 3,000 kg
Inlet wire rod: from diameter 5.5 to diameter 16mm
Outlet wire: from diameter 4mm to diameter 14mm
Wire reducing by means of cassettes
AC speed variable motors
Cabinet

### Line components:

1. tilting fingers
2. vertical static payoff with the possibility of adding a double pulley system in case of high payoff speed
3. compact module housing the mechanical descender, the lubricant adding unit and the support for Euroolls cassettes type A or B
4. compact module housing the bullblock with capstan and stress relieving device and possible support for cassettes in case of double pass
5. (5a/5b) Vertical and horizontal spooler

The following parts can be supplied as options:

- (A) straightening panel
- (B) revolver for cassette quick change (in substitution of fixed support)
- (C) automatic discharger for fixed and/or collapsible spools (in case of automatic vertical spooler)

**Teurema Tecnica Europea de Maquinaria SL – Spain**

**Fax:** +34 943 518807

**Email:** teurema@teurema.com

**Website:** www.teurema.com

## Fine metal wire drawing

Shanghai Lizhi Machinery Co Ltd is specialised in the research and development of micro-fine and fine metal wire drawing and annealing equipment for precious metal, non-ferrous metal, ferrous metal and stainless steel.

1. The LZDM-80/21 wire drawing machine is suitable for drawing extremely thin, precious metal wire rod.

The maximum inlet diameter is 0.12mm with a minimum finished wire diameter of 0.015mm. The machine speed is 600 metres per minute. The drawing process is completely automatic, with a PLC-programmed control system. Ten pre-programmed operations can be stored.



○ The LZDM-80/21 precious metal thin wire drawing machine

2. The LZDM-480/01 is suitable for drawing extremely thin, precious metal wire rod bus bar. The maximum inlet wire diameter is 8mm with a minimum finished wire diameter of 1.5mm.

The machine speed is 50-80 metres per minute. This single-drum wire drawing machine gradually decreases the wire diameter by threading wires through one die until the target wire diameter is reached.

Settings such as drawing speed and traverse pitch can be set up for every process via a touch panel on the 10.4" colour touch screen.

**Shanghai Lizhi Machinery Co Ltd – China**

**Fax:** +86 21 5284 4396

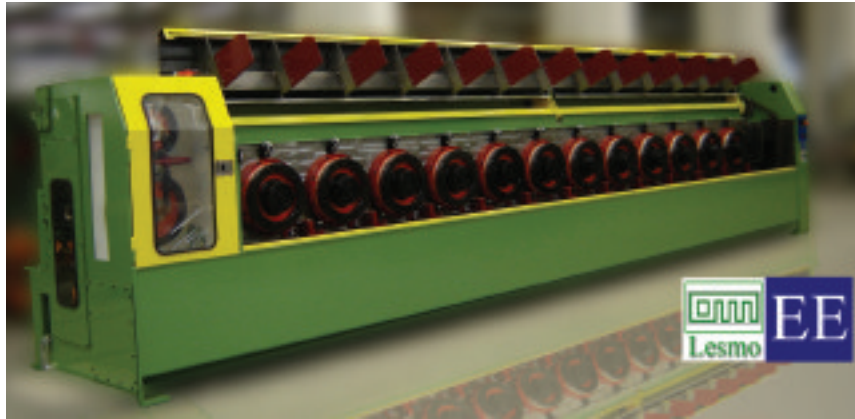
**Email:** sheldon12150@yahoo.com.cn

**Website:** www.sh-lizhi.com



## Eurodraw integrated with OM Lesmo

Eurodraw Energy SpA, a manufacturer of drawing machines for non-ferrous wires and believed to be the first company to produce rod breakdown machines with slip control system (where capstans are driven by electronically synchronised individual motors), was acquired by OM Lesmo in 2002. Eurodraw Energy and OM Lesmo are now fully integrated wire mill departments, from rod breakdown to bunching/stranding machines, supplying high quality machines and technical support for the high efficiency production of electrical conductors.



The Eurodraw Energy brand includes:

- rod breakdown lines, single and twin wire, for Al, Cu and alloy wires. DC or AC motor driven and electronically geared
- intermediate drawing lines for Cu and Al wires
- fine wire drawing lines, single and multiwires for up to 40 Cu wires and 24 Al wires.
- very fine wire drawing lines, single and multiwire for up to 24 Cu wires.

All RBD lines are supplied with wire slip control technology (all motor driven capstans) and a fast wire diameter changing system.

○ Wire drawing lines from OM Lesmo

Special models are available with different capstan diameters and numbers, as well as with different lubrication systems for special Al and Cu alloys wires. They can be equipped with an annealer, single or dual rod/wire coil pay-offs, basket coiler or static/dynamic spooler with automatic changeover and drawing emulsion treatment.

**OM Lesmo – Italy**

Fax: +39 039 6981148

Email: [omlesmo@omlesmo.com](mailto:omlesmo@omlesmo.com)

Website: [www.omlesmo.com](http://www.omlesmo.com)

**Advancing Bell Annealing Since 1966**

**The Industry Choice for:**

- Cold-Heading Quality Wire Annealing    - 100% Hydrogen Protective Atmospheres

P.O. Box 40027  
 Cleveland, OH, USA 44140-0027  
 Phone: +1.440.871.5720  
 Fax: +1.440.871.2948

Visit us on the web at [www.RAD-CON.com](http://www.RAD-CON.com)

## Dry drawing AS wire



○ Model TMD 8D670 drawing machine

“Two proven techniques, aluminium rod rolling from Continuus-Propenzi and steel rod drawing from OTT’s wire machinery division, are united to bring synergy to the process of dry drawing,” explains Mr R Contini, sales director of the wire machinery division.

AS wire is produced by initially extruding aluminium rod on a steel wire, and then reducing to the final size by drawing. The drawing technique, known as dry drawing by pressure dies, is designed to avoid stripping the aluminium from the steel core during the operation.

The wire passing through special dies and bushings, which guarantee the required lubrication, generates the pressure needed to facilitate the drawing process.

The drawing of AS wire has undergone years of research and development aimed to improve major process variables in order to boost quality and productivity while reducing operational costs.

The main requirements of the AS wire drawing process are best met with a non-slip type drawing line that provides efficient cooling of the blocks and dies, possesses the most appropriate block profile, accurately synchronises the blocks and facilitates easy alignment of the die holders.

The high performance of the capstan and die cooling technology, the lack of wire path deviation, improved back tension control, a lack of wire torsion, and the use of the most modern inverters and AC motors combine to maximise product quality while optimising machine performance. The drawing line is composed of a drawing machine with vertical axis blocks of 670mm, a motorised pay off for single bobbin up to 1,800mm, a cleaning unit, and a take up for single bobbin up to 1,250mm.

The number of blocks of the drawing machine depends on the desired reduction as well as the required final tensile strength of the wire. The most common machine is composed of eight blocks, although machines with ten blocks have been supplied where there is a requirement for different wire diameters and tensile strengths, or to provide flexibility.

The drawing machine is also equipped with completely sealed safety guards, internal lamps and an exhaust system to evacuate the dust generated during the drawing process.

**Continuus-Propenzi SpA – Italy**

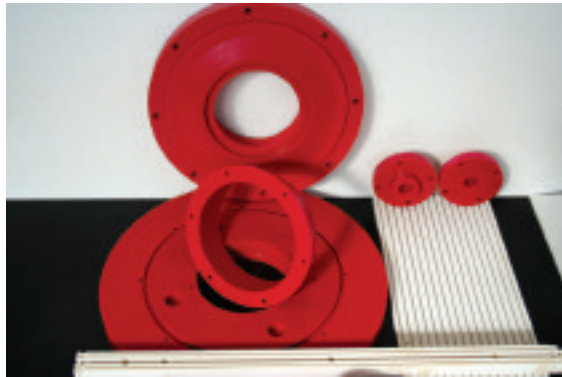
**Fax:** +39 0298 10358 **Email:** sales@properzi.it **Website:** www.properzi.com

1) Material: AS WIRE '20SA'	Number of blocks: 8	
Wire diameter	Inlet: 7.35mm	Outlet: 3.45mm
Tensile	Outlet: 1400 N/mm <sup>2</sup>	
Speed	3.8 m/s	
2) Material: AS WIRE '20SA'	Number of blocks: 8	
Wire diameter	Inlet: 6.3mm	Outlet: 2.89mm
Tensile	Outlet: 1400 N/mm <sup>2</sup>	
Speed	5.4 m/s	
3) Material: AS WIRE '20SA'	Number of blocks: 8	
Wire diameter	Inlet: 4.4mm	Outlet: 2.05mm
Tensile	Outlet: 1400 N/mm <sup>2</sup>	
Speed	7.2 m/s	
4) Material: AS WIRE '20SA'	Number of blocks: 10	
Wire diameter	Inlet: 7mm	Outlet: 2.2mm
Tensile	Outlet: 1400 N/mm <sup>2</sup>	
Speed	7.5 m/s	
5) Material: AS WIRE '27SA'	Number of blocks: 8	
Wire diameter	Inlet: 6mm	Outlet: 2.2mm
Tensile	Outlet: 1060 N/mm <sup>2</sup>	
Speed	4.5 m/s	
6) Material: AS WIRE '40SA'	Number of blocks: 6	
Wire diameter	Inlet: 6.65mm	Outlet: 3.5mm
Tensile	Outlet: 680 N/mm <sup>2</sup>	
Speed	3.5 m/s	

○ Performance of the drawing line

## Wire drawing consumables in fibreglass and thermoplastic

Isolmax, of Milan, specialises in manufacturing in thermoplastic materials and fibreglass but can also work in other materials including Teflon, nylon, lexan, PVC, glass epoxy or polyester glass, depending on the customer's application.



○ Components in thermoplastic from Isolmax

Especially for copper wire drawing machines, Isolmax produces flanges for coils and plates for annealing furnaces made from a thermosetting material.

This fibreglass material is believed to be more durable and offer higher performance than thermoplastic, which is currently used by most manufacturers of copper wire drawing machines.

The cost of material, its excellent heat resistance, mechanical properties and dielectric strength make this product successful in many other applications. The company also produces other components in fibreglass and thermoplastic material for other applications such as driving chains, tubes, pulleys, plates, bushes and pipes to individual specifications.

A technical department is always available to offer advice and to find innovative solutions to customer needs.

**Isolmax Srl – Italy**  
Email: [info@isolmaxsrl.it](mailto:info@isolmaxsrl.it)

Fax: +39 02 92162288  
Website: [www.isolmaxsrl.it](http://www.isolmaxsrl.it)

## Butt welders

Microwelder is a range of electric resistance wire butt-welding machines from Rymer Engineering.

The EH series are suitable for various materials and, depending on model, will handle ferrous materials of 0.9 to 9.5mm diameter or non-ferrous of 0.9 to 6mm diameter. The EH series is supplied mounted on a wheeled trolley.

The SG series, depending on model, is suitable for ferrous materials between 0.3mm and 2mm diameter or non-ferrous wires of 0.5 to 3mm diameter. A wheeled trolley is available for the SG series if required.

The energy efficient Microwelder units are adaptable for round, flat or shaped materials or sections. Portable, light and compact they are easy to handle and simple to operate. Suitable grinders are available and Rymer will also supply spares and service.

**Rymer Engineering – UK**  
Email: [admin@rymerengineering.co.uk](mailto:admin@rymerengineering.co.uk)  
Website: [www.rymereng.co.uk](http://www.rymereng.co.uk)

## Drawing of Alumoclad steel wire

Aluminium and aluminium alloy conductors are used for the overhead transport of electrical energy. To support the weight of airborne electrical cables hung between two trestles, a steel wire stiffener is necessary in the centre of the cable. The steel wires used for this purpose are aluminium- or zinc-coated. In particular, aluminium-coated steel wire, known as Alumoclad, is more resistant to corrosion and is also preferable to zinc due to its higher conductivity.

GCR Eurodraw makes lines to draw down Alumoclad from the wire rod to the final required diameters, with conductivity and tensile stress that comply with the regulations in force in the different countries of the world. The lines are able to draw the combination aluminium/steel at high speeds, while at the same time maintaining the original ratio between the thickness of the aluminium coating and the steel wire diameter.

Die cooling has been optimised for excellent dispersal of the heat produced during the drawing operation, and block cooling is such that the wire temperature is maintained within the required limits after every single drawing block. The die boxes have been expressly designed for this particular production. Alumoclad drawing lines include pay-offs and take-ups that are specific for the spools used by the user in the subsequent production processes.

**GCR Eurodraw SpA – Italy**  
Fax: +39 02 9354 0452  
Email: [gcr@gcrgroup.com](mailto:gcr@gcrgroup.com)  
Website: [www.gcrgroup.com](http://www.gcrgroup.com)

○ MTS machine to draw Alumoclad wire



## Multipass dry drawing

Team Meccanica manufactures equipment for the production of steel wires with a wide range of finished diameters, from very thin wires with a diameter of 0.2mm up to 20mm diameter. Low-carbon steel, high-carbon steel, stainless steel and special alloy wires can be manufactured with Team Meccanica's drawing machine range using both technologies of reduction by die and the newly developed reduction by cold-rolling.



○ Dry process wire drawing with Team Meccanica

Capstan sizes range from 160mm for thinner wires up to 1,270mm for the thicker ones, individually driven by AC motors fed at a variable frequency by vector inverters or DC motors fed by digital converters.

The rated power ranges from 5 to 175kW. Machine configuration is of the straight-through type with tilted blocks and sensing-arms for speed control.

The production speed reaches 50m/s, due to the robust construction, efficient wire cooling and a precise electronic control system. Many optional accessories are available, such as overhead pay-off on the first block, stripper capstan or double deck capstan with accumulation (Barco type) at the last block; ecological casing with dust extraction, laser gauge for control of finished wire diameter, production control through the video-keyboard and centralised control through a remote computer.

Team Meccanica uses only forged-steel blocks, induction hardened with eventual ceramic or hard metal coating. All major components are certified ISO 9001 and are internationally available.

All process management is by microprocessor AC drive inverters and communication is possible by PROFIBUS or similar network system.

**Team Meccanica SpA – Italy**  
Email: sales.office@teammecanica.it

Fax: +39 035 0779 728  
Website: www.teammecanica.it

## Dies and die maintenance

Baloffet is a French manufacturer with subsidiaries in the UK, USA and Germany and a worldwide network of agents. The Baloffet product range includes:

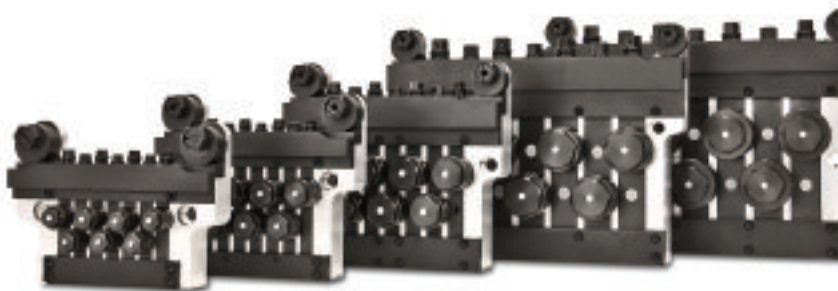
- natural diamond dies from 6 $\mu$  to 3mm
- synthetic mono-crystalline dies from 6 $\mu$  to 1mm
- poly-crystalline (PCD) dies from 50 $\mu$  to 30mm
- compacting, stranding and special-shaped dies
- enamelling guides
- extrusion tooling (guides and dies)
- special tooling with diamond inserts
- re-polishing machines and equipment

Baloffet helps ensure the surface condition, diameter accuracy and technical characteristics of wires and cables. The scope of service includes die re-polishing, training of operators and technicians (either at the customer's own plant or at the Baloffet showroom and training centre) and control and technical reporting of customers' dies.

**Baloffet – France**  
Fax: +33 474 357901  
Email: balloffet@balloffetdie.com  
Website: www.balloffetdie.com

## Straightening units for drawing

As a part of wire production the drawing process is indispensable. In each drawing machine, straightening units and systems are essential components. Witels-Albert GmbH, a leading supplier of straighteners and guides, has recently developed new roller straighteners for wire dry drawing applications. Minimised deformation under load, high precision and a reliable quick response locking mechanism (suitable in particular for high-strength wires) are features of the new RS straightening units. Roll adjustment mechanisms are located on one side of the straightener. The roll diameter and the distance between straightening rolls have been optimised in order to straighten process materials with a wide range of diameters. The straightening rolls can be re-greased and are prepared for resisting high speeds and high loads. As an option, alternative roll materials or specific coatings can be realised. Straighteners in the RS series are available in five sizes for straightening wires between 1.5mm and 9mm diameter.



○ RS series precision straighteners

Witels-Albert believes that the RS series roll straighteners overcome the disadvantages of using the drawing die for wire straightening, such as non-uniform distribution of tension and variations in material structure across the diameter. Using the drawing die for straightening can result in a finished product quality that makes handling difficult in downstream processes.

**Witels-Albert GmbH – Germany**  
Fax: +49 30 723 988 88  
Email: info@witels-albert.com  
Website: www.witels-albert.com

## PC wire line

Mario Frigerio has a range of wire drawing lines available, including a new PC wire line for wires of up to 13mm diameter used for high-speed train sleepers. The in-line cutting system can carry out up to 60 cuts per minute.

In order to produce straight wires at this diameter, the Mario Frigerio machine has twin capstans of 5,200mm diameter. This flexible machine allows the end user to treat 2/3 wires or a 7-wires strand. It uses a twin take-up/payoff spooling unit, the fully automatic Mario Frigerio layer winder.

This line is equipped with a 500 kW furnace that allows a run speed of up to 400m per minute, in batches of 6 tons on the treatment line payoff, and double load on strand take-up/payoff. It has a 1,200mm capstan drawing line, made by Mario Frigerio, with horizontal payoff and the DIN 1600 spooler.

**Mario Frigerio SpA – Italy**  
Email: info@mariofrigerio.it

Fax: +39 0341 368 385  
Website: www.mariofrigerio.it



○ Drawing equipment from Mario Frigerio

## Continuous development in drawing technology

For over 50 years, Niehoff has been developing a wide range of wire drawing machines and lines which cover all process steps in the non-ferrous wire drawing and in-line annealing process. Wire drawing machinery supplied by Niehoff is currently being used to produce wire from copper, copper alloys, aluminium, aluminium alloys, bi-metals such as copper clad aluminium and steel, plated copper, and multiple other kinds of composites as well as wire made of special materials with final diameters down to 0.014mm. The most recent additions are the new MSM224 drawing machine for the intermediate wire range and the MT200/RI170.2 telephone cable wire drawing line which was introduced at the wire 2008 trade show.

The MSM224 drawing machine is Niehoff's latest offering for drawing wires made of copper alloys such as brass, bronze, German silver, nickel and nickel alloys as well as other non-ferrous metals like platinum, rhodium and special materials. This machine is designed for an inlet diameter of 3.5mm and a final diameter range of 0.8mm to 1.8mm and can work with speeds up to 25 m/s. The drawing capstans are individually driven by water-cooled motors. This drive principle enables a minimised slip operation resulting in wire with a very high surface quality. Other characteristics include a completely submerged drawing section and die holders with high-pressure lubrication. The MSM224 drawing machine can be combined with an inductive continuous annealer type RI250 or RI170 developed by the joint venture company Niehoff-Bühler GmbH NBM.

The MT200/RI170.2 tandem wire drawing line (pictured) consists of a redesigned cone type draw box, the MT200, with an integrated RI170.2 inductive annealer and preheater and is designed for tandem inline operation with an extrusion line. The



○ The MT200/RI170.2 tandem wire drawing line

annealing technology was derived from the same inductive annealer technology as mentioned above, which has been successfully proven for years in various annealing applications. Optionally the annealer can be equipped with a calibration draft to guarantee close tolerances of the wire properties. Using dancer control, the line can be combined and synchronised with all existing types of extruders. A non-contacting temperature measuring system controls the wire temperature between annealer and extruder. The established MMH type multiwire drawing machines with an integrated RM continuous resistance annealer can simultaneously produce up to 48 wires with single wire final diameters of up to 0.05mm. These wires are characterised by highly homogeneous properties.

In addition to multiwire drawing machines for copper wire, Niehoff offers 8 and 16-wire drawing machines for aluminium and aluminium alloy wires. The latest electronic control systems and drive technology implemented in the above machines have been introduced into multiwire drawing technology for plated wires and special applications.

The Niehoff range of drawing machines is completed by the MKN101 wet drawing machine. It is based on a compact modular concept that enables extreme flexibility and scalable configurations. The machine is designed for superfine wires made of copper, aluminium, and non-ferrous alloys, as well as precious metals and their alloys with final diameters down to 0.014mm. All these drawing machines can be configured for inline operation with a continuous annealer. Niehoff and Niehoff Bühler NBM offer a broad range of conductive and inductive continuous annealers specially designed to the specific properties of all kinds of non-ferrous wires.

**Maschinenfabrik Niehoff GmbH & Co KG – Germany**  
Email: info@niehoff.de

Fax: +49 9122 977 155  
Website: www.niehoff.de



# 拉丝设备 和技术

“线材拉丝”在英国简明百科全书中的记载简洁、透彻和权威：

线材通常是由棒材或杆材制成。拉丝步骤包括棒材打尖、将尖头窜过模具和通过拉制轮。拉制轮由电机驱动，把经过润滑的棒材拉过模具，减小直径和增加长度。精细线经过多道拉制轮生产，因为一次拉制达不到减径要求。

在一个保留拉丝车间的一角发现很多设备使得这一实用定义显得非同一般，这些设备有整平机和包装机、大拉机、拉丝轮塔和马达驱动轮塔、拉丝床、拉丝架和十字机头、笼绞机、管绞机和行星式绞缆机。更不要说奇异的-不摇摆的和无模的-以及辅助设备：焊机、矫直、放线和切割。

事实上，在概念上和实践中拉丝是一个综合过程，因为任何一个附加过程和任何加强部分都是为了满足一定的需要。线材制造和拉丝是一回事。拉丝设备和技术同步发展为线缆行业带来了稳定的、基础的增长。

## 冷轧生产线

Teurema的轧制生产线是用来生产光面线材和/或带肋线材的。该生产线非常紧凑并装配有防护措施保障操作者的安全。生产线基本形式是拥有轴线或盘线生产用垂直或水平绕线机。它同样也可用钢丝网生产线于在线供给。



○ Teurema的LG冷轧生产线

线材从位于倾斜指针上的线盘出来，将通过垂直静止放线机、机械剥皮机、润滑剂添加装置以及Eurolls轧线盒，最后到牵引机，以确保冷轧变形必需的拉力。位于大拉机后面的绕线机将完成收线。

型号: LG
最大线圈重量: 3.000千克
进线直径: 5.5.到16毫米
出线直径: 4毫米到14毫米
通过轧线盒完成线材缩径
交流变速电机
机柜

### 生产线构成

- (1) 倾斜指针
- (2) 垂直静止放线机，遇到高速放线时可加双滑轮系统
- (3) 紧凑模块机架机械剥皮机、润滑剂添加装置、A或B型Eurolls盒子支架。
- (4) 紧凑模块机架大拉机带牵引和应力释放装置以及遇到双道时可能用到的盒子支架
- (5) (5a/5b)垂直和水平绕线机

以下部件可供选择

- (A) 矫直板
- (B) 快速换盒旋转装置(代替固定支撑)
- (C) 自动拆卸机用于固定和/或可拆卸轴(遇到自动垂直绕线机时)

**Teurema Tecnica Europea de Maquinaria SL – 西班牙**

传真: +34 943 518807

电子邮箱: teurema@teurema.com

网站: www.teurema.com

## 细金属丝拉丝技术

上海励志机械有限公司专攻贵金属、有色金属、黑色金属和不锈钢微细和细金属丝拉丝和退火设备。

1. LZDM-80/21拉丝机适用于超细贵金属线材的拉制。最大进线直径为0.12毫米，最小出线直径为0.015毫米。机械速度为每分钟600米。

拉丝过程全自动化，带PLC编程控制系统。可储存10个预定程序操作。

卷轴驱动排线型号适合所有不同的收线形式，如直形、圆形或锥形。



○ LZDM-80/21贵金属细拉丝机

2. LZDM-480/01适合各种超细贵金属线材母材的拉制。

最大进线直径为8毫米，最小出线直径为1.5毫米。机械速度为每分钟50-80米。

这种单线盘拉丝机通过将线材穿过拉丝模来逐渐减少线材直径直到达到线材目标直径为止。

可通过10.4英寸彩色触摸屏上的触摸面板为每个过程设计拉伸速度和排线节距。

**Shanghai Lizhi Machinery Co Ltd – 中国**

传真: +86 21 5284 4396

电子邮箱:

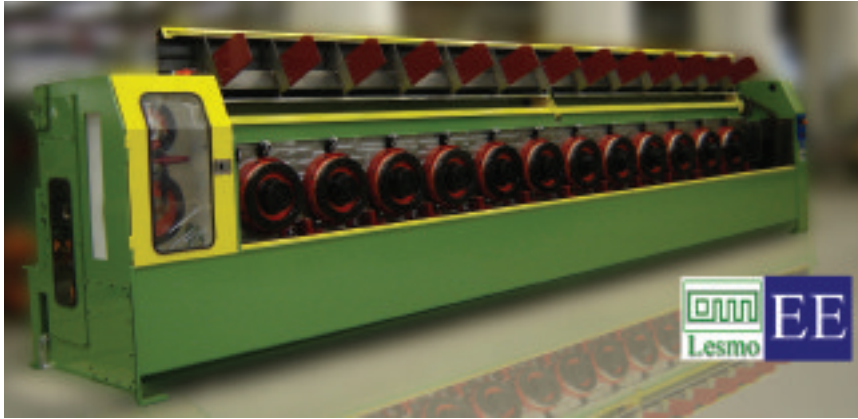
sheldon12150@yahoo.com.cn

网站: www.sh-lizhi.com

## Eurodraw与OM Lesmo合并

Eurodraw Energy SpA, 有色金属拉丝机生产商, 被认为是第一家生产带滑移控制系统(此处鼓轮由电子校准独立电机驱动)棒材拉丝机的厂家, 于2002年被OM Lesmo收购。

Eurodraw Energy和OM Lesmo现已成为综合线材加工部, 为高效生产电气导线提供从棒材大拉机到束丝机/管绞机的高质量机器和技术支持。



○ 来自OM Lesmo的拉丝生产线

Eurodraw Energy品牌包括:

- 单股和双股铝、铜和合金线材大拉机。由直流或交流电机驱动以及电子控制齿轮传动
- 铜和铝丝中拉生产线
- 单根或多根40铜和24铝丝细拉生产线
- 单根或多根24铜丝超细拉生产线

所有的RBD生产线配有线材滑移控制技术(所有鼓轮由电机驱动)和线材快速变径系统。

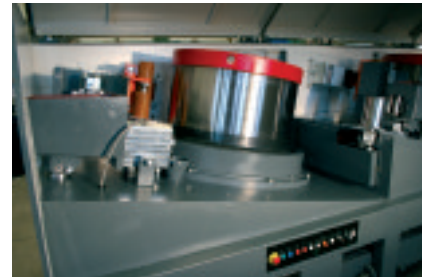
不同直径和数量的鼓轮有专门的模具, 以及专为铝和铜合金线材配有不同润滑系统。他们可配备一个退火机、单层或双层棒材/线材线盘放线机、篮式成圈机或静止/动力收线机, 带自动换向和拉丝乳化液处理。

OM Lesmo - 意大利  
电子邮箱: omlesmo@omlesmo.com

传真: +39 039 6981148  
网站: www.omlesmo.com

## 多道次干式拉丝机

Team Meccanica的设备可用于生产一系列成品直径很细的从0.20毫米到20毫米的的钢丝。Team Meccanica拉丝机使用拉丝模缩径和新开发的冷轧缩径法生产低碳钢、高碳钢、不锈钢和特殊的合金线材。牵引轮尺寸为较细线材用的160毫米到较粗线材用的1270毫米, 单独由带矢量控制变频器实现变频的交流电机驱动, 或由数字转换器带动的直流电机驱动。额定功率为5到175千瓦。机器构造为直通型, 带倾斜鼓轮以及速度控制感应臂。因稳定的结构、高效的线材冷却和精准的电控系统使生产速度达50米/秒。



○ 的干式拉丝工艺Team Meccanica

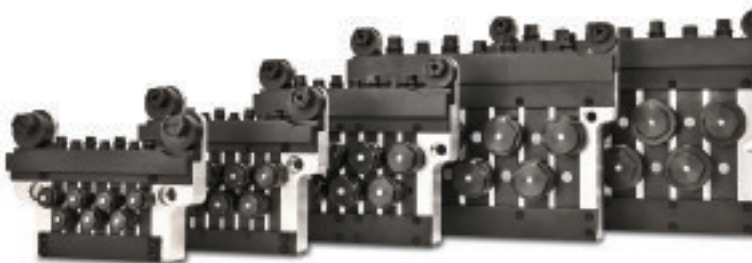
很多附件可供选择, 比如第一个鼓轮上的架空放线机和聚集在最后一个鼓轮上的剥皮鼓轮或双层收线鼓轮(Barco型); 吸尘生态镀层, 出线直径控制激光测径仪, 可视键盘生产控制和远程电脑集中控制。Team Meccanica仅用锻钢鼓轮, 用可能的陶瓷材料或硬金属涂层进行感应淬火处理。所有主要构件为ISO9001认证以及国际通用产品。通过微处理器交流驱动变频器实现过程管理, 通过PROFIBUS或相似的网络系统实现通信。

Team Meccanica SpA - 意大利  
传真: +39 035 0779 728  
电子邮箱: sales.office@teammecanica.it  
网站: www.teammecanica.it

## 拉丝机矫直装置

作为线材生产的一部分, 拉丝过程是必不可少的。每个拉丝机中, 矫直装置和系统是关键组成部件。Witels-Albert GmbH, 矫直机和导向器主要厂商, 最近开发了干式拉丝应用的新的辊子矫直机。加载下变形最小化、高精度度和可靠的快速响应锁定装置(特别适合高强度线材)专为新的RS矫直装置配置。

辊轮调整装置位于矫直机的一边。为矫直一系列直径的生产材料, 辊轮直径和矫直辊间间距已得到优化。调直辊可再润滑, 并能忍受高速和高负荷。



○ RS系列精密矫直机

作为一种选择, 可用替代辊材料或特殊涂层。矫直机RS系列有5种尺寸可用来矫直直径为1.5毫米到9毫米之间的线材。Witels-Albert相信RS系列辊式矫直机可以克服使用拉丝模进行线材矫直的缺点, 比如不均衡的应力分布和断面直径上的材料结构的变化。使用拉丝模矫直可完成产品质量但会使后续工艺处理困难。

Witels-Albert GmbH - 德国  
传真: +49 30 723 988 88  
电子邮箱: info@witels-albert.com  
网站: www.witels-albert.com



## AS线材干式拉丝技术



○ TMD 8D670 拉丝机

“来自Continuus-Properti的铝线材轧制技术和来自OTT线材机械部门的钢线材拉丝技术，这两项得到验证的技术联合起来配合干式拉丝过程。”线材机械部销售总监R Contini先生解释道。AS线材最初通过在钢线材上挤出铝棒，再通过拉丝制成最终的尺寸。拉丝技术，如众所周知的压力拉丝模干式拉丝技术，是设计用来避免操作过程中铝从钢芯中脱出来。线材通过特殊的拉丝模和轴衬，在保证必需的润滑情况下，产生推动拉丝过程的压力。

AS线材的拉丝工艺已经经过多年的研究与开发，目的是提高主要工艺参数来推进质量和生产力，同时降低生产成本。满足AS线材拉丝工艺最好的需求是有能为鼓轮和模具提供有效冷却的无滑动拉丝生产线，拥有最合适的鼓轮形状，能精确校准鼓轮和帮助模座对中。高性能鼓轮和模冷却技术，无线道偏差，改良的后应力控制、无线材扭力，和使用最先进的变频器和交流电机结合在一起形成了最佳的产品质量，同时优化了机器性能。

拉丝生产线由一个拉丝机和670毫米高垂直鼓轮，一个最大1800毫米的单线盘电动放线机，一个清洁装置和最大250毫米的单线盘收线机组成。拉丝机鼓轮的数量根据压缩需要和线材的出线张力需要而定。大多普通拉丝机由8个鼓轮组成，但需要不同直径和张力强度的线材时也提供10鼓轮拉丝机，或实行弹性供应。该拉丝机也配备了完全密封的安全保护装置、内置照明灯和用于排放拉丝过程中产生的灰尘的排气系统。

**Continuus-Properti SpA – 意大利**

传真: +39 0298 10358

电子邮箱: sales@properi.it

网站: www.properi.com

1) 材料: AS 线材 “20SA”	鼓轮数量: 8	
线材直径	进线直径: 7.35毫米	出线直径: 3.45毫米
张力	出线张力: 1400牛顿/平方毫米	
速度	3.8米/秒	
2) 材料: AS 线材 “20SA”	鼓轮数量: 8	
线材直径	进线直径: 6.3毫米	出线直径: 2.89毫米
张力	出线张力: 1400牛顿/平方毫米	
速度	5.4米/秒	
3) 材料: AS 线材 “20SA”	鼓轮数量: 8	
线材直径	进线直径: 4.4毫米	出线直径: 2.05毫米
张力	出线张力: 1400牛顿/平方毫米	
速度	7.2米/秒	
4) 材料: AS 线材 “20SA”	鼓轮数量: 10	
线材直径	进线直径: 7毫米	出线直径: 2.2毫米
张力	出线张力: 1400牛顿/平方毫米	
速度	7.5米/秒	
5) 材料: AS 线材 “27SA”	鼓轮数量: 8	
线材直径	进线直径: 6毫米	出线直径: 2.2毫米
张力	出线张力: 1060牛顿/平方毫米	
速度	4.5米/秒	
6) 材料: AS 线材 “40SA”	鼓轮数量: 6	
线材直径	进线直径: 6.65毫米	出线直径: 3.5毫米
张力	出线张力: 680 牛顿/平方毫米	
速度	3.5米/秒	

○ 拉丝生产线性能表



○ 来自Mario Frigerio的拉丝设备

## PC线材生产线

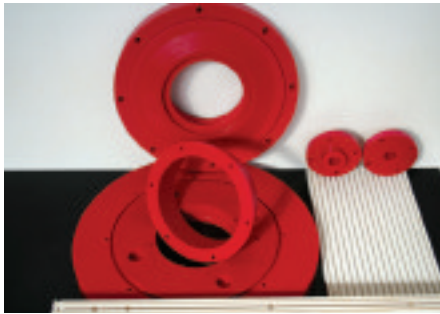
Mario Frigerio有一系列线材拉丝生产线，包括新的PC线材生产线，生产直径达13毫米的高速火车轨枕用线材。在线切割系统每分钟可进行60次切割。为生产这种直径的直线材，Mario Frigerio机器有直径5200毫米的双层鼓轮。该灵活的机械可以让最终用户处理2/3根线材或7根束线。它使用双层收线/放线装置和Mario Frigerio全自动层绕机。该生产线配有500千瓦熔炉，运行速度达到400米每分钟，处理放线6吨每批，收线和放线装置双倍载荷。拥有1200毫米鼓轮拉丝生产线，由Mario Frigerio制造，带水平放线机和DIN 1600收线机。

**Mario Frigerio SpA – 意大利**  
电子邮箱: info@mariofrigerio.it

传真: +39 0341 368 385  
网站: www.mariofrigerio.it

## 线材拉丝耗材： 玻璃纤维和热塑性塑料

米兰Isolmax专门制造热塑性材料和玻璃纤维，但也生产其它材料，包括特氟纶、尼龙、莱克桑、PVC、环氧或聚酯玻璃，视用户应用需要而定。尤其是为铜丝拉丝机，Isolmax生产热硬化材料制成的退火炉线材和板材用法兰。这些玻璃纤维材料被认为是更耐用，比热塑性塑料性能更高的材料，现被很多铜线材拉丝机制造商使用。材料低成本、卓越的抗热性、机械性能和绝缘强度高使得该产品在其他很多应用方面取得了成功。



○ 来自Isolmax的热塑性塑料构件

公司也生产其他玻璃纤维和热塑性塑料构件作其它方面的应用，比如传动链、管材、滑轮、金属板、衬套和特殊规格的管子。公司技术部门根据顾客需要经常提供建议和开发新的解决方案。

**Isolmax Srl – 意大利**  
传真: +39 02 92162288  
电子邮箱: info@isolmaxsrl.it  
网站: www.isolmaxsrl.it

## 对焊机

Microwelder是来自Rymer Engineering公司生产的电阻丝对焊机的一种。EH系列适合各种材料，视型号而定，能处理直径0.9毫米到9.5毫米的黑色金属材料或直径为0.9毫米到6毫米的有色金属材料。EH系列可供安装在轮式推车上。SG系列，视型号而定，适用于直径0.3毫米到2毫米的黑色金属材料或直径为0.5毫米到3毫米的有色金属材料。如果需要，轮式推车也可用于SG系列。高效Microwelder装置适合圆形、扁形或成形的材料或部件。可携带、轻巧、紧凑的特性使其便于握持和操作简单。有配套的磨具可用，Rymer将同样提供备件和服务。

**Rymer Engineering – 英国**  
网站: www.rymereng.co.uk

电子邮箱: admin@rymerengineering.co.uk

## 拉丝模和拉丝模 维护

Baloffet是一家法国厂商，在英国、美国和德国拥有子公司，拥有全球网络代理商。

Baloffet产品范围包括：

- 6微米到3毫米天然金刚石拉丝模
- 6微米到1毫米的人造单晶金刚石拉丝模
- 50微米到30毫米的多晶金刚石拉丝模
- 压缩模、绞缆模以及特殊形状的拉丝模
- 漆包线导线模
- 挤出加工（导线模和挤出模）
- 金刚石镶嵌特殊加工
- 再抛光机械和设备

Baloffet可保证线缆的表面条件、直径精确度和技术特性。服务范围包括拉丝模再抛光、操作者和技术员的培训（在客户自己的工厂里或在Baloffet样品室和培训中心两者都可）以及客户拉丝模的管理和技术报告。Baloffet是通过ISO 9001-2000认证的公司。

**Baloffet – 法国**  
传真: +33 474 357901  
电子邮箱: baloffet@balloffetdie.com  
网站: www.balloffetdie.com

## 铝包钢线钢丝拉丝技术

铝和铝合金导体用于高空电能传送。为支撑挂在两个支架上的高空电缆的重量，电缆中心需要一个钢丝加强筋。

此处需要用到的是铝或镀锌钢丝。尤其是镀锌钢丝，比如有名的铝包钢线，更具有防腐性并因其更高的传导性而优于镀锌线材。

GCR Eurodraw开了生产线拉制铝包钢线从线材到最终需要的直径，其传导性和拉应力符合全球各个国家现行规则。该生产线可以高速拉制铝/钢合金线材，同时还能保持铝户外层厚度和钢丝直径之间的初始比率。

模具的冷却已得到优化，使拉丝过程中产生的热得到良好的分散，鼓轮的冷却就是保持每个单拉丝鼓轮后线材温度在规定的范围内。模具盒也是为这种特殊生产特别设计的。铝包钢拉丝生产线包括专门用在后续生产工艺中用户使用到的线盘的放线和收线装置。

**GCR Eurodraw SpA – 意大利**  
传真: +39 02 9354 0452  
电子邮箱: gcr@gcrgroup.com  
网站: www.gcrgroup.com



○ 拉制铝包钢线 线材的MTS机器

# Furnaces & heat treatment

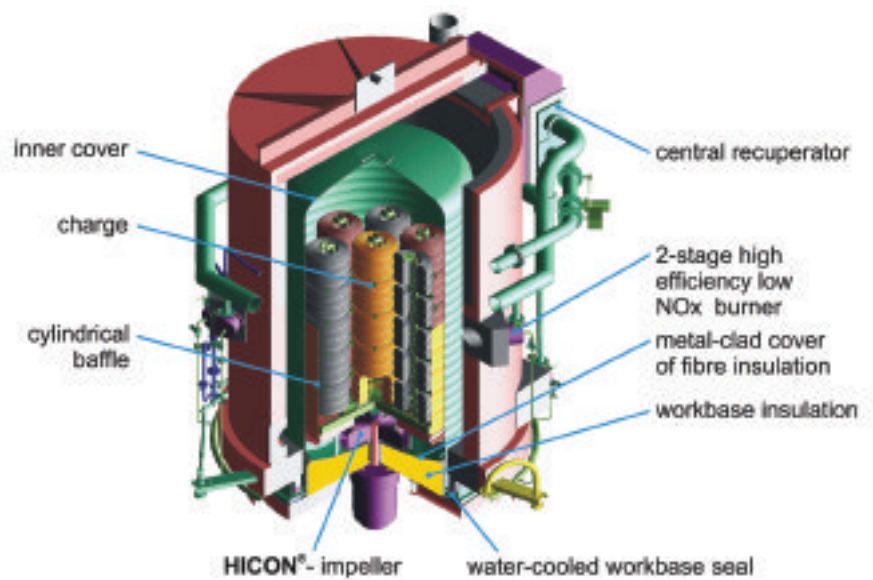
## New trends in bell annealers

HICON® annealer technology from Ebner has been developed for heat-treating rod and drawn wire, claiming the shortest heating/cooling times and the lowest operating costs. A Hicon bell annealer facility generally consists of at least two workbases, a heating bell and a cooling bell. Charges of material for cold heading and cold extrusion typically weigh between 20 and 80 tons. Today, around 300 Hicon workbases process more than four million tons of steel wire every year.

HICON/H<sub>2</sub>® bell annealer technology is attributable to key features such as the gas-tight workload space, Hicon impeller, diffuser and cylindrical baffle, large central recuperator and advanced burner technology. All key components are manufactured in Ebner's own workshops. The absolute tightness of the workload space is a basic requirement for decarb-free heat treatment of cold heading and cold extrusion steels as well as ensuring completely safe operation when hydrogen is used as process atmosphere.

A fully automatic control system includes advanced safety interlocks. Development of Hicon annealers is ongoing, and the newest facilities increase the economy of the technology. For example, due to a specially developed hot vent line direct from the plenum chamber in the workbase, both maintenance requirements and process atmosphere consumption have been further reduced. The installation of a gas analyser system also helps to minimise consumption with Hicon annealers using nitrogen as a process atmosphere.

In addition, user-friendliness has been increased.



○ Cross section of a Hicon/H<sub>2</sub>® bell annealer

Ebner has implemented workbase load plates and cylindrical baffle mountings that make the charging process easier, and software for the latest Hicon annealers supports furnace operators in ensuring the best annealing program is selected for each material. Automated charging of coil carriers is under development.

**Ebner Industrieofenbau GmbH – Austria**  
**Fax:** +43 732 6868 1000  
**Email:** sales@ebner.cc  
**Website:** www.ebner.cc

### Ecoquench, for economy and ecology

FIB's quenching fluid bed 'Ecoquench' is becoming increasingly popular on patenting lines for rope wire and steel cord. In combination with FIB's popular open fire furnace, uniformity and wire structure makes 'Ecoquench' incomparable patenting equipment.

Economy is offered by a lower cost of operation (compared to lead bath) and the lead free installation is ecologically friendly. The latest generation of 'Ecoquench' is already available.

**FIB Belgium SA – Belgium**

**Fax:** +32 2376 3711

**Email:** info@fib.be

**Website:** www.fib.be

## Dedicated heating

Fives Celes has designed and manufactured induction heating equipment for over forty years. With a strong focus on innovation, Fives Celes provides a wide range of solutions in static inverters, delivering equipment dedicated to tube and wire heating, hardening and cooling, and quenching systems.



○ Heating and quenching line from Fives Celes

The Fives Celes range includes:

- MOSFET and IGBT transistor inverters for medium and high frequency induction heating
- quenching tanks and cooling units
- a complete thermal treatment section based on these products

Fives Celes delivers customised services all over the world.

### Fives Celes – France

**Fax:** +33 3 89 76 36 79

**Email:** [fivesceles@fivesgroup.com](mailto:fivesceles@fivesgroup.com)

**Website:**

[www.fivesgroup.com/fivesceles/fr](http://www.fivesgroup.com/fivesceles/fr)

## Heat treatment take-up systems

Lämneå's heat treatment take-up systems, Stationary block frames (SBV) and Rotating block frames (RBV) serve the coiling requirements of the majority of in-line, multi-wire process operations involving low and high carbon steel wires. As such they are a basic component of the wire mill.

Applications include take-up of low carbon steel wires following annealing, annealing and plastic coating, annealing and galvanising, hard drawing and galvanised wires. Also, high carbon steel wires following patenting or patenting and galvanising.



○ Stationary block frames from Lämneå Bruk

on a vertical axis with wear resistant wire line surface but on the SBV the blocks are held stationary by the frame.

### Lämneå Bruk AB – Sweden

**Email:** [info@lamnea.se](mailto:info@lamnea.se)

**Fax:** +46 122 232 99

**Website:** [www.lamnea.se](http://www.lamnea.se)

The systems are of modular construction, each unit carrying a suitable number of units depending on the configuration of the take-up frame. The upper section provides mounting for the vertical block shaft. The lower section is of a heavy fabricated steel structure. A central column supports catwalk and handrails.

Both SBV and RBV feature double-flanged blocks

## Plasma treatment

Plasmait GmbH is a supplier of in-line surface and heat treatment solutions for ferrous and non-ferrous wire, strip and tube applications. Plasma treatment is conducted in a controlled atmosphere to ensure distinct surface cleanliness and uncompromised surface quality. Plasma treatment is a dry, environment-friendly cleaning process that can replace undesired acid/alkaline cleaning techniques. Plasmait has introduced the following distinct processes:

**PlasmaANNEALER** – High-speed annealing of ferrous and non-ferrous wire, rod, strip and tube. **PlasmaCLEANER** – surface degreasing and deoxidation on ferrous and non-ferrous wires, tubes or strip. **PlasmaDEGREASER** – Removal of oil/grease lubricants and wax protection from wire surface for applications such as welding wire or medical wire.

**PlasmaGRAPH** – Graphite de-lubrication and annealing for hot drawn materials. (Molybdenum, Tantalum and hot drawn steels).

**PlasmaPREPLATE** – high-speed annealing and dry surface cleaning process suitable for electro-plating and hot dip plating of non-ferrous materials. The process replaces chemical based treatments such as acid based deoxidation, alkaline based degreasing and flux based surface activation in the case of hot dip process.

Plasmait processes are available in horizontal and vertical configurations. All Plasmait processes include computer assisted inline quality control and offer greatest benefits to the applications with demanding surface and mechanical requirements.

- heat and dry surface treatment inline with electro plating and hot dip plating
- cleaning and annealing of copper alloys, silver and gold
- heat and surface treatment of stainless steels, nickel alloys and other alloys such as wolfram and molybdenum
- heat and surface treatment of medical wires, welding wire and superconductors



○ Plasma treatment with Plasmait technology

### Plasmait GmbH – Austria

**Fax:** +43 318 252 4754

**Email:** [info@plasmait.com](mailto:info@plasmait.com)

**Website:** [www.plasmait.com](http://www.plasmait.com)

## Vacuum furnaces

For more than 60 years the name of Schmetz has been associated with high technology in the field of vacuum furnaces for heat treatments including hardening, annealing, brazing and sintering of tools, drills, milling cutters, pelleting dies, heat-exchangers, pipe fittings in special steel, magnets, PM-materials, turbine blades and aircraft components.

Schmetz is among the leading partners for modern industrial plants, with an established product programme and new systems such as:

- FUTUR – with convection heating for more efficient heat treatment
- 2R – gas quenching with minimised distortion and 2-directional reversal
- 2x2R – gas quenching with vertical and horizontal direction reversal
- 2PLUS – quenching in a separate cooling chamber for higher cooling speeds
- COOL PLUS – automatic hardening and tempering processes with a sub-zero phase

Now, with the recently developed Schmetz eSS system, it is said to be possible to save energy costs and to reduce cycle times.

**Schmetz GmbH – Germany**  
Email: info@schmetz.de

Fax: +49 2373 686 154  
Website: www.schmetz.de



○ Vertical loading vacuum furnace from Schmetz

## Innovation in annealing

Celebrating over 40 years of bell-type batch annealing furnace designs, Rad-Con, Inc engineers, manufactures, installs, and supports high-capacity, robust systems to the wire and wire-rod industry. Rad-Con has pioneered innovation in convection design, atmosphere analysis and temperature control of bell annealing equipment.

Efficient performance of the system's convection flow is critically important to the end-quality of the annealed material. Rad-Con's 100% hydrogen super-high convection (H<sub>2</sub>SHC)<sup>TM</sup> system utilises the most advanced fan designs combined with a 100% hydrogen atmosphere, resulting in greater temperature uniformity throughout the charge, low utility costs, and clean, decarb-free product every cycle.

Today's control technology allows for ease of operation and maintenance of required advanced safety systems for 100% hydrogen, with redundant safety elements to eliminate operator error.

Rad-Con continues to change the industry with its AC/APEX<sup>TM</sup> atmosphere control system, coupling gas stream analysis with closed-loop process control results in improved surface quality of the charge while minimising the amount of atmosphere gas required.

Specialising in annealing systems to produce spheroidised cold heading quality (CHQ) wire for the fastener industry, Rad-Con's experience also encompasses ferrous and non-ferrous applications in the agricultural, electrical, construction, spring, industrial, and communications industries.

**Rad-Con – USA**  
Email: sales@rad-con.com

Fax: +1 440 871 5720  
Website: www.rad-con.com

## Electric furnace

ILES Srl presents model 1.08.3+7.62+DCB – the electric furnace with a horizontal chamber, together with quenching tank and NC loading device. The main characteristic is the automatic loading/unloading/quenching system of interlocking to the furnace, named DCB.

This is made of a four-axle NC loading device that, using a personalising hooking device, allows the operator to work in a completely safe zone.



○ Electric furnace from ILES

The operator has only some simple operations to put the pieces in and out of the NC loading device, taking just a few minutes for each cycle. To program the machine the operator enters the data by means of the operator board.

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

## Furnace specialist, QED

QED Wire Lines Inc is a long-standing specialist in furnaces for heat-treating and coating steel wire, where multiple strands travel through the equipment at relatively high speeds.

To improve efficiency, and minimise environmental concerns, QED has developed the dual loop pressure control system – a new system of burner control that maintains a close air to gas ratio while allowing for stopping and starting burners without changing ratios.

This system has proved so successful that the company has received a US patent for the technology.

QED Wire Lines now uses this combustion control system on all multiple burner furnaces such as oil temper lines, patenting and autenitising furnaces as well as galvanising and Galfan coating furnaces.



Another specialism is the Fluidbed heat-treating furnace, a technology well proven for in-line annealing, stress relieving, tempering and quenching. For increasing numbers of users who run their lines twenty-four hours a day, seven days a week, even small maintenance items can be a problem. With QED design these maintenance areas are all but eliminated.

○ QED galvanising line uses the dual loop pressure control system

New QED furnaces have a fuel injection system that avoids the need for distribution plenums, porous bases and a new proportional control system to improve efficiency. The previous heat loss problems, due to poor sealing of the threading openings, have been eliminated with a new labyrinth seal system. The improved design minimises sand drag out and greatly improves the sand handling technology. In a niche market, all furnaces are custom designed to suit the individual user and application.

**QED Wire Lines Inc – Canada**  
Email: sales@qedwire.com

Fax: +1 450 458 0200  
Website: www.qedwire.com

## New heat treatment range

ILES Srl presents a new range, Combinat heat treatment equipment.

The basic equipment provides the following standard units:

- electric hardening furnace, for treatment under protective atmosphere
- electric pre-heating and tempering furnace, with forced air circulation
- dynamic quenching tank
- washing machine with alkaline solutions

The units are connected by an external structure, on which runs a shuttle to transfer the charge.

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



○ The Combinat heat treatment range

# 热处理和熔炉

## 真空炉

60多年来，在真空炉领域，包括各种工具、钻子、铣刀、造粒模具、换热器、特种钢管件、磁体、PM材料、涡轮叶片以及飞机构件的淬火、退火、铜焊以及烧结等的热处理方面，Schmetz这个名字一直和高科技联系在一起。



○ 来自Schmetz的垂直加载真空炉

Schmetz是现代工厂的最主要的合作者之一，拥有已建立的产品程序和新的系统，比如：

- FUTUR——对流加热系统，实现高效率热处理；
- 2R——双向可逆，变形最小的气体淬火系统；
- 2x2R——垂直和水平双向逆转的气体淬火系统；
- 2PLUS——在独立的冷却室进行淬火，达到更高的冷却速度；
- COOL PLUS——零度以下的自动淬火和回火工艺；

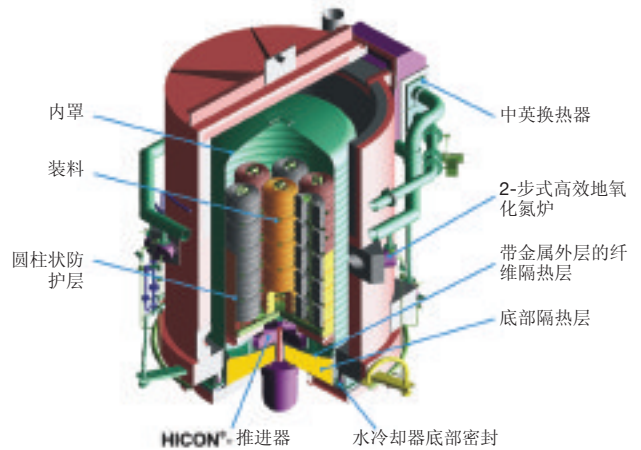
目前，最近开发的Schmetz eSS系统，据说可以节能和减少周期时间。

**Schmetz GmbH - 德国**  
 传真: +49 2373 686 154  
 电子邮箱: info@schmetz.de  
 网站: www.schmetz.de

## 罩式退火炉的新趋势

来自Ebner的HICON®退火炉技术已发展用于棒材和拉制线材的热处理，该系统只需要最短的加热/冷却时间和最低的操作成本。Hicon罩式退火设备通常由至少两个炉台、一个加热罩和一个冷却罩组成。冷顶锻和冷挤出的填料重达20到80吨之间。如今，约300个Hicon炉台每年可处理400多万吨钢材。

HICON/H<sub>2</sub>®罩式退火炉技术可归于一些关键特征，比如气密工作负荷空间、Hicon叶轮、扩散器和柱形缓冲器、较大的回热器和先进的火炉技术。所有的关键部件是在Ebner的工厂加工完成。工作负荷空间的绝对气密是对冷顶锻和冷挤出钢材无脱碳热处理的基本要求，同时也是为了确保氢气作为处理气体时十分安全的操作。一个全自动控制系统包括先进的安全联动装置。



○ Hicon/H<sub>2</sub>® 罩式退火炉的横截面

Hicon退火炉的发展正在进行中，最新的设备将增加技术方面的节约措施。比如，因专门开发的直接从炉台内高压仓出来的热排出线，使得维修需求和处理气体的消耗已远远减少。气体分析系统可帮助最小化以氮气作为处理气的Hicon退火炉的氮气消耗。

另外，用户友好性已增强。Ebner已实现炉台装载机柱形缓冲器安装，使装料过程更简单，最新Hicon退火炉使用的软件可帮助熔炉操作者确保为每种材料选择了最好的退火系统。盘管传送器自动装料系统也正在开发中。

**Ebner Industrieofenbau GmbH - 奥地利**  
 电子邮箱: sales@ebner.cc

传真: +43 732 6868 1000  
 网站: www.ebner.cc

## Ecoquench, 经济与生态

FIB的淬水流化床“Ecoquench”正在制绳钢丝和钢丝帘线退火工艺中流行。结合FIB受欢迎的明火炉，均匀性和线结构使“Ecoquench”成为无与伦比的退火设备。节约通过较低成本的生产(与铅淬火槽相比)得到实现，无铅安装为经济友好型。现在可提供最新一代的“Ecoquench”。

**FIB Belgium SA - 比利时**  
 电子邮箱: info@fib.be

传真: +32 2376 3711  
 网站: www.fib.be

## 热处理收线系统

Lämneå 的热处理收线系统、固定式收线装置 (SBV) 以及旋转盘收线装置 (RBV) 用于低碳钢和高碳钢线材多数在线、多线过程操作的卷绕需要。因此，他们是线材加工的基本组成。

其应用包括低碳钢线材后退火、退火和涂塑、退火和镀锌、冷拉和镀锌线材的收线。

同样也包括高碳钢线材后退火处理或退火和镀锌处理过程中的卷绕。

该系统为单元结构，每一单元包含根据收线装置需要的适当数量的构件。

上部安装的是垂直鼓轮轴，下部由重制钢结构制成，中间的柱子用来支撑人行道和栏杆，SBV和RBV都是以垂直轴上的双法兰鼓轮带抗磨损线材表面，但是SBV的鼓轮结构是静止的。

Lämneå Bruk AB - 瑞典  
电子邮箱: info@lamnea.se

传真: +46 122 232 99  
网站: www.lamnea.se



○ 来自Lämneå Bruk的固定盘收线装置

## 专用加热系统

40多年来，Fives Celes已设计和制造了感应加热设备。因高度关注创新，Fives Celes为静止变流器和用于管材和线材加热、淬火和冷却、以及淬火系统的送料设备提供了一系列解决方案。



○ 来自Fives Celes的加热和淬火生产线

Fives Celes产品包括:

- MOSFET和IGBT晶体管换流器，用于中频或高频感应加热；
- 淬火罐和冷却装置；
- 建立在这些产品上的完整的热处理部分

Fives Celes在全世界提供定制服务。

Fives Celes - 法国  
传真: +33 3 89 76 36 79  
电子邮箱: fivesceles@fivesgroup.com  
网站:  
www.fivesgroup.com/fivesceles/fr

## 等离子处理法

Plasmait GmbH是有色金属和黑色金属线材、带材以及管材应用范围内在线表面处理和热处理解决方案的供应商。等离子处理在气调下进行以保证明显的表面清洁和不折中的表面质量。等离子处理是一种干的环境友好型清洁工艺可代替不受欢迎的酸/碱清洁技术。Plasmait已提出以下独特的工艺:

**PlasmaANNEALER**——有色金属和黑色金属线材、棒材、带材和管材用高速退火法

**PlasmaCLEANER**——有色金属和黑色金属线材、管材和带材的表面脱脂和去氧；

**PlasmaDEGREASER**——在线材应用时，比如焊接线材或医疗线材，去除其表面油/脂润滑剂和蜡保护层。

**PlasmaGRAPH**——热拉材料（铝、钨和热拉钢材）用石墨脱润滑剂和退火工艺。

**PlasmaPREPLATE**——高速退火工艺和干燥表面清洁工艺适用于有色金属材料电刷镀和热浸镀。该工艺代替化学处理工艺比如热浸镀过程中的酸剂脱氧，碱剂脱脂和融化表明激活工艺。

Plasmait加工可提供水平和垂直结构。所有Plasmait工艺包括用于在线质量控制的电脑，有利于达到严格的表面和机械要求法方面的应用。

- 配合电刷镀和热浸镀的热处理和干燥表面处理
- 铜合金、银和金的清洁和退火
- 不锈钢、镍合金和其它合金，比如钨和钼合金的热处理和表面处理
- 医用线材、焊接线材和超导体的热处理和表面处理

Plasmait GmbH - 奥地利  
电子邮箱: info@plasmait.com

传真: +43 318 252 4754  
网站: www.plasmait.com



○ Plasmait技术等离子处理法



## 熔炉专家, QED

QED Wire Lines有限公司是长期存在的钢制线材热处理和镀层用熔炉专家, 各种线材以相对高的速度在设备间穿行。

为提高效率, 使对环境的影响最小化, QED开发了双环压力控制系统——一个新的火炉控制系统, 通过保持接近气比的大气, 同时允许在无需比率变换的情况下停止和启动火炉。该系统的成功得到了证实, 公司获得了该技术美国专利。

QED Wire Lines目前在各种燃气炉上使用该燃烧控制系统, 比如油回火线、退火和奥氏体化熔炉, 以及镀锌和Galvan镀层熔炉。

另外一个专攻是流化床热处理熔炉, 一种在线退火、应力释放、回火和淬火方面得到很好证明的技术。对不断增加的每周7天, 每天24小时运行生产线的用户来说, 很小的维修项目甚至都能成为一个问题。用QED的设计, 这些维修区域几乎可以排除。

新的QED熔炉有一个燃料注入系统, 可以避免对分熔炉的需要, 多孔基层和新的比例控制系统可提高效率。先前因螺纹开孔密封差引起的热损失问题已由新的迷宫式密封系统消除。改进的设计是砂带出量最少化, 大大提高了砂处理技术。在这样一个专业的市场, 所有的熔炉为用户定制设计, 适合个体使用者和应用。

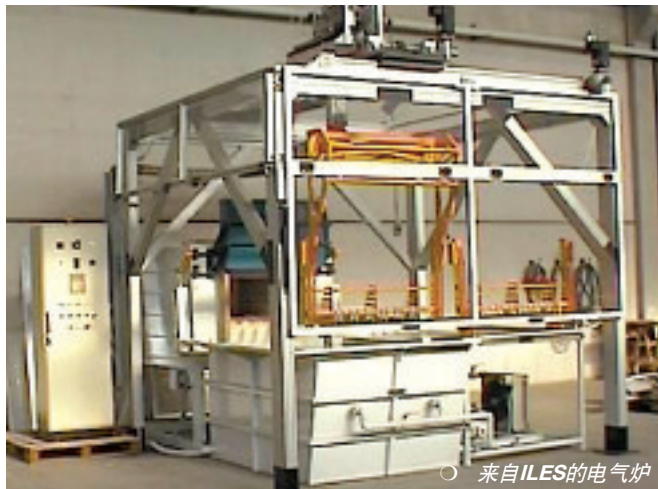


○ QED 镀锌线使用双环压力控制系统

QED Wire Lines Inc - 加拿大  
电子邮箱: sales@qedwire.com

传真: +1 450 458 0200  
网站: www.qedwire.com

## 电气炉



○ 来自ILES的电气炉

ILES Srl发布型号为1.08.3+7.62+DCB的电气炉, 其炉室为水平向的, 带淬火罐以及NC加载装置。主要特征为与熔炉连锁的自动加载/卸载/淬火系统, 即DCB。该系统由四轴NC加载装置制成, 使用人性化的吊挂装置, 使操作者可以在十分安全的环境里工作。操作者只需要进行一些简单的将小件装入或拿出NC加载装置的操作, 每周期只需要花几分钟时间。操作者可通过操作界面进入数据完成对该设备的设置。

ILES Srl - 意大利  
电子邮箱: info@iles.it

传真: +39 0373 750110  
网站: www.iles.it

## 退火工艺的创新

回顾40多年的钟罩式分批退火炉设计, Rad-Con为线材与棒材行业设计、制造、安装和维护高产稳定的系统。Rad-Con已开辟了对钟罩式退火设备对流设计、大气分析以及温度控制方面的创新。

系统对流的高效性能是退火材料最终质量的关键所在。Rad-Con的全氢强循环系统(既H<sub>2</sub>SHC)<sup>™</sup>采用最先进的风机设计以及全氢气氛, 使每个周期整个填料温度更均匀、应用成本低、清洁、无脱碳产品。现今的控制技术便于全氢系统必需的安全系统的操作和维护, 后备的安全部件可消除操作者的错误。

Rad-Con以其AC/APEX<sup>™</sup>大气控制系统继续改变着该行业, 连接的气流分析和闭环工艺控制使填料表面质量得到改进同时对保护气体的需要达到最小。

除专攻用于紧固件行业生产球化冷顶锻线材的退火系统外, Rad-Con的经验同样也包括农业、电气、建筑、弹簧、工业以及通信的有色金属或黑色金属方面的应用。

Rad-Con - 美国  
传真: +1 440 871 5720  
电子邮箱: sales@rad-con.com  
网站: www.rad-con.com

ABB ..... 29	Fives Celes ..... 50, 54	Rad-Con Inc ..... 10, 16, 51, 55
Air Control Industries ..... 32	Mario Frigerio SpA ..... 43,47	Rio Tinto Alcan ..... 12, 14
Alcatel-Lucent ..... 13, 16	GCR Eurodraw SpA ..... 41, 48	Rymer Engineering ..... 41
Atkin Automation ..... 9, 16	GEM Srl ..... 31	SAS Engineer & Planning... 28
Ballobet ..... 42, 48	ILES Srl ..... 51, 52, 55	Schmetz GmbH ..... 51, 53
bedra ..... 12	Isolmax ..... 41, 48	Shanghai Lizhi Mach'y . 38, 45
Concast AG ..... 9, 16	IWMA ..... 12, 15	Siemens VAI Metals ..... 30
Continuus-Properzi 32, 40, 47	Lämneå Bruk AB ..... 50, 54	SIF MDC ..... 29
Cortinovis Machinery ..... 30	OM Lesmo ..... 39, 46	SMS Meer GmbH ..... 33
Draka Holding ..... 11, 31	Medek & Schoerner GmbH . 33	Team Meccanica SpA .. 42, 46
Ebner Industrieofenbau.. 49, 53	Nexans ..... 11, 16	Teknor Apex Co ..... 15
Eurolls Group ..... 10, 15	Niehoff ..... 8, 14, 43	Teurema ..... 38, 45
Fastener Fairs Group ..... 13	Plasmait ..... 50, 54	Unicor ..... 28
FIB Belgium SA ..... 49, 53	QED Wire Lines ..... 52, 55	Witels-Albert GmbH ..... 42, 46

Front cover courtesy of Sikora AG, showing the X-Ray 2120

For more details please call Sikora on +49 421 48900 0, or email sales@sikora.net Website: www.sikora.net

## Advertisers index

Anbao (Qinhuangdao) Wire & Mesh Co Ltd.... 22	Locton Ltd ..... 31
Candor Sweden AB ..... 9	Messe Düsseldorf GmbH ..... <b>Back cover</b>
Dongguan Zhangli Machine Fittings Co Ltd ... 29	QED Wire Lines Inc ..... 13
Gauder Group ..... 29	Rad-Con Inc ..... 39
Guanbiao Electrical Machinery Co Ltd ..... 31	Rautomead Ltd ..... 33
Guangzhou Julang	Sampat Heavy Engineering Ltd ..... 33
Exhibition Design Co Ltd ..... 17	Shanghai Electric Cable Research Institute ..... 2
Hangzhou SANP Machinery Co Ltd ..... 1	Shanghai Nanyang Equipment Factory ..... 3
Huestis Industrial ..... 21	Sikora AG ..... <b>Front cover</b>
Isolmax Srl ..... 9	Supermac Industries (India) Ltd ..... 11
ITO-SIN (Deyang)	TDS Expo - Wire & Fasteners Ukraine 2009 ..... 7
Wire & Cable Equipment Co Ltd ..... 64	The Wire Association International Inc
Jiangsu Jintailong Mechanical	..... <b>Inside back cover</b>
& Electrical Equipment Manufacturer ..... 25	Zumbach Electronic AG ..... <b>Inside front cover</b>



46 Holly Walk • Leamington Spa • Warwickshire CV32 4HY • UK

Tel: +44 1926 334137 • Fax: +44 1926 314755 • Email: intras@intras.co.uk • Website: www.read-wca.com

US copies only: *Wire & Cable ASIA* (ISSN No. 0218-3277) is published bi-monthly by INTRAS Ltd and distributed in the US by DSW, 75 Aberdeen Road, Emigsville, PA 17318-0437. Periodicals postage paid at Emigsville, PA. Postmaster: send address changes to *Wire & Cable ASIA*, PO Box 437, Emigsville PA 17318-0437.



# 伊东新 ( 德阳 ) 线缆设备有限公司

ITO-SIN (DEYANG) WIRE & CABLE EQUIPMENT CO., LTD.



Ito-Sin (Deyang) Wire & Cable Equipment Co., Ltd., with co-operation from Ito-Sin Private Industries (Singapore) Ltd., is specialized in the design and manufacture of equipment for the wire and cable industry. Since its founding Ito-Sin has been in close co-operation with some well-established companies in the industry both at home and abroad in research and development of new products, some of which have been sold to Morocco, Mexico, Mauritius, Iran, India, Pakistan, Bangladesh, Thailand, Indonesia, Malaysia, and Singapore, etc.



## Application

High speed aluminum rod breakdown machine for pure aluminum rod or aluminum alloy rod to make  $\phi 9.5\text{mm}$  rod into  $\phi 1.9\text{mm} \sim \phi 4.5\text{mm}$ .



## Application

This machine is designed to sheath lead cover onto electric cables continuously as well as vulcanize rubber pipe.



## Application

Aluminum rod continuous casting and rolling line for  $\phi 9.5\text{mm}$  aluminum rod with production capacity at 2.6 ~ 5 tons per hour.

## OUR MAIN PRODUCTS

1. ALUMINUM & ALLOY ROD DRAWING MACHINE TYPE LHD-450/13
2. CONTINUOUS LEAD SHEATHING EXTRUDER TYPE YQL-150/S
3. ALUMINUM ROD CONTINUOUS CASTING & ROLLING LINE TYPE LGZ-1500/Y
4. ALUMINUM & ALLOY ROD CONTINUOUS CASTING & ROLLING LINE TYPE LELZ-1600+255/14
5. COPPER ROD CONTINUOUS CASTING & ROLLING LINE TYPE UL+Z-1820+255/12
6. UPWARD CONTINUOUS CASTING LINE FOR OXYGEN-FREE, GLOSSY COPPER ROD TYPE UTV
7. COPPER ROD DRAWING MACHINE TYPE LHD-450/13

Addr: Bajiao Industrial Area, Deyang, Sichuan 618000, China Tel: +86 838 2601060/2823721 Fax: +86 838 2601065/2825530

E-mail: itosin@dy-public.sc.cninfo.net ssmco@sina.com.cn Http://www.ito-sin.com

Shanghai Office Tel: +86 21 56085484 FAX: +86 21 56095586

Guangzhou Office Tel: +86 20 87376167 Fax: +86 20 87373431



# CONTACTS AND COMMERCE

WIRE, CABLE, AND FASTENERS



SAVE THE DATE FOR THE LARGEST WIRE, CABLE, AND FASTENER  
MARKETPLACE IN THE AMERICAS

CONVENTION:  
APRIL 25-30, 2009

EXHIBITS:  
APRIL 27-30, 2009

I-X CENTER  
CLEVELAND, OHIO, USA



*The Commercial Service logo is a  
Registered trademark of the U.S.  
Department of Commerce, and  
with permission.*

Meet Interwire—the gold standard in wire and cable trade events in the Americas—where inventory and equipment await a global destination.

At Interwire more than 500 exhibiting companies will demonstrate how their supplies, merchandise, and machines can elevate your business operations to the next level.

Interwire 2009 will be back at Cleveland, Ohio's I-X Center and backed by the U.S. Department of Commerce's International Buyer Program. We'll all be focused on U.S. exports around the world. So when you land new contacts and partnerships at Interwire we'll help ensure the goods you require are homeward bound.

Whether it's wire to Wales or an order for fence in the Outback, Interwire is a vast marketplace set on an international stage. Educational presentations and networking are another agreeable part of the deal.

To learn more about the industry's most anticipated business week in 2009, visit The Wire Association International, Inc. website at: <http://www.wirenet.org/events/interwire>

Supporting Sponsors:



Steel Wire Manufacturers  
Association of India

Educational Alliances:



ORGANIZED BY:



The Wire Association International, Inc.



INTERNATIONAL ASSOCIATION  
FOR WIRE-ROPE MANUFACTURING  
Registration and Trademark  
Approved by the International Institute  
of Business, Supply, and Logistics

w i r e  
Russia



wire & cable



springmaking



fastener



The International Wire and  
Cable Trade Fair in Russia

12 – 15 May 2009

Krasnaya Presnya  
Expocentr Fairgrounds

Moscow, Russia

[www.wire-russia.com](http://www.wire-russia.com)

EXPOCENTR

  
VNIKP

000 Messe Düsseldorf Moscow  
123 100 Moscow  
Krasnopresnenskaya nab. 14,  
Hall 7  
Phone +7/495/605-1100  
+7/495/256-73 95  
Fax +7/495/605-7207  
info@messe.d.russia.ru  
www.messe-duesseldorf.ru

  
Messe  
Düsseldorf  
Moscow

Messe Düsseldorf GmbH  
P.O. Box 10 10 06  
40001 Düsseldorf  
Germany  
Phone +49/2 11/45 60-77 43  
Fax +49/2 11/45 60-77 40  
HermesKi@messe-duesseldorf.de  
www.messe-duesseldorf.de

  
Messe  
Düsseldorf