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Wire & Cable ASIA 线缆

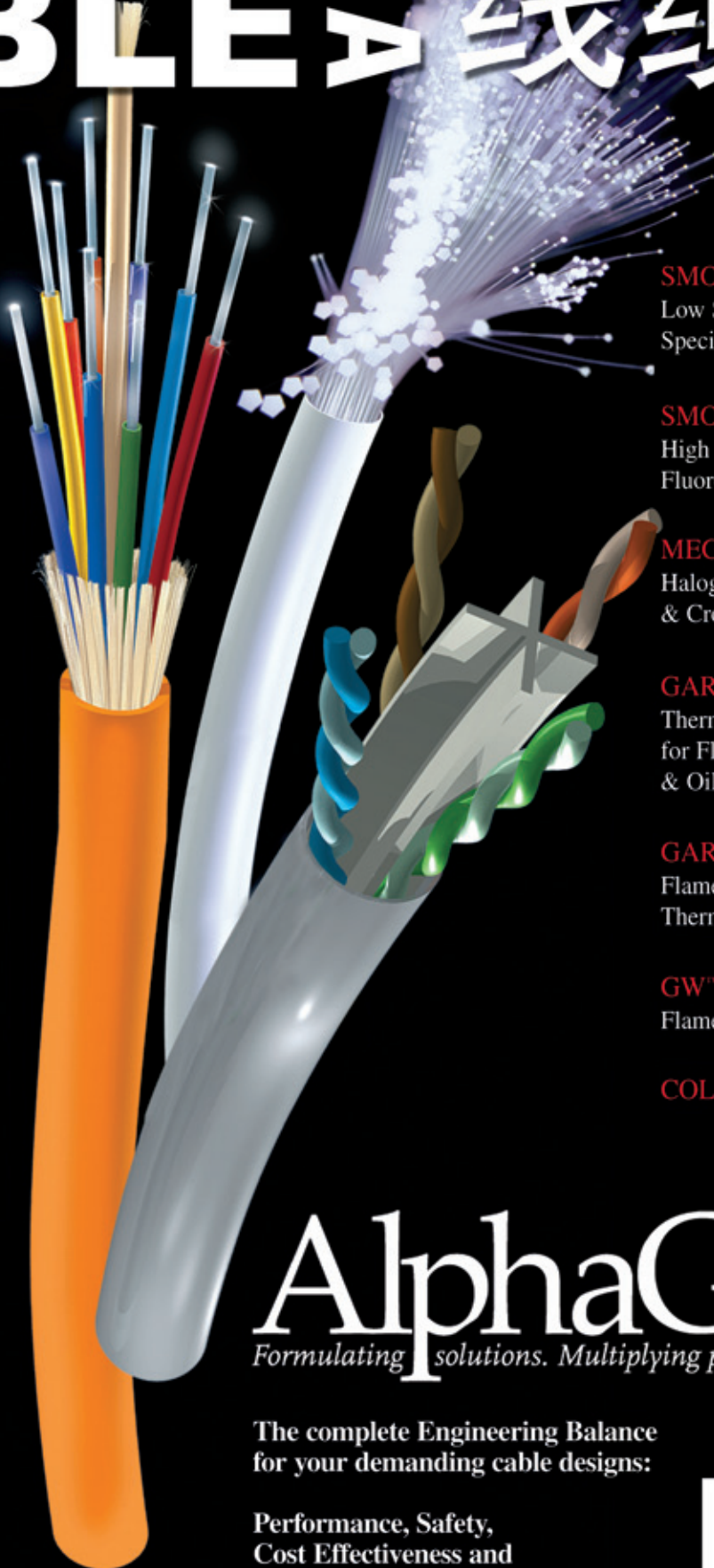
November 2011
US\$33*

AlphaGary Corporation
Headquarters
170 Pioneer Drive
Leominster, MA 01453 USA
+1-978-537-8071 Voice
+1-800-232-9741 Voice
+1-978-840-0856 Fax

AlphaGary Corporation
9635 Industrial Drive
Pineville, NC 28134 USA
+1-704-889-7821 Voice
+1-704-889-7861 Fax

AlphaGary Limited
Belver Way,
Melton Mowbray
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ADD:NO.279 west Huanghe RD.,Xinbei District, Changzhou Jiangsu,China

TEL:+86-519-85960370

FAX:+86-519-85960370 85960371

e-mail: czsbj1004@126.com czabsbj@hotmail.com aibang@czaibang.com

MO:13506124377

http://www.czaibang.com

http://www.aibang.en.alibaba.com

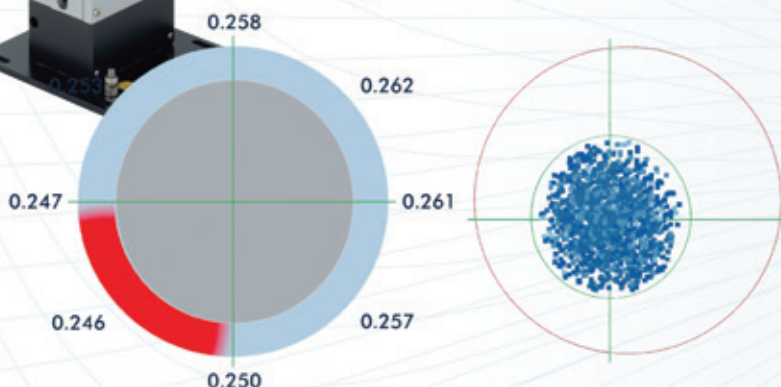
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David Carracoi
Head of Performance Improvement Department at SIKORA



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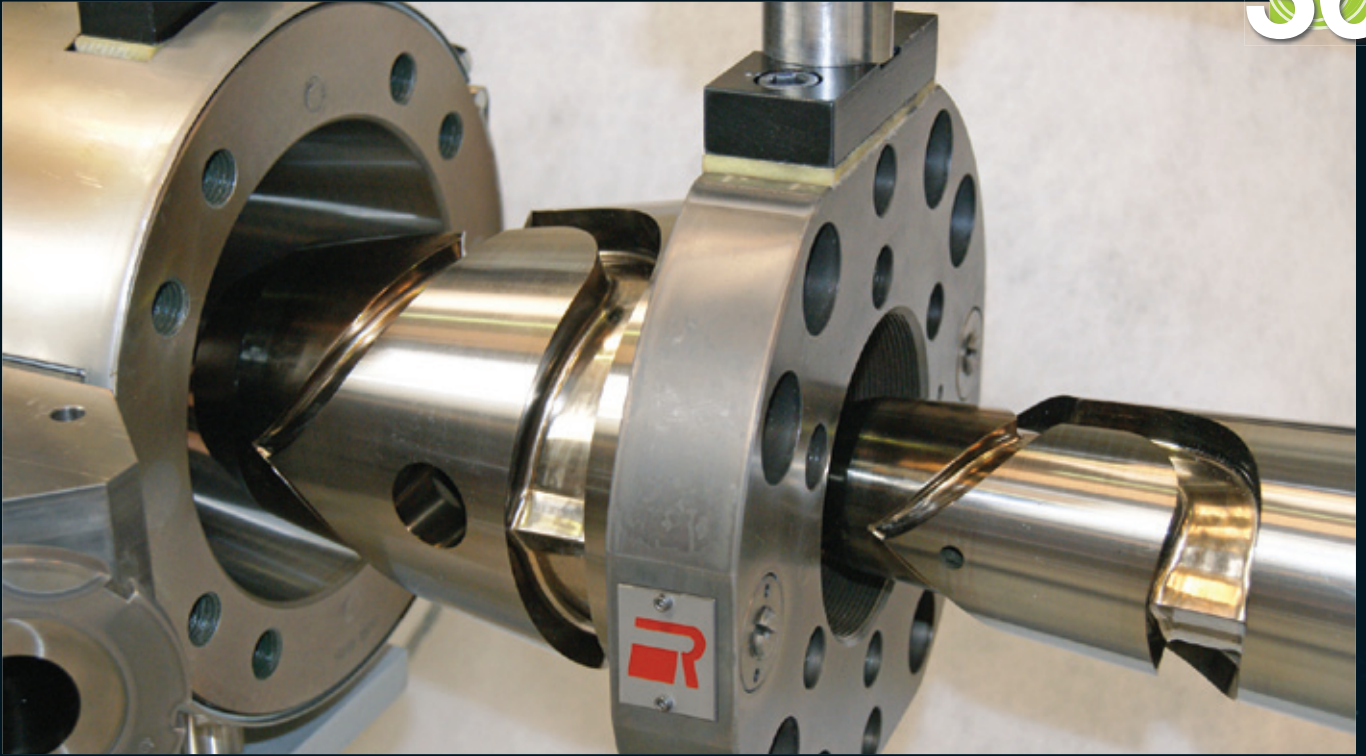
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by Grzegorz Tosik, Paweł Kołodziej and Magdalena Mirynowska,
of Corning Cable Systems

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撰文：Corning Cable Systems公司Grzegorz Tosik、
Paweł Kołodziej 和 Magdalena Mirynowskax

Editor (编辑):..... David Bell
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
Linda Li

Advertising/Marketing:..... Jason Smith
(广告/营销): UK, ROW, USA, Canada
Giuliana Benedetto
Italy
Hendrike Morriss
Germany, Austria, Switzerland
Linda Li
中国
Jeroo Vandrevala
India/Pakistan

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):..... wca@intras.co.uk
Website (网站):..... www.read-wca.com

USA (美国)
Intras USA – Doug Zirkle
Danbury Corporate Center, 107 Mill Plain
Road, Danbury, CT 06811, USA
Tel (电话):..... +1 203 794 0444
Email (电子邮箱):..... doug@intras.co.uk

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):..... jeroo@intras.co.uk

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Wire & Cable ASIA is published six times a year. It is distributed throughout North and South-east Asia to registered readers in wire, cable and wire component producer and consumer industries. Annual subscriptions are available from just US\$80.

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What exhibition?

Very few things shock me, I have to admit. My eyes and ears have witnessed and heard a lot during my 44 years and I am a firm believer in the saying 'believe only half of what you see and nothing that you hear'.

But I was left amazed by the lengths that Chinese 'company' Copex Global went to trying to take cash from wire and cable companies for a fake exhibition.

Whilst giving publicity to such companies is not something I particularly enjoy, it has to be done to prevent people and companies from parting with money for nothing in return. Our story on p9 goes into the full details but it is easy to understand how some people are duped into believing these very simple scams.

The people behind the 'company' concerned were incredibly forthcoming. Having seen their promotional literature – bearing our logo without our permission – and listing a veritable who's who of the industry as speakers, it is easy to see how you can be taken in.

A flurry of emails after we had been alerted to this were all answered. Indeed, after an apology was issued to us we were asked if we would like to support the event! I made a number of telephone calls to Shanghai. None of my questions were answered but my calls were returned time after time.

And that included a call after I had spoken to the hotel in Shanghai where the event was supposedly happening. They had, of course, no record of such an event.

There was no attempt to avoid talking to me, as I had expected. Finally an apology was sent saying sorry for using our name as media partner, and then a further email informing us that the event had been cancelled.

If only they showed a tenth of that enthusiasm in running a legitimate business. . . just imagine the results.



David Bell
Editor

when and where



'Downtown Charlotte' www.bigstockphoto.com Photographer – Jeffrey Thomas

November 2011

6–9: **IWCS 2011** – conference and symposium – Charlotte Convention Center, North Carolina, USA

Organisers: IWCS
Fax: +1 732 389 0991
Email: phudak@iwcs.org
Website: www.iwcs.org

March 2012

26–30: **wire 2012** – trade exhibition – Düsseldorf, Germany

Organisers: Messe Düsseldorf
Fax: +49 211 456 087 7793
Email: wire@messe-duesseldorf.de
Website: www.wire.de

May 2012

22–23: **Wire Expo** – trade exhibition – Dallas, USA

Organisers: Wire Association International
Fax: +1 203 453 8384
Email: info@wirenet.org
Website: www.wirenet.org

June 2012

19–21: **Guangzhou Wire and Tube** – trade exhibition – Guangzhou, China

Organisers: Julang Exhibition Co Ltd
Fax: +86 203 862 0790
Email: meiwen@julang.com.cn
Website: www.julang.com.cn

Record breaking wire Southeast ASIA

A RECORD 392 exhibitors and 5,300 visitors from more than 60 countries confirmed wire Southeast ASIA as the leading platform in the region.

The exhibition, which took place at BITEC (Bangkok International Trade and Exhibition Centre) from 13th-15th September 2011, exceeded expectations with a 20 per cent increase from 2009.

The strong visitor attendance, particularly from Indonesia, Malaysia, Singapore, and even India, also further highlights the increasing significance of ASEAN as a 'collective whole' and dynamic common market moving towards a single economic community by 2015.

"Thailand has progressed quickly in the past years and has the best market position in Southeast Asia to date," said Ferruccio Bellina, President of ACIMAF (Italian Wire Machinery Manufacturers Association).

Numerous discussions took place on the show floor during all exhibition days, together with visiting delegations from China, Malaysia, Japan, Philippines and Vietnam greatly boosted the professional atmosphere of wire Southeast ASIA.

The response from the local, regional and international sectors to wire Southeast ASIA has driven the exhibitions to yet another important stage in its strategic development.

Gernot Ringling, managing director of Messe Düsseldorf Asia, said: "The results of this year's wire and Tube Southeast ASIA proves that business in the wire, cable, tube and pipe sectors in the region is expanding strongly, driven by continued economic growth in Thailand and the Southeast Asian region.

"As the leading forum for buyers and sellers of the latest manufacturing equipment and technology across these sectors, we are pleased with the double digit growth both in



○ Visitors heading into the Bangkok International Trade and Exhibition Centre for this year's wire SE Asia

terms of quality visitor turnout and exhibiting companies."

President of AWCMA (Austrian Wire & Cable Machinery Manufacturers Association) Dr Kurt Eder said the exhibitions have attracted high quality visitors and the right target audience.

"We were very impressed by the international origin of visitors, with industry professionals coming from as far as Australia," he said.

According to Dr Gerhard Bartz, President of VDKM (German Wire and Cable Machine Manufacturers Association), "wire and Tube Southeast ASIA have proven their status as the leading regional event for the wire, cable, tube and pipe industries by largely increased number of foreign visitors from all over Asia."

Highlights from this year's exhibitions included eight national pavilions and groups from Austria, China, Germany, Italy, Singapore, Taiwan, UK and USA. There was also a creative design showcase on stainless steel industrial products presented by members of the Thai Stainless Steel Development Association (TSSDA).

Representing a group of Chinese exhibitors, Wu Lianshe, senior economist of MC-CCPIT (Metallurgical Council of China Council for the Promotion of International Trade) sees wire and Tube Southeast ASIA as "the

biggest and most important exhibitions for the steel and wire industries in Southeast Asia."

The growth in the number of international visitors attending was due in no small part to the success of the technical seminar series held in July this year in Jakarta, Taipei and Seoul which placed a spotlight on leading companies including Eder Engineering, Maillefer SA, Maschinenfabrik Niehoff, Reber Systematic, Rosendahl Maschinen and Sikora AG.

Commenting on plans for wire Southeast ASIA 2013, Beatrice Ho, senior project manager said: "Having spoken to key exhibitors both local and international, it is certainly most encouraging to note the commitment to return for wire/Tube Southeast ASIA 2013.

"This only goes to show our concept is what the market in this region needs and the increasing relevance of the ASEAN market and we could not ask for better support than satisfied customers."

wire Southeast ASIA 2013 will run from 17th-19th September at BITEC, Bangkok.

Messe Düsseldorf Asia – Singapore
Fax: +65 633 296 55
Email: wire@mda.com.sg
Website: www.wire-southeastasia.com

Warning over fake China exhibition

WIRE and cable companies are the latest to be targeted by Chinese fraudsters in an elaborate scam for a fake industry conference.

The China Wire and Cable Industry Summit was advertising places available with a whole host of credible names from the industry at the Crowne Plaza Century Park Hotel, Shanghai, China, from 25th-26th November 2011.

The summit, organised by a 'company' called Copex Global, was selling places at \$2,000, and backed by many large companies and media organisations from within the industry, with both EuroWire and Wire & Cable ASIA magazines included as media partners.

The event, which has since been cancelled after we contacted Copex Global over the misuse of our titles, was not even listed at the hotel, which we contacted in a bid to clarify whether it was real or not.

We spoke on a number of occasions to both a Randal Chan and Sean Chen who continually asked for permission to use our titles' names in association with the event.

"This was very clearly a deliberate attempt to generate income with the

pretence of a false conference," said David Bell, editor of EuroWire and Wire & Cable ASIA.

"I personally spoke to representatives of Copex Global a number of times asking them to remove our logos from their literature and to withdraw their advertising.

"They remained incredibly professional in their dealings with me, returning telephone calls and emails, but did not answer any of the direct questions put to them. Eventually they sent me a letter of apology for using our names and informed me they had cancelled the event."

None of the 'speakers' at the event were even aware they were attending.

"This was a good team effort to respond with the appropriate cautions. We are all now aware of one other method of counterfeits," said David Kidoo, of AlphaGary, one of the companies initially targeted.

"Please be very careful in the future with ANY upstart conferences and be sure to check them out for their 'history' and legitimacy before sending out a lot of personal information and making costly plans to attend," he added.

Kaharani unit gains ISO 9001 approval

Cords, developers and manufacturers of all types of LT range cables and household wires, has received ISO 9001:2008 certification from TUV Rheinland for its new Kaharani manufacturing unit (Rajasthan, India).

With the successful completion of the ISO certification process, the company will now initiate plant approval procedures with various public sector companies, project authorities, consultants and major EPCs.

The new development brings Cords' total output to INR 30 Cr. (or USD 7 million) per month, to be progressively increased to INR 40 Cr. (or USD 9.30 million) per month by the end of the third quarter 2011-12. The plant has a further capacity for production which will be progressively utilised.

Cords Cable – India
Fax: +91 112 695 1196
Email: ccil@cordscable.com
Website: www.cordscable.com

Imported wire to be investigated

The Indonesian Trade Security Committee (KPPi) has begun an investigation into imported iron and steel wire for the construction industry which, allegedly, has impacted on the sales of similar domestic products.

KPPi chairwoman Halida Miljani said in a statement that the investigation was being made in response to a petition filed to the committee by Indonesia's leading manufacturer of wire products, PT Bevananda Mustika, and based on preliminary data showing surging imports of the products that potentially hurt the company.

"The government will keep protecting local producers from unfair trade practices.

If the imported products are proven to have hurt local

producers, we will immediately impose safeguard measures," she said.

Under World Trade Organisation rules, the government can impose a provisional measure on imported products for a maximum of 200 days after the committee initiates an official investigation.

At present, imported steel products, including wire, are charged a 15 per cent import duty.

Indonesia Trade Security Committee – Indonesia
Fax: +62 21 632 6433
Email: info@kppi.or.id
Website: www.kppi.or.id

Providing fibre backhaul support

Access Kenya Group, Kenya's corporate data and infrastructure provider, and Airtel Kenya have partnered to provide customers with fixed voice services over fibre optic cable.

The two companies have signed a contract that grants Airtel access to Access Kenya's extensive fibre network. The deal is to provide connectivity services for Airtel's fixed line voice services, also known as E1. Airtel Kenya will now buy E1 circuits from Access Kenya's fibre optic network.

Access Kenya Group MD Jonathan Somen said Airtel is set to leverage Access Kenya's extensive fibre presence to reach more customers, more buildings and to provide reliable services on Access Kenya's network.

Access Kenya Group – Kenya

Fax: +254 203 600 01

Email: info@accesskenya.com

Website: www.accesskenya.com

Kenyan power firm stands fast on tax bill

KENYAN Business Daily reports that Kenya Revenue Authority (KRA) and the Rural Electrification Authority (REA) are locked in a Sh1.85 billion tax arrears battle, the outcome of which could slow down the connection of more Kenyans to the national electricity grid.

The power agency, through Treasury, is pushing for the tax authority to waive its tax backlog on the grounds that its operations are not profit driven and that it does not sell commodities. It also argues that it was not aware of its tax obligations.

KRA is insisting that the agency is not exempted from paying taxes and that it should clear the backlog accumulated since 2006, when the former department in the Ministry of Energy was upgraded to an autonomous corporate body.

"REA had assumed that they are not supposed to pay tax, which is not

correct," finance assistant minister Oburu Oginga told Parliament. "We have already started discussions on the matter with KRA on the possibility of exempting REA from paying taxes.

"This would most likely necessitate an amendment to the Energy Bill," added Mr Oginga.

Electricity consumers pay a five per cent rural electrification levy in their monthly power consumption bills that is passed on to REA to accelerate the pace of electricity penetration in rural Kenya.

Settlement of the tax arrears looks set to slow down rural electrification projects, which have helped boost the country's electricity penetration rates from 12 per cent of the population in 2005 to about 30 per cent last year.

Rural Electrical Authority – Kenya

Fax: +254 020 495 3600

Email: info@rea.co.ke

Website: www.rea.co.ke

Well done is better than well said

Benjamin Franklin

NPC approval for Cords

Cords Cable has received approval from Nuclear Power Corporation of India Ltd (NPCIL) for its LV Power Cables.

NPCIL is the nodal Indian government agency responsible for setting up nuclear power projects in India.

With this new approval, and the existing approval for instrumentation, control, signalling, communication and thermocouple cables, Cords' entire cable range is approved with the Nuclear Power Corporation.

The organisation is now poised to serve this emerging segment in India with its complete product range.

Cords Cable – India
Fax: +91 112 695 1196
Email: ccil@cordscable.com
Website: www.cordscable.com

New cable could end data caps

THE team involved with building a new fibre cable to connect New Zealand with America wants to break the current monopoly on supply and eliminate broadband data caps.

Pacific Fibre's new undersea cable is aiming to make "fast, inexpensive, unlimited broadband" a reality in New Zealand by 2014.

CEO Mark Rushworth says supply is currently outstripping demand for internet use but that will change soon with the government's ultra fast broadband (UFB) roll-out.

"The issue we are solving for New Zealand is at the moment there is only that one cable, Southern Cross. So essentially you have an economic problem where you have a monopoly provider setting the price."

Mr Rushworth explained to AMP Business that price setting results in data caps on individual broadband plans and Pacific Fibre wants to change that.

"What we want to do is bring competition in to the NZ markets so that we see pressure on prices and people can enjoy higher data caps, or at some point, the removal of data caps," he said.

He believes if a monopoly stays in place, people using UFB – which should be up to 10 times faster than current speeds – will simply exceed their data caps more quickly.

"There needs to be an increase in data caps, just to keep up with the speed improvements the government is driving with ultra fast broadband," Mr Rushworth explained.

Pacific Fibre – New Zealand **Email:** enquiries@pacificfibre.net
Website: www.pacificfibre.net

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Jindal Steel raises \$475m for expansion

JINDAL Steel & Power Limited (JSPL), one of India's largest steelmakers and owner of the Jindal Shadeed Iron and Steel plant in Sohar, has raised US\$475m to fund its expansion programme in Oman, having raised the loan at 225 basis points over the Libor (London interbank offered rate) for five years.

D K Saraogi, executive president of Jindal Shadeed and head of JSPL's Oman operations, told Muscat Daily: "The major part of this loan will be used to finance the expansion programme in Oman.

"And some money is likely to go for technology and technical purchases outside Oman."

Saraogi continued: "We are trying to take the capacity up to five million tonnes by 2015-16.

"Until the expansion programme is initiated we cannot divulge details of investments," and went on to explain that the necessary pellets will be sourced from JSPL's plant in Bolivia, once it becomes fully operational.

This is expected to take two years.

Jindal Steel & Power Limited – India
Fax: +91 112 616 1271
Email: marketing@jindalsteel.com
Website: www.jindalsteelpower.com

Cable&Wireless appoints manager for Hong Kong

Bhupinder Singh has been appointed as country manager for Cable&Wireless Worldwide's Hong Kong operations. Based in Hong Kong, he will hold the new position in addition to his current role as vice president for delivery, Asia-Pacific, for the mission critical communications provider.



○ Bhupinder Singh

Mr Singh has over 16 years of experience in delivering strategic programmes across private and public industry sectors including telecommunications, banking, utilities, manufacturing, and oil and gas.

Hong Kong is a key hub for the company's Asia Pacific business, supporting the needs of many of the world's largest banking, financial services, manufacturing and high-technology brands. In the last year, Cable&Wireless Worldwide has extended its network in the region with the commissioning of its own backhaul network in Hong Kong. In addition, it has secured a Unified Carrier Licence from the Hong Kong Telecoms Authority, which allows it to provide and operate a public internal telecoms network and sell an expanded scope of telecoms services to customers.

"Bhupinder is a senior member of the Asia management team and has worked with Cable&Wireless Worldwide in various roles for more than a decade," said Mike Powell, vice president, service delivery, global markets at Cable&Wireless Worldwide.

Mr Singh has an engineering degree in computer sciences and an MBA from the Anderson School of Management, UCLA.

Cable&Wireless Worldwide (Asia Pacific) – Singapore
Email: michele.soon@cw.com
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WAI unveils Wire Bulletin website

THE Wire Association International (WAI), Inc and its Indian subsidiary, WAI Wire & Cable Services, Pvt Ltd, have introduced the Wire Bulletin website – an electronic companion presence that extends the reach of the quarterly publication of the same name, which is distributed exclusively to subscribers in India.

The website features industry, product and global news; industry trends; a calendar; a corporate focus section; and a digital archive of Wire Bulletin issues.

Of note are the site's search functionality that enables visitors to search articles on the site and in past issues of the quarterly publication by keyword; and the convenient contact form for submission of press releases or enquiries directly to the editor.

"This new Wire Bulletin medium gives readers continuous access to industry developments between issues and the interaction will help shape pertinent content of future issues," said Wire Bulletin editor Huned Contractor.

"Subscribers to the new site will be able to experience and contribute to the Wire Bulletin brand. This especially benefits readers outside India who want to learn more about the wire and cable marketplace there and it increases exposure for the advertisers who support the publication," said Janice Swindells, WAI's marketing and corporate communications director.

Social networking links to Facebook, Twitter, Digg and Delicious are offered as a convenient means to connect with colleagues, and an RSS feed link ensures that readers remain aware of new content and article feedback. The site's features can be accessed through free registration at www.wirebulletin.net

The Wire Association International, Inc – USA


Fax: +1 203 453 8384

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Website: www.wirenet.org

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100G under the sea

GULF Bridge International (GBI), the Gulf's first privately owned submarine cable operator, is believed to be the first operator to offer true 100G connectivity on parts of its undersea cable network.

GBI has made the move to 100G to meet growing demand from the carrier community for high-capacity services that bridge Europe, the Middle East and Asia.

The networking technology uses dense wavelength division multiplexing (DWDM) technology, and total system design capacity has increased to close to 10 Terabits per second on certain sections.

"100G has been something that has been discussed in the industry for a long time and GBI is proud to be the operator to usher in this new era of undersea cable connectivity," said Ahmed Mekky, founder and CEO of GBI.

"As capacity demands continue to grow aggressively, GBI made the decision to use the latest in technology and ensure that we are prepared to meet the demands of our customers in the long term."

Gulf Bridge International – Qatar
Email: info@gbiinc.com
Website: www.gbiinc.com

Saudi Electricity signs contracts worth \$307m

Saudi Electricity Company, the state-backed power supplier, has finalised deals worth \$307m with Saudi companies to build the next stage of the country's power infrastructure. The initial announcement was made by Ali S Al Barrak, SEC's CEO, and reported in local press.

The company said the first contract was to construct a transformer station in Qassim; the second is to build two electricity lines, one linking Makkah and Taif and another linking Tabuk with Dhaba.

Saudi Arabia has been troubled by rising energy demands and an increasing population in its biggest cities and during the last year the company has awarded billion of riyals of contracts to local and international contractors to build plants and extend existing facilities.

SEC has secured government and international loans, including from Bank of Japan-Mitsubishi, to fund the nationwide expansion of its electricity capacity. The company added 508MW to its capacity in May, taking its total annual output to 50,512MW.

Saudi Electricity Company – Saudi Arabia
Email: info@se.com.sa
Website: www.se.com.sa

India upgrading its power transmission infrastructure

The state government of Haryana in India will invest INR40.58bn (\$894m) to upgrade its power transmission and distribution network in the region. The government plans to construct 174 new substations and increase the capacity of 98 existing substations over a three year period.

Haryana power minister Ajay Singh Yadav said new transmission lines of 3,232km will be laid in the state to connect the new substations to the feeding sources.

The minister inaugurated three 132kV substations at Khairkan, Kurangawali and Dudhianwali and broke ground for two new 33kV substations projects in Shergarh and Mallekan.

The state-run Haryana Vidyut Prasaran Nigam (HVPN) has begun the construction and operation of the 400kV level substations and is also constructing three 400kV substations in Sirsa, Mahendragarh and Faridabad.

Haryana Vidyut Prasaran Nigam – India
Website: www.hvsn.gov.in

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By H el ene Latour

IT'S been four long years since Nexans launched their first sponsorship deal to help renovate one of the most visited monuments in the world, the Palace of Versailles.

It would have been rude of me, Wire & Cable ASIA's very own French import, not to pay a visit to my homeland and find out what the global cable giant has been doing during Phase One of the renovation of one of Europe's most priceless attractions.

This wasn't just an opportunity for me to inform the readers of the major financial support offered by Nexans, but to witness first hand part of my heritage being brought back to life.



○ *Fr ed eric Vincent, chief executive officer of Nexans*

A labour of love for the French heritage

A few hours on Eurostar and the Metro (Parisian tube network), trying to remember my French (I have lived in the UK for three years now) and I finally walked through the gold plated gate of the majestic baroque castle from the 17th Century.

I have, being French, been to the great Versailles before but in 2007 Nexans signed, for the first time in its history, an agreement of sponsorship to renovate the technical networks of the Château and Estate of Versailles.

Because protecting the building also meant protecting the site and visitors, Nexans expect this year to renovate the electrical networks, meaning:

- Upgrading the medium voltage installations
- Attaining the highest safety standards
- Modernising the electrical networks

Sponsorship

■ 2007: Great Versailles Palace
Renovation of the power, data and communications network

■ 2011: Electriciens sans frontières
Mission to improve the living conditions of disadvantaged population providing electricity and water. Nexans will supply 50% of ESF's annual cable needs for low and medium voltage power cables

■ 2011: The Louvre-Lens Museum
Nexans is providing the low and medium voltage cables and data cables for the museum's new project

- Reorganising the Groves
- Renovating the power system.

This we learned about from Jean-Jacques Aillagon, Versailles' president, Frédéric Vincent, chief executive officer of Nexans, and Athem's team (the project's design and communication agency) as they went through each stage of the modernisation of the Chateau de Versailles.

Nexans – it appears – felt compelled to undertake the works at their own expense, a generosity normally lacking and out of the ordinary in this day and age.

The other reason we were there was to unveil the huge canvas, due to be draped over the main court of the castle while the work is being carried out.

Continued on page 19





○ The air conditioning system at the Palace de Versailles



○ Groundworks at the site, being sponsored by Nexans

This huge structure now envelops the Versailles' Royal Courtyard, covers some 1,000m² and welcomes visitors with an artistic and surprising sight that shows off the architecture and gardens.

Additionally, the campaign is also to adopt trees, benches and statues in the grounds, something that Nexans has also agreed to underwrite financially.

M Vincent said that Nexans was "glad that the company could again help the Etablissement public de Versailles modernise the palace and grounds, thereby contributing to its reputation worldwide.

"What's more, I am sure that associating our group's name with an unprecedented, original work will be an additional source of pride for all our employees."



The facts

Figures Palace of Versailles phase 1

- 539km of cables (50% for electricity and 50% for communications)
- 22% of Alsecure® cables
- €670,000 worth of cables

I was then allowed underground, under the castle where visitors do not venture. There are small tunnels and secret passageways to be discovered – running alongside the new wire and cable installations, of course.

The difference between the obsolete network present for years in the castle (my fingerprint on these dusty wires was proof of their old age) and what Nexans has provided since 2007 was undeniable.

The company had donated a range of low and medium voltage power cables, telecommunications cables and fibre-optic cables manufactured at plants in Autun, Bourg-en-Bresse, Fumay and Lyon.

Nearly a quarter of the networks have been replaced by Nexans' Alsecure cable. This is part of a range of new fire-resistant cables developed to ensure the continued operation of building safety systems including fire detection, emergency lighting, voice alarm and public address, during the evacuation and fire-fighting period.

In addition to meeting extreme fire conditions for extended periods, the Alsecure® cables are halogen-free and



- Top. The signing of the Palace of Versailles patronage agreement in 2007
- Above. Press conference at the estate of Versailles in 2011 with, from left, Frédéric Vincent, CEO Nexans, and Jean-Jacques Aillagon, president of the Château de Versailles and French politician

flame retardant, with minimal smoke emission.

As for the future, Nexans is continuing with the sponsorship and is also contributing to other national heritage sites and global initiatives among disadvantaged communities.

Allez for Nexans, and merci, merci...

Nexans – France
8 rue du Général Foy
75008 Paris, France
Fax: +33 173 23 86 38
Email: nexans.web@nexans.com
Website: www.nexans.com

东南亚线缆展打破记录

来自60多个国家和地区的392家参展商和5300访问者创新了纪录，确认了东南亚线缆展是该地区的重要平台。

此次展览于2011年9月13-15日在BITEC (曼谷国际贸易展览中心)举行，超过预期比2009年增加了20%。

众多的访问者参加，特别是来自印尼、马来西亚、新加坡、甚至印度，也进一步突出了“共同整体”和快速发展的共同市场，对到2015年将建立一个单一的经济发展的东盟ASEAN越来越重要。

ACIMAF (意大利线材机械制造商协会)的Ferruccio Bellina先生说：“泰国在过去几年发展迅速，现在已在东南亚市场的得到重要位置。

在所有的展览期间在展会现场举行了多次讨论，与来自中国、马来西亚、日本、菲律宾和越南的访问代表团一起极大地推动了东南亚线缆展的专业氛围。

来自当地、周边地区和国际领域对东南亚线缆展的反响，使该展览会战略发展进入又一重要阶段。

Gernot Ringling, 杜塞尔多夫亚洲总经理说：“今年东南亚线材和管道展证明，在泰国和东南亚地区经济持续增涨的驱动下，该地区线材和管道行业生意强劲扩大。”

“做为整个领域最新的制造设备和技术的买家和卖家的主要展会，我们很高兴在高质量访问者人数及参展企业都是两位数字的增长。”

AWCMA (奥地利电线电缆机械制造商协会)主席, Kurt Eder博士说, 展览吸引了高质量的访客和正确的目标观众。

“来自世界各地的访问者给我们非常深刻的印象，还有来自遥远的澳大利亚的专业人士，”他说。

据VDKM (德国电线电缆机械制造商协会)主席Gerhard Bartz博士说“东南亚线材和管道展来自亚洲各地的外国访问者数量大大增加已经证明，该展会是这一地区电线、电缆和管材行业最重要的展会。”

今年的展览重点，包括来自奥地利、中国、德国、意大利、新加坡、台湾、英国和美国8个国家展团和团体。同时还有一个泰国



不锈钢发展协会 (TSSDA) 的成员展出的不锈钢工业产品创意设计展示。

中国参展商团的代表，Wu Lianshe, MC-CCPIT (中国贸促会国际贸易促进委员会冶金分会)的高级经济师认为，作为“东南亚线材和管道展是东南亚地区钢铁和线缆行业的最大和最重要的展览会”。

参加的国际访问者人数的增长，今年7月在雅加达、台北和汉城举行的系列科技研讨会起了不小的作用，吸引了著名的公司包括Eder工程、Maillefer SA、Maschinenfabrik、Niehoff、Reber Systematic、Rosendahl Maschinen和Sikora AG。

谈到2013年东南亚线材和管道展计划，高级项目经理Beatrice Ho说：“通过和本地和国际重要参展商交谈，肯定是最令人鼓舞的承诺参加2013东南亚线材和管道展。”

“这只能证明我们的概念，就是在这一地区的市场需求和东盟市场的日益重要性，客户的满意是对我们最好的支持。”

东南亚线材展2013年将于9月17-19日在曼谷BITEC举行。

Messe Düsseldorf Asia - 新加坡
传真: +65 633 296 55
电子邮件: wire@mda.com.sg
网址: www.wire-southeastasia.com

铝芯电缆增加

Indonesian Cable Manufacturers Association (Apkabel)公司董事长Noval Jamalullail表示铝芯电缆生产于2012年将从150,000公吨增加到180,000公吨，增加20%。他说政府于2006年启动的10,000兆瓦特电厂的雄伟计划的第一阶段促成了此次增加。“该计划是一个大项目，需要在今年年底完成；之后我们的目标是提高铝芯电缆生产，”

Noval说，在下一期德国杜塞尔多夫线材和管材展的小型研讨会后。电厂计划的第二阶段将于2012年开始。他补充说工厂扩建将是计划的一部分，用来增加生产。目前，有38家工厂生产铝芯电缆。“但是，扩展并不表示我们会建新工厂。仅表示我们将增加工厂没有但却需要的设备，” Noval说。Apkabel数据显示电缆年产量为500,000吨，包括310,000吨电力电缆、130,000吨通信电缆、50,000吨专用电缆和10,000吨漆包线。

Indonesian Cable Manufacturers Association - 印度尼西亚
传真: +62 216 338 702
电子邮件: apkabel@cbn.net.id
网址: www.apkabel.org



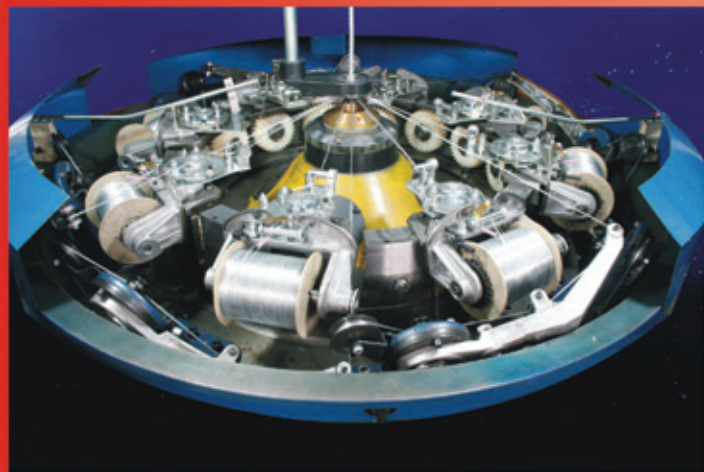
NYDG

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



GSB-1Q型

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



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在精心策划的行业内虚假会议的骗局里，线缆公司成为中国骗子的最新目标

利用众多行业内重要人物的声望，宣传推销中国电线电缆行业峰会，将于2011年11月25日到26日在中国上海世纪皇冠假日酒店举行。

此次峰会由一家叫做Copex Global的公司组办，收费2000美元，并得到业内很多大公司和传媒组织的支持，包括EuroWire和Wire & Cable ASIA杂志都是媒体合作者。

在我们就滥用我们的头衔联系了Copex Global后，这次活动已被取消，为了确认真假，我们联系了酒店，酒店的预定单中并没有该峰会。

我们与Randal Chan和Sean Chen交谈过几次，他们不断要求在此次活动使用的我们的名称。

“这很明显是故意试图假借一个虚假的会议来赚钱，” EuroWire和Wire & Cable ASIA的编辑David Bell说到。

“我已经亲自对Copex Global的代表说过很多次，要求他们从他们的资料上去掉我们的标志并撤出他们的广告宣传”。

“他们居然非常专业的对付我，给我回电话以及电子邮件，但未直接回答我们对他们提出的任何问题。最后，他们给我发了

一封信函，对使用我们的名字表示道歉，并通知我们他们已经取消了此次活动。”

在此次事件上甚至没有一个“发言人”知道到他们将要参与其中。

“这是一个很好的团队合作来谨慎应对。我们现在都意识到仿冒品的另外一种方法。”最初被瞄准的目标公司之一AlphaGary公司的David Kidoo说到。

“以后一定要非常小心所有突然新出现的会议，在发出许多个人信息和做出重要的参加计划前要小心检查他们的“历史”和合法性，”他补充说。

100G海底电缆

Gulf Bridge International (GBI)，是海湾地区第一家私有海底电缆运营商，被业界认为是提供真正100G连接部分海底电缆网络的第一家运营商。

GBI将着力开发100G，以满足日益增长的高容量承载需求，连接欧洲、中东和亚洲。网络技术采用了密集波分复用技术(DWDM)，系统总设计能力在某些区域已提高到接近每秒100太比特。“在业界，100G已被热议很久，GBI很荣幸，迎来海底电缆连接的新时代，” GBI的创始人兼首席执行官Ahmed Mekky说。

“随着容量需求继续积极增长，GBI决定使用最新技术，确保我们能够满足广大客户的长期需求。”

Gulf Bridge International – 卡特尔
 电子邮件: info@gbinc.com
 网址: www.gbinc.com

从坦桑尼亚到桑吉巴的电力线路

基地在印度的Kalpataru Power Transmission公司获得一份建造从坦桑尼亚大陆到桑吉巴的132千伏电力传输线的合同。这个价值900万美金的项目是由美国的Millennium Challenge Corp (MCC)授予的扩大到坦桑尼亚的五年、价值6.981亿美金项目的一部分。

在该项目下，公司将构建从Ubungo变电所到坦桑尼亚大陆的印度洋海岸上的Tegeta 和 Ras Kiromon 的架空输电线。该电力线将从海底连到桑吉巴的 Ras Fumba，并架空输送到桑吉巴的Mtoni变电所。

theestafrican.com报告日本的Viscas公司将负责修建海底电缆来连接该项目的两条架空电力线，计划于2012年8月份完成。期待该项目提高坦桑尼亚的电力输出并通过升级该国目前快瘫痪的45兆瓦的电力传输设施来满足不断增加的用电需求。

Kalpataru Power Transmission – 印度
 传真: +91 792 321 4239
 电子邮件: mktg@kalpatarupower.com
 网址: www.kalpatarupower.com

电缆投标悬而未决

在仅仅收到一份项目投标书后，孟加拉政府安装第二套海底电缆的招标工作陷入困难。在三月份政府首次尝试未收到任何报价后，由当地五家电信公司组成的财团于今年五月参与了投标。

由Mir Holdings、Bangla Trac Communication、HRC Technologies、Advanced Data Networks Systems 和 Agni Systems组成的财团提供了7000万美元的海底电缆安装报价，但评估委员会还没有对报价做出决定，他们表示因无其他投标人，所以无法对报价进行比较。一名政府部门官员表示公布的公告并没有提到仅一份报价是不能接受的。最近Bangladesh Telecommunication Regulatory Commission (BTRC)的委员会评估了财团的报价。提出了一些问题，但是并未表示接受还是拒绝此报价。但电信部门已要求评估委员会重新评估报价。

电信部门特别秘书M Rafiqul Islam说到：“政府采购法并不是说只收到一份报价就取消该报价。如果该公司能满足政府要求就能得到此份工作，”他说。

拟建的海底电缆将通过孟加拉海湾连接孟加拉以及世界其它地区。

Bangladesh Government – 孟加拉国
 电子邮件: info@pmo.gov.bd
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Jindal Steel拨款 4.75亿美元用于阿曼扩建

Jindal Steel & Power Limited (JSPL)是印度最大的钢铁制造商,在苏哈尔拥有Jindal Shadeed钢铁厂,最近投资4.75亿美元用于阿曼的扩建计划,五年贷款利率为225基点Libor (伦敦银行interbank提供的利率)。Jindal Shadeed执行总裁兼JSPL阿曼业务负责人接受马斯喀特日报采访时说:“这项贷款的主要部分将作为阿曼扩建计划的资金支持。有些资金可能用于阿曼以外的技术和技术采购。”

Saraogi接着说:“我们争取在2015-16年将生产能力提高到500万吨。扩建计划启动之前,我们不能透露投资的任何细节,他接着解释说,一旦全面投入运作,必要的材料将来自JSPL公司在玻利维亚的工厂。预计需时两年。”

Jindal Steel & Power Limited – 印度 传真: +91 112 616 1271
 电子邮件: marketing@jindalsteel.com 网址: www.jindalsteelpower.com

印度核电集团批准

Cords Cable公司的低压电力电缆最近收到了印度核电集团有限公司(NPCIL)的批准。NPCIL系印度政府机构,负责设立印度核电项目。公司已有的认证包括仪表、控制、信号、通信和热电偶电缆,加上此次获得的新批准,Cords的整个电缆系列将全部获得核电集团的批准。该组织将致力于为印度该新兴领域提供全方位的服务。

Cords Cable – 印度 传真: +91 112 695 1196
 电子邮件: ccil@cordscable.com 网址: www.cordscable.com

Access Kenya提供光纤回程支持

Access Kenya集团是肯尼亚企业数据和基础设施供应商,将联手Airtel Kenya,通过光缆为客户提供固定语音服务。

这两家公司已经签署了一份合同,允许Airtel接入到Access Kenya的广泛光纤网络。该协议是为Airtel的固定线路语音服务提供连接,也称为E1。Airtel Kenya将购买Access Kenya光纤网络中的E1电路,连接其客户。

Access Kenya集团MD Jonathan Somen说,Airtel 正利用Access Kenya的广泛光纤连接更多的客户和更多的建筑,借助Access Kenya网络为客户提供稳定可靠的服务。

“我们的目标仍然是提供最可靠、最稳定和一流的客户服务与支持,” Somen先生说。

Access Kenya Group – 肯尼亚
 传真: +254 203 600 01
 电子邮件: info@accesskenya.com
 网址: www.accesskenya.com



上海申辰线缆设备有限公司

Shanghai Shenchen Wire & Cable Equipment Co., Ltd

— The Kingdom of Cold Welding Machines



SB-10



SB-10



SB-11



J2-B



J3-B

Shanghai Shenchen Wire & Cable Equipment Co., Ltd(SCH) is located in the city of Shanghai in China, we are a world wide leader in the manufacture of cold welding machinery. Our products are sold internationally including Germany, Brazil, Britain, Russia, Turkey, India, Indonesia, Malaysia, Thailand, Vietnam, Japan, Korea, Egypt and the USA. Our customer service and products are provided to the highest standards. Our products are approved by Safenet Limited and have conferred the CE certificate.

Our products can weld Copper(Cu)wire from Ø0.06 –Ø25mm, Aluminum (AL) wire from Ø0.08–Ø35mm; and flat strips maximum width 33 mm, minimum thickness 0.45mm.

Website: <http://www.sch.chinacable.com.cn>
 E-mail: schsc8@yahoo.com.cn
jasonzhong@vnet.citiz.net

Y14-A


Y15-B


AC705


AC107


AC1208


AC2013


AC158


AC1510


AC2515








Address: Rm. 1804, Bldg. No.1 (Guoke Mansion), Lane 1029, Kongjiang Road, Yangpu District, Shanghai 20093, China.
 Tel: +86 21 65199437 / +86 21 65199438 / +86 21 65187232 Fax: +86 21 65199430

肯尼亚电力公司坚守所缴税款

肯尼亚商业日报报道，肯尼亚税务局（KRA）和农村电气化管理局（REA）正在为18.5亿肯尼亚先令的拖欠税款继续较量，其结果可能放慢更多肯尼亚人连接到国家电网。

通过权力机构财政部，推进税务机关放弃税收积压，其理由是他们运营是不赢利的，不出售任何商品。并且还认为，不知晓其纳税的义务何在。

KRA则坚持，该机构没有豁免缴纳税款权，应该还清自2006年以来拖欠的累积税

款，当时能源部的前身已经升格为独立的法人团体。

“REA假设，他们不交税款是不正确的，”财务助理部长Oburu Oginga告诉国会：“我们已经与KRA就豁免缴纳税款的可能性展开讨论。”

“这极有可能需要对能源法案进行修正，”Oginga先生补充说。

电力消费者在他们每个月的电力消费账单上支付5%的农村电气化征税，交付

给REA以加速肯尼亚农村电力渗透的步伐。

解决欠税似乎放缓了农村电气化项目的进程，该项目将有助于提高该国的电力普及率，从2005年总人口的12%到去年的约30%。

Rural Electrical Authority – 肯尼亚
 传真: +254 020 495 3600
 电子邮件: info@rea.co.ke
 网址: www.rea.co.ke

Kaharani设备通过ISO 9001认证

Cords是LT完整系列电缆和家庭用线的开发商和制造商，公司的新型Kaharani生产设备（印度，拉贾斯坦）最近获得了TUV莱茵其新ISO 9001:2008认证。随着ISO认证的成功完成，公司将协同各公营企业、项目主管部门、顾问们和EPCs主要成员，开启项目审批程序。新的发展给Cords每月带来了30 Cr卢比（700万美元）的总产出，到2011-12第三季度末将逐步增加到每月40 Cr卢比（930万美元）。该设备不断扩大的生产容量将逐步被利用。

Cords Cable – 印度
 电子邮件: ccil@cordscable.com

传真: +91 112 695 1196
 网址: www.cordscable.com

新电缆可能终结数据限量

参与建设新的光纤电缆连接新西兰与美国的团队希望打破目前供应的垄断和消除宽带数据限量。Pacific Fibre新型海底电缆的目标是在2014年的新西兰实现“快速、价廉、无限宽带”。公司首席执行官马克拉什沃思（Mark Rushworth）说，当前互联网使用供过于求，但局势很快就会改变，因为政府将推出超高速宽带（UFB）。

“目前我们为新西兰解决的问题，只涉及一根电缆Southern Cross。所以本质上面临的是经济问题，由垄断的供应商定价。”Rushworth对AMP Business解释道，定价导致数据限量出现在个别宽带计划中，但Pacific Fibre想改变这种状况。“我们所要做的是给新西兰市场带来竞争，也让我们看到了价格的压力，人们可以享受更高的数据限量，或者在某些点消除数据限量，”他说。

Rushworth还认为，如果垄断在一个地方存在，人们使用UFB – 比当前速度快10倍 – 将会更快的超过数据限量。“有增加数据限量的需求，只是为了速度的改善，因为政府正在推进超高速宽带，”Rushworth说。

Pacific Fibre – 新西兰
 网址: www.pacificfibre.net

电子邮件: enquiries@pacificfibre.net

沙特电力签订价值3.07亿美元合同

沙特电力公司，国家支持的电力供应商，与沙特各公司已签署了价值3.07亿美元合同，建设下一阶段的国家电力基础设施。消息最初是由SEC首席执行官Ali S Al Barrak发布的，当地媒体也进行了报道。

该公司称，第一份合同是在卡西姆建设一个变电站；第二份合同是建立两条电力线路，一条连接麦加和塔伊夫，另一条连接塔布克和Dhaba。

沙特一直被不断增长的能源需求所困扰，并在其大城市的人口不断增加，去年一年公司已给予当地和国际承包商数亿元合同，主要兴建厂房和扩建现有基础设施。

SEC已经获得政府和国际贷款，包括来自日本三菱银行的借贷，用于资助国家发电能力的扩张。公司在五月份增加了508兆瓦的容量，年总产50,512兆瓦。

Saudi Electricity Company – 沙特阿拉伯
 电子邮件: info@se.com.sa
 网址: www.se.com.sa

印度升级其电力传输基础设施

印度哈里亚纳邦政府将投资40.58bn卢比（8.94亿美元），用于升级该地区的电力传输和分配网络。政府计划兴建174个新的变电站，在未来三年内提高98个现有变电站的能力。哈里亚纳邦电力部长阿贾伊辛格亚达夫（Ajay Singh Yadav）说，新的

传输线路总长约3,232千米，将铺设在该州，连接新的变电站与能源供给。部长在Khairkan, Kurangawali和Dudhianwali开创了三个132千伏的变电站，为在Shergarh和Mallekan的两个33千伏新变电站开辟了新天地。国营哈里亚纳邦Vidyut

Prasaran Nigam (HVPN) 在Sirsa, Mahendragarh和法里达巴德的三个400千伏变电站已经开始建设和运营。

Haryana Vidyut Prasaran Nigam – 印度
 网址: www.hvpn.gov.in

Increased competition among operators of 4G mobile networks across the Middle East portends a shakeup in the region

Writing in the *National*, the English-language publication of Abu Dhabi Media, Tony Glover observed that fourth-generation telecommunications services are about to transform mobile communications across the Middle East. The London-based journalist reported from the capital of the United Arab Emirates (UAE) that Saudi Arabia launched three separate 4G services in September alone, and the UAE operators Etisalat and du are poised to do the same. According to Mr Glover, although the region's consumers are largely unfamiliar with the new technology "it is expected to cause a major shakeup among the region's mobile operators as they try to woo new and existing customers with high-speed video services." ("Fourth Generation to Spark Major Telecoms Shakeup," 18th September).

"Shakeup" is not extravagant, given that the new capability will enable mobile phone users to view video websites such as YouTube and to access the increasingly large volume of home-made video content on the social networking site Facebook. The term 4G has perhaps become less a scientific label than a marketing brand. Even so, Mr Glover wrote, what all the technologies "lumped together under the 4G umbrella" have in common is the supply of very fast data speeds – several times current levels – to mobile devices. Hence the main marketing thrust of 4G is toward mobile phone users; but Mr Glover sees evidence that, in markets like the Middle East, 4G may hold an even greater relevance for other wireless devices. Mobile operators around the world now offer small USB sticks, known as "dongles," that plug into the sides of laptop computers to permit mobile broadband Internet access. He noted that these are ripe for increased bandwidth.

A British analyst consulted by the *National* commented that, not only will 4G power a new generation of smart phones – it will also provide a faster data pipe for tablet computer users and for dongles. Mobile network operators in emerging markets such as the UAE therefore will have options to weigh. The technology of 4G effectively offers a low-cost alternative to traditional high-speed data networks that rely on a fixed-line cable to deliver the service. Now, this consultant points out, if operators wish to provide high-speed Internet connections to a wide area, they face a choice between digging up the roads to install fibre optic cables or simply erecting an LTE cell tower.

☉ Whichever approach is selected, according to Mr Glover the race is on to deploy 4G across the Middle East – with early adoption in Saudi Arabia set to be followed in the UAE. Vivek Malhotra, an analyst with the California-based market intelligence firm Frost & Sullivan, expects brisk competition. He told the *National*: "With a parallel launch of long-term evolution services in Saudi Arabia, by Mobily and Saudi Telecom, the intense data race has become even more evident with a clear agenda to maximise market share and gain early leadership." The British analyst concurred. As he sees it, operators such as Etisalat may now be forced to follow suit to provide consumers in Abu Dhabi and Dubai with the same level of service being introduced in Saudi Arabia.

Will the offer of cloud services enable telecoms to present themselves as credible alternatives to established IT suppliers?

According to the London-based research and advisory firm Ovum, cloud computing provides a model

that plays to a number of the core strengths of telecommunications companies looking to enhance the service they provide with that provided by information technology (IT) companies.

In particular, Ovum says, the telecoms stand to benefit from the utilisation of communications networks as a delivery mechanism.

The ability to provide one-stop shopping for an entire range of communications and IT needs will be fundamental to attracting enterprises to a service. In support of this thesis, Ovum cited the dominance of Apple and Google over the consumer applications and services market. ("Enabling Cloud Telco Services," *computerweekly.com*, 15th August). "[Large telecoms] are coming to cloud from a managed service point of view," Ovum analyst Mark Giles told *Computer Weekly*. "They are making substantial investments in cloud, in building data centres."

As a group the large providers can thus hope – if not expect – to be seen as an increasingly attractive alternate choice for businesses looking for added-value, high-availability cloud services.

As reported by *Computer Weekly*'s Bill Goodwin, larger players like Verizon and AT&T are distinguishing themselves from cloud-only providers by offering to manage both cloud services and telecommunications for business clients, as part of a high-availability package.

"Cloud combines the two because it is very dependent on the network," the industry weekly was told by Mr Giles. He pointed out that the package generally includes monitoring and feedback on performance, relieving clients of those costs.

☉ The Ovum analyst cautioned that telecoms looking to develop and sell cloud services must be prepared for significant "cultural changes," notably improvement of their expertise, remedying any lack of resources, and bringing internal network workers and IT teams into harmony. Their sales staffs will have to be retrained for a product that does not fit the traditional communications model.

In addition, many telecoms will need to establish or bolster their credibility as IT suppliers. Ovum sees this as an area in which vendors can be of assistance, at the same time advancing their own interests.

Some of the larger IT services players have already entered into go-to-market partnerships with telecoms as a means of capturing market share more quickly.

These are a few more recommendations and caveats from Ovum, a unit of Switzerland's Informa Group, on cloud services via telecom:

- ① SMEs should be a key target market
- ② The telecoms should be conscious of creating another set of siloed systems
- ③ Rapid-service delivery is essential in a cloud environment
- ④ New pricing models will create issues for product management

Elsewhere in telecom . . .

- ① A half-year summary by the independent French agency in charge of regulating telecommunications shows that France and its overseas territories accounted for 65.965 million mobile subscribers at the end of June, up 6.3% year-on-year from 62.063 million in June 2010. Within France itself there were 63.419 million mobile subscribers at the end of June.

The Autorité de Régulation des Communications Électroniques et des Postes (ARCEP) also provided data for the second quarter confirming the continued advance of MVNO (mobile virtual network operator) services. French virtual operators collectively added 741,000 new users in the April-June quarter for a total of 5.975 million, up from 6.49% in second-quarter 2010 and equivalent to a market share of 9.42%. SMS (Short Message Service, or text-messaging) traffic reached 35.52 billion text messages in the second quarter, up 4.8% quarter-on-quarter and 46.8% year-on-year, with average SMS use per customer increasing to 186.1 per month, from 134.2 previously.

- ② Apple outlets in Beijing and Shanghai are among the best-performing anywhere for the US marketer of the popular iPhone. For its most recent quarter Apple Inc reported a 247% surge in sales in the Asia-Pacific region, to \$6.3 billion.

Seeking to capture an even greater share of the booming Asian market, Apple – currently the operator of four stores on the Chinese mainland – is now planning to open one in Hong Kong.

“The scale of retail sales via the open market in Hong Kong is quite high,” Melissa Chau of IDC Asia-Pacific told the BBC (6th September). “It would make sense that they [Apple] want to be the ones profiting from it the most.”

As noted by the BBC, while Apple's products have been very popular with the local residents, analysts say Hong Kong is also catering to increased demand from other parts of the region.

Ms Chau said: “Hong Kong has been a really big port to buy Apple products for consumers who are not [resident] there.”

- ② The selection, on 5th September, by Thailand's Senate of 11 members of the nation's new telecommunications regulator was followed by an immediate rise in the stock value of the three biggest Thai mobile phone companies: Advanced Info, Total Access Communication, and True Corporation. Delays in setting up the National Broadcasting and Telecommunications Commission had been blamed for the slow adoption of high-speed mobile technologies in Thailand.

Taking note of the apparent display of optimism, an analyst at Asia Plus Securities observed that the formation of the new regulator could enliven the bidding for high-speed mobile phone licenses in Thailand.

Porrane Thongyen also wrote in a company report: “All mobile phone companies will benefit from the new licenses, which enable them to expand into new businesses with lower royalty costs than the existing contracts.” (Bloomberg Businessweek, 18th September).

- ③ Huawei, the Chinese telecommunications equipment company, announced its partnership with Aero2, Poland's largest mobile broadband operator, to launch the world's first LTE TDD/FDD converged commercial telecom network.

As reported by telecomasia.net (16th September), the fastest mobile network in Poland will leverage Huawei's SingleRAN LTE solution. It is expected to

boost high-speed mobile Internet access with downlink data speeds of 134Mb/s and uplink speeds of 124.8Mb/s.

The network launch marks a second instance of Huawei-Aero2 collaboration. In May 2011, the companies deployed the world's first LTE TDD commercial network.

- ④ Expanding its footprint in Africa, the Indian telecom Bharti airtel announced an investment of \$100 million over the next three years to provide 2G and 3G mobile services in Rwanda. As reported in the *Economic Times* (9th September), the New Delhi-based company said it has obtained the necessary operating licenses from the Rwandan government.

The chairman and managing director of Bharti airtel, Sunil Mittal, said in a statement that, according to the National Statistics Institute of Rwanda, the mobile penetration in the country was 38.4% as of July 2011.

The operator accordingly considers the nation to be a key telecom market. Bharti first entered Africa with its \$10.7 billion purchase of the African assets of Saudi Arabian operator Zain. The Rwandan deal gives Bharti a presence in 16 African countries.

- ⑤ A mid-September report from the British business intelligence firm Juniper Research warns that the world's mobile operators will need to spend some \$840 billion over the next five years to upgrade their backhaul networks for the coming data deluge – or else face serious backhaul bottlenecks.

Radio network upgrades are not enough when existing backhaul infrastructure is incapable of supporting the forecast growth in consumption and users, according to report author Nitin Bhas.

Juniper also forecasts the growing importance of microwave in backhaul networks, estimating that the technology will account for over 60% of the world's backhaul capacity by 2016.

The company also expects that fibre will take up a larger share of the market.

日益增强的中东4G移动网络运营商之间的竞争预示着区域重组

Tony Glover在阿布扎比媒体的英语出版物the National中撰文，他观察到：第四代通信服务即将转化中东的移动通讯。这名以伦敦为基地的记者从阿联酋首都报道：沙特阿拉伯于9月份独自推出三款4G服务，阿联酋运营商Etisalat和du也将推出同样的服务。据Glover先生所述，尽管区域的消费者不大熟悉这种新技术，但“期望在区域的移动运营商中形成一次重大重组，因为他们力图用高速视频服务来争取新的和现有客户”（“第四代将引发主要通讯重组”）

鉴于新的能力将能使移动电话用户收看诸如YouTube之类的视频网站，并进入社会网络Facebook上的数量不断增加的家庭制作视频内容，所以，“重组”并非夸大。4G这个词与其说是一个科学标志，还不如说是一个市场品牌。即便如此，Glover先生写道，“聚在4G大伞下”的所有技术归根到底是为移动服务提供非常快的数据速度 - 快过现有的几倍。

因此，4G的主要市场推力朝着移动电话用户；但是，Glover先生还发现：在诸如中东这样的市场，4G可能与其它无线电装置保持着大得多的相关性。全世界的移动运营商现在提供小型U盘，称为“版权钥匙”，将其插入手提电脑后就可无线进入宽带英特网。他注意到这些对于不断增加的宽带来说是成熟的。the National咨询的一份英国分析家评论道：4G不仅将成为新一代智能电话，而且还将为台式电脑用户和版权钥匙提供一个更快的数据通道。所以，在诸如阿联酋这样的新兴市场中的移动网络运营商将拥有可能权衡的各种方案。4G技术为依赖固定线电缆提供服务的传统高速数据网络有效地提供一个低成本的变通方案。现在，这位咨询师指出：如果运营商希望将高速英特网连接到一个广泛的区域，那么他们将面临一个选择：挖掘道路安装光缆或安装LTE电话塔。

◎ 不管选择哪种途径，据Glover先生所述，在中东部署4G的比赛开始了 - 最先采纳的是沙特阿拉伯，随后是阿联酋。以加利福尼亚为基地的市场分析公司Frost & Sullivan的一位分析家Vivek Malhotra预计这场比赛速度是挺快的。他告诉the National：“随着Mobily和Saudi Telecom在沙特阿拉伯同时推出长期的进化服务，密集的数据比赛显现出一个更加清晰的日程表，以便最大化市场份额，尽早赢得领跑地位。”这位英国的分析家对此具有相同的看法，因为他看到：诸如Etisalat之类的运营商现在可能被迫紧随其后，为阿布扎比和迪拜的消费者提供与沙特推出的同样水平的服务。

提供云服务能使电信为IT供应商提供可靠的方案吗？

根据以伦敦为基地的研究和顾问公司Ovum所述，云计算为许多具有核心实力的电信公司提供了一种模型，增强为信息技术（IT）公司提供的服务。尤其是，Ovum说，电信作为一种递交机制，准备从通信网络的利用获取盈利。

吸引企业来购买服务，为整个通讯和IT的需要提供一步到位式服务的能力是最基本的要求。为了支持这个观点，Ovum引用Apple和Google对客户应用和服务市场的实例（“能够提供云通讯服务” computerweekly.com, 8月15日）。

“从一个服务得到良好管理的角度出发，[大通讯]即将到来到云”Ovum分析家Mark Giles告诉Computer Weekly。“他们在云方面做了实质性投资，构建数据中心。”

作为一个团体的大型提供者则能希望其被看成是一个吸引力不断上升的变通方案，受到期望增值和高度可靠的云

服务的各种业务的青睐。如Computer Weekly的Bill Goodwin报告的那样，诸如Verizon和AT&T之类的大型公司正在努力地将自己与仅提供云服务的提供者区分开来，他们还要为业务客户提供云服务和电信的管理，作为高拥有性包的一部分。

“云将两者合二为一，因为它非常依赖网络”Giles先生告诉每周工业。他指出：这种包一般包括业绩监测和反馈，为客户节约那些成本。

◎ Ovum分析家提请注意：开发和销售云的通讯公司必须准备好重大的“文化变革”，显著改进他们的专业知识，弥补缺乏资源，使内部网络工人和IT团队和谐工作。针对与传统通讯模型不匹配的产品，他们的销售人员必须重新经过培训。另外，许多通讯公司作为IT供应商，要建立或改善其可靠性。Ovum认为这是供货商可以予以援助的一个方面，同时促进其自身的兴趣。一些更大的IT服务商已经与通讯公司签署了进入市场的合作伙伴协议，作为更快获取市场份额的一个手段。

这些是瑞士的Informa Group旗下的Ovum对通过通讯公司云服务提供的一些建议和告诫：

- ◎ SME应当是一个关键市场
- ◎ 通讯公司应当有意识地创建另一套建仓系统
- ◎ 快速服务递交是云环境的基础，以及
- ◎ 新的定价模型将引出产品管理问题

通讯方面的其它消息...

◎ 负责管理电信的法国独立机构的半年总结表明：法国及其海外领域在6月底的移动用户为6596.5万，与2010年6月的6206.3万相比，年度增长了6.3%。法国本土移动用户在6月底为有6341.9万。Autorité de Régulation des Communications Électroniques et des Postes (ARCEP)还提供了第二季度的数据，确认MVNO（移动虚拟网络运营商）服务将继续增长。法国虚拟网络运营商在4月到6月这个季度总体新增74.1万用户，总数达597.5万，比2010年第二季度增长了6.49%，相当于市场份额的9.42%。第二季度的SMS（短信服务，或文字信息）流量达355.2亿条文字信息，季度对季度上升了4.8%，年度对年度上升了46.8%，每个客户平均每月SMS使用量从以往的134.2条增加到186.1条。

◎ Apple在北京和上海的销售当属美国市场流行iPhone最好业绩之列。在最近一个季度，Apple Inc报告其在亚太区的销售上升了247%，达到63亿美元。Apple希望在新兴的亚洲市场获取更大的份额，Apple目前在中国大陆经营4家店，计划在香港再开一家。“通过香港开放市场的零售规模是很大的”IDC亚太的Melissa Chau告诉BBC(9月6日)“他们[Apple]想成为从中获利最多的公司之一。”如BBC的报道，Apple的产品在当地非常畅销，分析家说：香港也欢迎来自区域其它地方对Apple产品不断增长的需求。Chau女士说：“香港真的是一个大港口，不住在香港的消费者也到香港来买Apple产品。”

◎ 继9月5日泰国11名国家通信新立法参议员选举之后，泰国三大移动电话公司 - Advanced Info、Total Access Communication、和True Corporation的股票面应声上涨。人们在抱怨国家广播通信委员会的延迟成立，因为这延缓了泰国对高速移动技术的采用。Asia Plus Securities的分析家注意到了明显出来的优化，观察到：新的立法委员会的成立可能搞活泰国的高速移动电话许可的报价。Porrane Thongyen也在公司报告中写道：“所有移动电话公司将从新的许可受益，新的许可可能使他们扩展到新的业务，其许可费低于现有的合同”（Bloomberg Businessweek, 9月18日）。

Financial

Who will rate the raters? Or, what use are Standard & Poor's et al, anyway?

"On the other hand, it's hard to think of anyone less qualified to pass judgment on America than the rating agencies. The people who rated subprime-backed securities are now declaring that they are the judges of fiscal policy? Really?"

The economist and Nobel Prize winner Paul Krugman had briefly reviewed the acrimonious negotiations that preceded US President Barack Obama's eleventh-hour signing into law of a bill enabling the nation's debt ceiling to be raised. Now he was getting down to his real purpose: to question whether the three major American rating agencies are competent to be in the business of evaluating creditworthiness, at all.

Mr Krugman cited, in particular, Standard & Poor's, which miscalculated by \$2 trillion; conceded having made the error prejudicial to the United States; then went on regardless to lower the long-term US top rating of AAA to AA+. ("S&P and the USA." 5th August).

Together with banks and mortgage lenders, the leading US rating agencies have been identified as parties that contributed to the country's current economic problems. All three agencies – S&P, Moodys, and Fitch – failed to see the credit crisis of 2007 coming. For years they had bestowed AAA ratings on bundles of mortgage bonds even though many of the loans inside those securities were highly dubious.

Investors, reassured by the positive ratings, purchased the securities. When holders of mortgages defaulted, investors lost quickly and heavily, setting off the panic that drove the financial crisis.

The current outcry against Standard & Poor's in Washington may signal a new attitude toward complaints of unfairness from other governments that have had their credit standing impugned. Despite the pushback, however, the rating agencies retain weight in the financial markets; careful investors still monitor their views on sovereign debt in Greece, Japan, Italy and – now – the United States.

China in New York

To a low-key but warm welcome, Chinese money flows rapidly into the realty markets of Manhattan and environs

"The Chinese investments are occurring with little fanfare, in part because Chinese executives tend to shun publicity.

"But, back home, their government is urging them to invest overseas to diversify China's foreign-exchange holdings, develop business partnerships, and improve the country's leverage in international affairs."

The reference by Kirk Semple, of the *New York Times*, was to something that had gone virtually unnoticed until very recently: the surge in investment in New York City, over the past few years, by companies and entrepreneurs from China. To Mr Semple, the phenomenon recalls the boom in Japanese investment that swept the region in the 1980s, although it is meeting with none of the resentment aroused by that earlier buying spree.

Today's well-heeled investors, from China, are welcomed as helping to buoy the local economy even as the broader US economy struggles. ("As Investors, Chinese Turn to New York," 10th August).

According to the *Times*, Chinese banks have poured more than \$1 billion into real estate loans in New York City over the past year. Investors from China are planning to spend hundreds of millions of dollars on commercial and residential projects like Atlantic Yards, a 22-acre commercial and residential project in Brooklyn that includes a new stadium for the New Jersey Nets. Chinese companies have signed major leases at iconic sites such as the Empire State Building. And the China Center, a business and cultural organisation, was the first tenant to sign a lease (for six floors of space) at 1 World Trade Center, the main element of the rebuilding going on at Ground Zero.

Delegations of Chinese swept through the city on a nearly weekly basis over the summer, assessing the markets, seeking out office locations, and meeting prospective partners and clients. In July, officials and executives from China and the United States filled a ballroom at the Waldorf-Astoria to make deals during a business conference. "Even one of the region's fastest growing construction companies is Chinese," Mr Semple wrote. The company, China Construction America Inc (Jersey City, New Jersey) has won contracts on major public works projects including the Tappan Zee and Alexander Hamilton bridges, the No 7 subway line extension, and the \$91 million Metro-North Railroad station at Yankee Stadium in the Bronx.

- ❖ Analysts, as well as American and Chinese officials consulted by Mr Semple, said it is difficult to calculate the precise size of Chinese investment in New York, or even the number of deals with Chinese participation, because of the complexities of international business arrangements and privacy laws. But experts said the current level of interest in the city is only a hint of what could lie ahead.
- ❖ Remarkable in its own right, the Chinese zest for New York is more significant as an indicator of Beijing's keen interest in diversifying its foreign exchange reserves beyond United States Treasuries ("T-Notes"). Flush with capital from its enormous trade surpluses, China has been on the lookout for other investment opportunities. Its presence in the US has been growing accordingly, and there is no apparent reason why that trend should shift any time soon.

Clarence Kwan, a senior partner at the New York-based business services firm Deloitte, told the *Times*: "In terms of overall flow from China into the US, many of us believe that it could accelerate very quickly, and could even parallel what Japanese investment did in the mid-'80s."

India in Minnesota

Essar Steel's Iron Range ambitions: taconite production in 2012 and 7 million tons of pellets by 2015

"Essar, like Magnetation and Mesabi Nugget, is an important milestone not just for being a new taconite plant, but for the kind of technology that's going into it. Nobody else is doing this." The reference by Craig Pagel, executive director of the Iron Mining Association of Minnesota, was to Essar Steel Minnesota, of Nashwauk, and its state-of-the-art methods for making taconite and, eventually, direct-reduced iron and steel.

Essar Steel Minnesota is a subsidiary of the Indian steel giant Essar Group, a \$20 billion firm with headquarters in Mumbai and some 70,000 employees worldwide. Mr Pagel sees Essar Steel Minnesota as an outstanding example of his state's eminence in mining innovations. The other companies he cites are either processing valuable ore out of mine waste (Magnetation, also Nashwauk-based) or making iron nuggets directly from taconite concentrate (Mesabi Nugget, of Silver Bay).

In Nashwauk, Essar's construction of Minnesota's first new taconite plant in 34 years will further its advance toward becoming one of the largest iron ore producers on the Iron Range. When finished, the plant will be the first fully integrated mine-through-steelmaking facility, at a single location, in North America.

As noted by John Myers, who interviewed Mr Pagel for the Duluth (Minnesota) *Budgeteer News*, the bustling site is an encouragement to Iron Rangers who attended a groundbreaking ceremony in 2008 but saw little subsequent activity. Promising "real progress" from the renewed effort, Madhu Vuppuluri, the president of Essar Steel Minnesota, said that construction crews "will be working all winter to get it done." ("Construction Moves Ahead on Iron Range Plant," 1st August).

Mr Myers reported that about 30,000 tons of steel was being brought to Nashwauk to frame the crushing mill, pelletizing plant, and furnace that will bake taconite into marble-sized balls.

The company expects to have the mine open and the processing plant producing taconite by the end of next year – on the way to producing 4.1 million tons of pellets each year, with about 300 workers. A second phase would boost production to 7 million tons within a few years, raise the company's Nashwauk investment to \$1.7 billion, and require an additional 100 workers.

❖ As impressive as the Essar taconite project is, the real charm for Minnesotans lies in the third phase of the company's plan: the use of Nashwauk taconite to make direct-reduced iron to feed the first-ever onsite electric arc steel mill to produce slab steel. Mr Myers of the *Budgeteer News* noted that this is a long-held dream of Iron Range leaders who, for more than a century, have seen iron ore shipped out and made into finished products elsewhere. The steel mill phase is, however,



The poster features a background of glowing blue and orange curved lines. At the top, the word "wire" is written in red, with a registered trademark symbol, above "Düsseldorf" in white. Below this is a circular logo composed of concentric lines. To the right, the text "join the best" is written in red. Further down, the dates "26 – 30 March 2012" and location "Düsseldorf, Germany" are listed, followed by "International Wire and Cable Trade Fair" and the website "www.wire.de". At the bottom, three icons represent "Wire & Cable", "Springmaking", and "Fastener".

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the least certain, with development not slated to begin until 2015 at the earliest and then only if North American steel demand warrants it. Mr Vuppuluri told another Duluth newspaper, the *News Tribune*, “[A steel mill at Nashwauk] is dependant on the domestic and Canada housing markets coming back much beyond where they are now.”

- ❖ The Essar Minnesota president added: “We’re optimistic.” But a factor in his calculations will be the additional \$1 billion or so that the steel phase of the project would require. Unable to raise capital in the US for the taconite plant, the company obtained the \$1.7 billion from Indian banks. Those lenders demanded that steel from India be used at Nashwauk, over some local objections for which the Essar Minnesota president supplied context. “Every dollar being spent here is coming from India,” Mr Vuppuluri told the *News Tribune* in an 3rd August interview at the plant site. “I’m very proud of that particular achievement and we are very privileged to be associated with this community.”

Japan in Brazil

Japan’s NTT aims to expand a Brazilian beachhead to cover the rest of South America over the coming decade

NTT Communications Corp announced that it has extended the reach of its tier-one global IP network in South America with a new point of presence (PoP) location in São Paulo, Brazil’s most populous city. Writing from Portland, Oregon, in *EE Times* (12th September), R Colin Johnson noted NTT’s strong belief that South America is the next big growth market in connected electronics.

NTT’s infrastructure already includes tier-one IP backbone connections in 150 countries. Its new PoP will connect major markets in the US, Europe, and Asia to Internet service providers, content delivery networks, and independent enterprises in South America. Michael Wheeler, vice president of NTT America’s Global IP Network business unit, told *EE Times*: “Broadband is still growing in the US, Europe, and Asia. But from a traffic perspective the big opportunities for the next three to five years will be in Latin America.”

New York-based NTT America and NTT do Brasil Telecomunicações Ltda, NTT’s Brazilian subsidiary, will jointly manage the expansion into South America, which to date has been serviced only by smaller private-network connections. As reported by Mr Johnson, with the establishment of a tier-one PoP in Brazil, companies in the region will be able to directly access NTT assets elsewhere. From that beachhead, NTT plans to expand over the next decade into servicing the entire continent. “Brazil is the epicenter of emerging telecommunications opportunities in South America, but there are many other growth opportunities throughout the region,” said Mr Wheeler of NTT America. “We put Argentina and Chile on the top of our list of emerging markets there, but we also

have customers in Colombia, Peru, and Ecuador where we hope to take advantage of our familiarity with their requirements and what their top-tier players are looking for in broadband growth.”

Automotive

Joint development of a hybrid drive train for SUVs and light trucks

“Interestingly, Ford and Toyota said they’ll also work together on future telematics and in-car Internet services, perhaps driving the costs so low [that] data cellphones can be embedded in any vehicle.” Writing in *Extreme Tech*, Bill Howard was going beyond the obvious aspects of the pledge by Ford Motor Co, of the US, and Japan’s Toyota Motor Corp to work for joint development of a new hybrid drive train for SUVs and light trucks.

The American auto industry must deliver a corporate average fuel economy of 54.5 miles per gallon (mpg) by the 2025 model year. The two parties to a 22nd August memo of understanding believe that, with a combined effort, they will be able to bring hybrid vehicles to market sooner and more affordably. (“Why Ford and Toyota Will Jointly Develop Hybrid Truck Technology,” 22nd August). The two auto makers had been working separately on hybrid drive trains (engines, transmissions, battery packs) for light trucks such as pickups and for SUVs, when discussions begun between them in April found considerable common ground. The equal partnership to be formalised early in 2012 marks their first collaboration.

As construed by Mr Howard, the deal will focus on creating a new rear-wheel-drive hybrid system. Most of Ford and Toyota’s hybrid work to date has been on front-drive vehicles (sometimes with the hybrid electric motor driving the rear wheels to create what might be termed an all-wheel-drive vehicle). When the component technology work is complete, the two companies will integrate the technology in different ways into pickup trucks and SUVs due to be launched before the end of the decade.

While this is ambitious enough, Mr Howard sees in the Ford-Toyota connection an “equally intriguing” possibility: a push to jointly develop telematics, information, and entertainment services. Ford and Lincoln are the industry leaders with the Sync platform that combines USB, Bluetooth, voice recognition, and emergency crash notification (via cellphone) that is free of charge on higher-end cars; \$295 (down from \$395) on cheaper models. “Toyota’s Entune works similarly,” Mr Howard noted. “Working together, [Toyota and Ford] could drive the costs even lower and possibly integrate a data-and-voice cellphone into the vehicle.”

- ❖ The cost of an embedded cellphone in a motor vehicle was still several hundred dollars when Sync arrived in 2008. Now lower, it also buys more features. As noted by *Extreme Tech*, a cellphone-equipped car can disclose where it is in the parking lot or out on the highway (for all that that means for tracking car thieves or joy-riders). It can receive driving directions sent from a laptop.

And the antenna of such a car enables a better phone connection than that provided by a mobile handset.

- ❖ To return to the automotive basis of these projected advances, it is worth noting that the Ford-Toyota joint venture is not the first in the US for development of hybrid technology for pickup trucks and SUVs. In 2004, General Motors; DaimlerChrysler, of unhappy memory; and BMW set up a joint hybrid development centre in Troy, Michigan, to create electric motors, transmissions, electronics, wiring, and safety modules. The system developed there powers some GM pickups and SUVs but has not sold well.

The strong yen confirms Honda in its commitment to North American production as well as sales

Honda Motor Co has said it will build an \$800 million auto plant in Celaya, in the Mexican state of Guanajuato, to make subcompacts. Honda's eighth facility in North America will raise the Japanese car maker's production capacity in that market from the current 1.63 million units to 1.83 million units by 2014. As noted by Chris Woodyard in *USA Today* (12th August), currently the compact Civic is the smallest model made in North America by American Honda Motor (Torrance, California).

The subcompacts it offers – the popular Fit and the hybrid CR-Z and Insight – are made in Japan. But the rising value of the Japanese yen vis-à-vis the US dollar has been killing profits, and has prompted a tilt by the company toward producing cars for Americans closer to the point of sale. In 2010, more than 87% of Honda and Acura cars and light trucks sold in the US were produced in North America. "This will be one big plant," wrote Mr Woodyard, plausibly: it will employ 3,200 workers to turn out 200,000 cars and engines a year. Honda is no stranger to the Celaya automotive cluster, north of Mexico City, where the German car maker Volkswagen and the Italian tyre maker Pirelli, among others, have put down roots. A Honda auto plant 210 miles to the east – in the neighbouring Mexican state of Jalisco – already makes cars, motorcycles, and auto parts.

A range of favourable factors draws auto parts makers to Mexico

In the first half of 2011, according to the Mexican trade association National Auto Parts Industry (INA), ten Japanese automotive suppliers and others from Canada and Germany (for a total of 50 overseas companies) invested in new operations in Mexico. The INA credits this to a mature Mexican automotive sector, proximity to the US, free trade agreements that allow export to 40 countries, favourable

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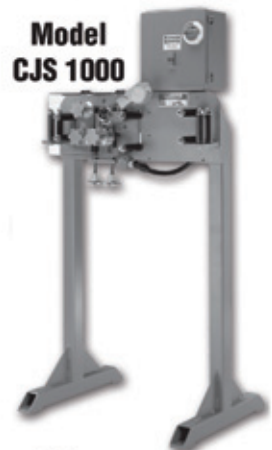
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exchange rates, and comparable investment by original equipment manufacturers (OEMs). As reported by *Mexican Business Web*, Javier Rion, operations director of the metals and ceramics company Grupo Industrial Saltillo, also cites higher costs in China and rising oil prices which impact the cost of transportation. Assemblers in Mexico are thus looking to replace some imports, to the benefit of auto parts manufacturers with a presence in Mexico. In March of this year the Mexican auto parts industry recorded its highest level of utilisation of installed capacity since the onset of the global economic crisis in 2008. ("Mexico Appealing for Auto Parts," 3rd August).

Antonio Ramirez is mayor of Salamanca in the industrial corridor of the state of Guanajuato. Current and projected regional activity reported by Mr Ramirez includes the following:

- ❖ The arrival of more raw material suppliers for four or five satellite units planned for its Mexican operations by the Japanese auto maker Mazda
- ❖ The opening of a Fujikura plant in Muzquiz, Coahuila. This will be the third Mexican facility for the Japanese automotive electronics maker
- ❖ Three new plants in Chihuahua for the Japanese automotive equipment supplier Yazaki, whose Yazaki North America headquarters is in Canton, Michigan
- ❖ A second, \$300 million plant to be built by the South Korean steel maker Posco at its present site in Altamira. The galvanised steel output will go 75% to auto makers based in Mexico; the rest will be sold abroad

The Digital Age

Four tech giants with a combined market capitalisation of \$616 billion cast covetous eyes over one another's fiefs

"It's the biggest, most intense battle in tech history," said Ted Morgan, chief executive of Skyhook Wireless, a firm that provides location-based technology for mobile devices. "It's so much bigger than even the Microsoft, Apple, IBM battles of the 1990s. I think all four of those guys get it."

Mr Morgan was sharing his views with Jia Lynn Yang of the *Washington Post*, who did not need to be told that the "guys" meant are in fact companies – Google, Apple, Facebook, and Amazon – also known as "the gang of four" and "the four titans of tech." Such attempts to reduce the quartet to a comprehensible size have not met with much success. Huge, rivalrous firms that, in Ms Yang's words, "are impossible to escape, tapping nearly every consumer's wallet and holding vast power over huge swaths of the [US] economy" do not readily assume a human face.

That the battle for American tech supremacy asserted by Mr Morgan comes down to these four is taken for granted, by them and everyone else. Also widely accepted is his assertion that they all "need to have something on every front." Ms Yang goes a step further, perceiving connections as well as divisions. "Each is lacking something that another one has," she wrote. "Put in the missing pieces, and one company has the potential to be all things to all people – a complete system in which consumers spend

most of their time watching videos, reading the news, writing email," and, of course, "making purchases." ("Four Titans of Tech Are Racing to Be King of Digital Age," 16th August).

Whatever its defects as a design for living, that is the shared ideal of the titans of tech and they are unlikely to be deterred from pursuing it. The battle has already been joined. The 15th August announcement of Google's projected \$12.5 billion acquisition of cellphone maker Motorola Mobility Holdings serves notice on Apple that its Silicon Valley archrival intends an even deeper incursion into Apple's smartphone territory.

Of related interest . . .

- ❖ The recent \$12.5 billion offer by Google for Motorola Mobility (Libertyville, Illinois) was remarkable for the rich 63% premium the online advertising giant was willing to pay, justified on grounds of the cellphone company's trove of patents. The deal points up the growing significance of patents in mobile telecom and the steep prices they command from companies anxious to keep them out of the hands of rivals.

"Dealbook" blogger Evelyn M Rusli noted (16th August) the view of analysts that, as the web gravitates to mobile and patent litigation rises, patent portfolios will only increase in value. By how much, no one can say. But to that point in the summer, Ms Rusli wrote, patent deal making was "on a roar."

In July, Google bought 1,000 patents from IBM after losing a bid to buy an even larger lot from Canada's Nortel Networks. The Nortel prize, 6,500 patents, went to a consortium led by Google competitors Apple and Microsoft. The winning bid was \$4.5 billion.

According to "Dealbook," now other companies with large mobile patent portfolios – like Alcatel-Lucent, Kodak, Research in Motion, and Nokia – "are being scrutinised as possible targets for licensing deals or full-on takeovers."

In brief . . .

- ❖ According to the global market intelligence firm IDC, China in the second quarter of 2011 shipped 18.5 million PCs domestically, thus eclipsing the US (17.7 million PCs shipped) to become the world's biggest market for personal computers. The shift reflects the rising wealth of China's population; but full-year totals are likely to find the US still in the top spot, with 73.5 million PC shipments versus 72.4 million in China.

IDC (Framingham, Massachusetts) explained that PC shipments within the US typically rise in the fourth quarter, offsetting a slower pace to that point, while Chinese shipments shrink after the traditional summer discount season. Even so, the trend favours China, which in 2012 is expected to lead the annual ranking. Its advance can be seen as a function of rising demand for electronics in emerging markets in a period of relative saturation in more mature regions.

Dorothy Fabian – Features Editor

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金融

谁来为评级者评级？或者说，标准普尔等的作用究竟是什么？

“另一方面，很难想象一个人能象评级机构那样缺乏资质却还在评价美国。那些曾为次级抵押贷款证券评级的人现在宣称他们是审判财政政策的法官？真是如此吗？”经济学家及诺贝尔奖获得者Paul Krugman简要地回顾之前美国总统巴拉克·奥巴马历时11小时尖锐的谈判，并签署了允许上调国债上限的法案。现在他开始了此举的真正目的：质疑美国最大的三家评级机构是否真正胜任其在资信评估领域中开展的业务。Krugman先生特别指出，标普曾错误计算了2万亿美元，承认该错误对美国有所损害；然后又不顾一切的将美国长期债券的评级从AAA降到了AA+（《标普和美国》，8月5日）。

连同银行和抵押贷款机构，美国主要评级机构已经被认为是美国目前经济问题做出“贡献”的肇事方。三家机构——标普，穆迪，惠誉未能预测出2007年的信贷危机。多年来，他们赋予捆绑抵押债券以AAA评级甚至在这些证券内部贷款十分可疑也一样。而投资者，出于对正面评级信任，购买了这些证券。当贷款人拖欠时，投资者损失剧烈而惨重，引发了产生金融危机的恐慌。

中国在纽约

面对低调而又热烈的欢迎，中国资金快速流入曼哈顿及周边地区房地产市场

“中国人的投资正悄然无声的进行着，部分原因是中国高管试图避开公众。但是，回到中国，他们的政府促使他们在海外进行投资以使中国的外汇持有多样化，发展商业合作关系，提高国家在国际事务中的杠杆作用。”引用《纽约时报》Kirk Semple的话，有关一些直到最近不久才刚刚引起关注的事：在过去的几年中来自中国公司及企业家的投资在纽约飞速增长。用Semple先生的话来说，这个现象让人回忆起上世纪80年代日本投资席卷该地区的高潮，虽然还未遭遇因早先抢购风潮而引起的怨恨。如今来自中国衣着考究的投资者作为帮助提振地方经济甚至是拓宽美国经济的努力而受到欢迎。（《作为投资者，中国人来到纽约》，8月10日）

根据《时代》的报导，中国的银行在过去一年中已经在纽约房地产贷款中投入了超过10亿美金。来自中国的投资者正计划花费数以亿计的美金在商业及居住项目诸如亚特兰大花园（一个位于布鲁克林地区面积达22英亩的商业及居住项目，其中包括一个为新泽西网队新建的体育馆）。中国公司已经在诸如帝国大厦等的地标建筑签署了主要租赁合同。还有中国中心，一个商业文化组织，首个在世贸大厦第一塔签订租约（六层空间）的租客，该塔在世贸大厦遗址重建。

整个夏天中国代表团几乎每周都充斥着整个城市，评估市场，寻找办公地点，与潜在合作伙伴及客户会面。7月，来自中美两国的官员及高管聚集在华尔道夫酒店（Waldorf-Astoria）的一个宴会厅，在商务会谈中作交易。

“甚至该地区成长最快的建筑公司之一也是中国公司，” Semple先生写道。该公司，即中国建设美国公司（泽西城，新泽西州）已经赢得包括Tappan Zee和亚历山大·汉密尔顿大桥、地铁7号线延伸以及价值9100万美金的在布朗克斯（Bronx）的扬基体育馆北火车站的地铁在内的主要公共工程项目。

❖ 分析家以及由Semple先生提供咨询的中美官员，宣称由于国际交易安排的复杂性和隐私法，因此很难精确计算中国在纽

约的投资规模，甚至是中国参与的交易数量。但是专家说，目前对城市的感兴趣程度只是山雨欲来的前兆。

❖ 比较值得注意的是，中国青睐纽约更像是一种北京希望将其外汇储备多样化的信号而不再一味的购买美国国债（“T债券”）。拥有贸易顺差中赢来的充沛的巨额资金，中国一直在寻找其他投资机会。中国在美国的影响力也在增长，而且没有显著原因会使得趋势短期内有所改变。

德勤纽约总部的高级合伙人Clarence Kwan告诉时报：“从中国投资流入美国的总体情况看来，我们很多人都相信投资可能快速增长，甚至可与八十年代中期的日本投资相提并论。

印度在明尼苏达

埃萨（Essar）钢铁在铁矿山脉目标：2012年内铁燧投入生产，2015年前产量达到700万吨团球矿。

“埃萨，就像Magnetation和Mesabi Nugget，对他们准备介入的这种技术而言，不仅是一个铁矿石厂商而是个重要的里程碑。没有其他人这么做。”根据明尼苏达州铁矿协会执行董事Craig Pagel的评价，在Nashwauk的埃萨钢铁（明尼苏达）和它国家最先进的技术来炼制铁矿石以及，最终生产直接还原铁和钢。埃萨钢铁（明尼苏达）是印度钢铁巨人埃萨（Essar）集团的分支机构，该集团是市值200亿美金的机构，总部设在孟买，全世界范围内有7万多名员工。

Pagel先生把埃萨钢铁（明尼苏达）看作他国家在矿业革新的杰出代表作。他评论道，其他公司是看有用铁矿从矿渣中提取出来（Magnetation，同样以Nashwauk为基地）或者把铁矿直接从铁燧石精矿中提取出来（Mesabi Nugget，银湾）。

在Nashwauk，埃萨集团在明尼苏达的第一座新的铁矿石厂建筑34年来将首次向铁矿领域的最大铁矿石供应商方向迈进。等完成时，该厂将成为第一座完全综合型的从矿石到钢铁制造功能于一身，就坐落在北美的同一地点。正如John Myers所说，他曾为度鲁斯（Duluth）（明尼苏达州）的《Budgeteer新闻》采访过Pagel先生，进出频繁对铁矿山脉的人来说是种鼓励，他们在2008年参加了开工典礼但没有看到随后的行动。许诺要“动真格”的来自新官上任，埃萨钢铁（明尼苏达）的总裁Madhu Vuppuluri先生说，施工队伍“将会整个冬天都在工作以结束它。”（铁矿山脉工厂的施工正在进行，8月1日）。

Myers先生报道说大约3万吨的钢材被送到Nashwauk为碎石厂、球团厂搭建结构，高炉把铁矿石熔化成大理石大小的球。公司预计开矿和加工工厂加工铁矿石要等到明年年底——预计每年将能生产410万吨的球矿，雇佣大约300名工人。第二阶段将在数年内将产量达到700万吨，将公司在Nashwauk的投资增加到17亿美元，并需要再雇佣100名工人。

❖ 和埃萨铁矿石项目一样让人印象深刻的是，对明尼苏达人来说真正的吸引力来自公司的第三阶段：用Nashwauk的铁矿石来生产直接还原铁来供应首次出现的电弧钢铁生产厂来生产钢板。《Budgeteer 新闻》的Myers先生评论说，这是铁矿山脉领导人长期以来一直的梦想，一个多世纪以来，只看到铁矿被运出在其他地方被制成成品。

然而，钢厂的现阶段至少可以肯定的是，伴随着发展计划最早要到2015年才开始，只有那时北美的钢铁需求才会允许这样做。Vuppuluri先生告诉另一家度鲁斯的报纸《新闻论坛》（News Tribune）“[在Nashwauk的钢厂]依赖美国国内和加拿大的房屋市场复苏而非目前它们的状态。”

❖ 埃萨（明尼苏达）的总裁附加道：“我们很乐观。”但是他计算的因素中要加上10亿美金，这是钢铁项目现阶段需要的。无

法在美国为铁矿石厂筹集资金，该公司得到了来自印度银行的17亿美金。债权人要求那些来自印度的钢材在Nashwauk使用，超过当地一些反对埃萨（明尼苏达）总裁提供的。

“这里花费的每一美金都来自印度，”在8月3日《新闻论坛》对工厂的采访中Vuppuluri先生这样说道：“我为那些特别的成就感到骄傲，同时我们很荣幸能与这个社区联系在一起。”

日本在巴西

日本的NTT公司在接下来的10年的目标是拓展一个巴西的桥头堡以覆盖剩余南美地区。

NTT通讯公司宣布它已经将其一线全球IP网络拓展到南美的，新的接入点（PoP）位于圣保罗，巴西人口最多的城市。波特兰，俄勒冈州的《EE时报》（EE Times）（9月12日）的R Colin Johnson写道NTT相信南美将是下一个巨大的互联电子设备成长性市场。

NTT的基础设施已经包括在150个国家的一线IP骨干链接。它的新接入点把美国、欧洲以及亚洲的主要市场。和互联网供应商，内容交付网络，以及在南美的独立企业连接在了一起。

Michael Wheeler, NTT美国全球IP网络商业部门的副总裁，告诉《EE时报》：“宽带在美国、欧洲以及亚洲仍在成长。但是从交通方面来看在将来的三到五年中大的发展机会将会在拉美。”

汽车

联合开发SUV和轻型卡车的混合动力传动系统

“有趣的是，福特和丰田宣布他们将在未来远程信息处理和车内网络服务领域展开合作，或将使成本降低以使得数字手机能被嵌入到任何车内。”

Bill Howard在《极限科技》（Extreme Tech）分析美国福特汽车公司与日本的丰田汽车公司联合开发SUV和轻型卡车新的混合动力传动系统的内在原因。在2025年之前，美国汽车工业必须递交公司平均经济油耗54.5英里每加仑（MPG）的车型。双方8月22日达成的了解备忘录认为，通过联合方式他们将有能力很快就把混合动力车送到市场上并使之更容易被接受。（《为什么福特和丰田将联合开发混合动力卡车技术》，8月22日）

两家汽车制造商曾经在轻型卡车和SUV的混合动力传动系统（引擎、传动装置，电池包）上各自为战，当他们之间的协商在四月开始时，他们发现了相当多的共同点。2012年初平等的合作关系正式化标志着他们的首次合作。正如Howard先生分析的，该交易将专注于开发一种新的后轮驱动的混合动力系统。迄今为止，福特和丰田的混合动力产品均为前轮驱动汽车（有的时候混合动力电动马达驱动后轮以创建可被称之为四轮驱动的车）。由于要在10年内推广，当组合技术工作完成时，两家公司将用不同的方法整合技术使之运用到小货车和SUV中。

这些雄心勃勃的计划足够了，Howard先生把福特-丰田关系看作一种“同样耐人寻味”可能性：对联合开发远程通讯、信息、以及娱乐的推动。福特和林肯是Sync平台的行业领袖，该平台涵盖USB、蓝牙、语音识别、紧急事故通知（通过移动电话），该平台在高端车免费安装，对低端车型售价为295美金（原价为395美金）。

“丰田Entune车型也与此类似，”Howard先生评价道。“共同合作，[丰田与福特]能把成本降得更低并可能将数据语音移动电话嵌入车中。”

一系列的有利因素吸引汽车零件制造商来到墨西哥

在2011年的上半年，根据墨西哥国家汽车零件产业（INA）贸易协会的报导，10家日本汽车供应商和来自加拿大及德国（总共超过50家公司）在墨西哥投资新的业务。INA将之归功于成熟的墨西哥汽车领域，毗邻美国，自由贸易协议使其可以出口到40个国家，有利的汇率，原始设备制造商（OEMs）相当大的投资。

根据《墨西哥商业网》的Javier Rion报导，萨尔提略工业集团公司的金属与陶瓷运营董事同样列举了在中国成本上升，油价的上涨对物流成本的影响等因素。在墨西哥组装看来能取代部分进口，使墨西哥的汽车部件生产商受益。今年的3月墨西哥汽车零件工业纪录其自2008年全球经济危机爆发以来达到的最高装机容量利用水平。（《墨西哥呼吁汽配》，8月3日）

Antonio Ramirez是萨拉曼卡市市长，该市位于瓜纳华托州的工业走廊上。Ramirez先生对当前及已立项的区域活动的报导包括以下内容：

- ❖ 日本汽车制造商马自达计划通过四到五家分支机构来进行墨西哥运作，更多的原材料供应商为此而来；
- ❖ 在柯阿维拉州的Muzquiz，一家藤仓公司的工厂即将开业。这将是这家日本汽车电子设备制造商在墨西哥的第三家厂房；
- ❖ 日本汽车设备供应商矢崎公司的三个新工厂在奇瓦瓦州，矢崎公司的北美总部在密西根州的坎顿；
- ❖ 第二座价值3亿美元的工厂将由韩国钢铁制造商浦项制铁在它的现址阿尔塔米拉上建立。75%镀锌钢铁产出将流向墨西哥的汽车制造商，剩余部分将销往海外。

数字时代

联合的市值达6160亿美元的市场让四个技术巨人对彼此的领地虎视眈眈。“这是在科技历史上最大最激烈的战斗，”Ted Morgan, Skyhook Wireless的执行总裁说，该公司为移动通讯设备提供地区服务。“这要比1990年代微软，苹果，IBM的战斗要大得多。我认为所有这四个家伙得到它。”

Morgan先生与华盛顿邮报的Jia Lynn Yang持有相同观点，她早已知道那些“家伙”事实上指的就是那些公司——谷歌，苹果，脸谱（Facebook），和亚马逊（Amazon）——同样也被称之为“四人帮”或“高科技四巨头”。想从四重奏中减掉哪个来获得合适的规模都不可能实现。有关这巨大、竞争性的企业，在YANG女士的文章中写道，“几乎无法逃脱，轻拍每一个客户的钱包同时握有巨大的权利掌控一大部分[美国]经济。”不要轻易假设人类的嘴脸。

这场Morgan先生称之为美国技术霸主之战的理所当然由这四家公司参加，他们或任何其他。一种被广泛接受的说法是他认为的他们“需要各方面的一些东西”。杨女士则更进一步，要全方位的看待此事。

“每个公司都缺乏其它公司具有的一些东西”，她写道“补足所欠缺的，那么一家公司就有可能满足所有的人——一个完整的系统，该系统是客户花费大量时间看视频，读新闻，写电子邮件，”理所当然的还有“购物”。（四技术巨头竞相成为成为数字时代的领袖，8月16日）

无论作为生活设计有多失败，那是技术巨人的共同理想，他们不可能在追求中退却。战斗已经打响了。8月15日，谷歌宣布了125亿美金以获得手机制造商摩托罗拉移动控股服务的项目，以此通知它在硅谷的竞争对手苹果公司，它打算更深入的侵入到苹果的智能手机领域中。

Dorothy Fabian - 专栏编辑



○ The Rosendahl Crosshead

RX5 completes Rosendahl's crosshead series RX

WITHIN the RX Crosshead Series – available in sizes from RX2 to RX110 – the latest product launch of RX5 made by Rosendahl meets the very wide-ranged demands in the field of cable applications between 0.1 and 5mm conductor diameter.

Perfectly balanced polymer distribution, temperature- and pressure-profiles guarantee a smooth and stable melt-flow across the outlet zone.

RX-Type Crossheads generally provide high-precision centricity, therefore preventing over-sizing cable wall-thickness and helping to save material.

Enhanced flow-channel geometry ensures short residence time of polymer melt and enables a quick and easy change

of colour or material. Easy-handling is guaranteed by a compact and modular design, by high precision ball-centring over an adjustable and self-sealing tip-holder – or by the well-proven fine-tuning-centring which is not only requested especially in extrusion-lines for fibre-optic cables.

Advanced RX5-Crosshead design keeps away process-deviations and increases quality and efficiency in extrusion-lines for micro-coaxial-, LAN- and standard power cables for automotive and non-automotive applications as well.

Rosendahl Maschinen GmbH – Austria

Fax: +43 3113 5100 59

Email: office@rosendahlaustria.com

Website: www.rosendahlaustria.com

Avoid scrap and save money

MEDEK and Shörner's video print quality monitoring system (VST) is a favourable method of avoiding scrap and saving money.

The VST video stroboscope has been designed to continuously monitor the print quality of fast running cable printing machines. The system also offers the convenience of being able to view the entire print area at various magnifications on a monitor screen.

The integrated software allows various evaluations of the displayed print area; eg alarm in case of bad quality and/or missing prints. The system can also be used for inspection of the insulation quality and the correct colour.

The VST system offers more comfort to the operator allowing for easy inspection of the print and/or insulation quality. Additionally checking the quality on screen offers more safety to the operator since he can control the image from a distance and does not have to check close to the fast running cable.

The biggest advantage is to save a lot of scrap by real time inspection and



○ The VST from Medek & Shörner

alarm, so that the price of the VST will amortise and pay for itself after a few manufactured drums of cable.

Medek & Shörner GmbH – Austria

Fax: +43 198 272 96

Email: info@medek.at

Website: www.medek.at

Hybrid fibre and copper cable

Hradil Spezialkabel, Germany, introduces a new hybrid cable including both a fibre optic (FOC) and a copper cable. This specific broadband hybrid cable adds up to Hradil's FOC business segment and combines two benefits.

On the one hand, the optical fibres enable high data rates for the network layer whereas the "conventional copper cores" ensure the power supply and carry triggers and signals for the connected applications.

Using the keyword 'fibre to the home', the optical fibre technology has found its way into the private customer field. The ultimate ambition is that all voice and image data be broadcast without loss to the end-user.

This requirement constitutes one of the main FOC properties which Hradil exploits in its new hybrid cable. The optical fibres enable a lossless transmission of the optical signals over a great distance without repeater and therefore make demanding applications like eg 3D-television (far above 100Mbit/s) possible.



○ Lateral view of Hradil fibre optic hybrid cable

Jürgen Albrecht, Hradil product designer for special cables, said: "There is no way a copper cable could keep up with these advantages. The optical fibre technology offers a full symmetrical bandwidth, for example for the down- and upload of data."

In addition, its price is much cheaper than the copper technology, which constitutes another plus.

Hradil Spezialkabel GmbH – Germany

Fax: +49 714 278 891 22

Email: info@hradil.de

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Custom-made cold weld dies facilitate continuous production

BRITISH company PWM, which designs and manufactures high-performance cold welding equipment, is stepping up production of its custom-made dies for welding two different sizes of non-ferrous wire and rod.

According to PWM's managing director, Steve Mepsted, more wire manufacturers are looking for cold welding dies capable of bonding different sizes of wire during the wire drawing process.

"We custom make dies specifically for this application, enabling manufacturers to weld different wire sizes together extremely quickly when changing spools," said Mr Mepsted.

"Manufacturers can, for example, weld 2.5mm diameter wire to 2.7mm diameter wire without disrupting production, which has considerable cost benefits."

PWM's double cavity dies are hand-made by skilled engineers in the company's own workshops to stringent quality standards using top quality tool steel.

Although most of the recent demand is



○ Custom made dies from PWM

for dies to weld wire sizes with diameters within the range 0.3mm to 1.8mm (0.011"-0.071"), PWM has made dies to bond materials with larger diameters, for example 8mm rod to 9.5mm rod.

PWM offers manufacturers a fast turnaround and can provide custom-made dies within two weeks from receipt of order. Standard sizes of die can be supplied within 24 hours.

PWM Ltd - UK
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 Website: www.coldpressurewelding.com

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- Automatically control
- Maximum power:10KW



High Frequency Spark Tester

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Going nuclear. . .

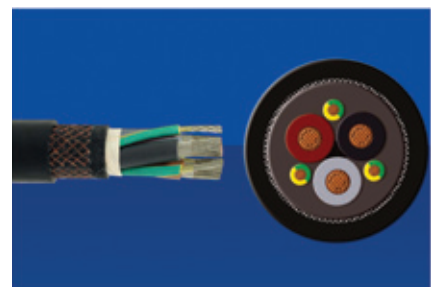
Leading cable manufacturer Tratos has created Tratos Nuclear[®], a low voltage power cable specifically designed for use in nuclear power station cranes.

Manufactured from a tinned flexible conductor, with HEPR insulation and EVA sheaths for strength and durability, Tratos Nuclear has been designed to give the best possible performance where tensile strength, bending radius, temperature and operating speed are paramount.

The cable has an operational speed of 200mt/min and working ambient temperatures of -25°C to 90°C.

Tratos Nuclear has undergone extensive and vigorous testing and is approved by IMQ to BTS 74 068000, NF M 64-001, CEI EN 61074 AND UNI ISO 4650.

Tratos Nuclear is one of the range of



○ The nuclear cables from Tratos

cables for moving applications from Tratos, which include mono-spiral and multi-spiral reeling, basket reeling, festoons and spreaders.

The cables supply power, control and signalling functions.

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Email:zlf@changan.net

Double scan is the solution

ZUMBACH Electronic enhanced and extended its line of systems for accurate, non-contact measuring systems for precision profiles made of steel, copper or any metal. The Dynamic Double Scan (DDS) method is the solution.

Accurate thickness measurement of precision profiles in the production line, eg cold rolling or drawing, has always been a difficult task.

While tactile systems are subject to wear or damage on the contact points, all optical systems have the problem of large errors, as soon as there is slightest torsion of the profile relative to the optical sensor. A forced mechanical guiding is often prohibitive because of damage to the product.

Vision systems based on the light cut principle can be an alternative but are often too expensive.

Zumbach, which has a long record with ODAC® laser scanners for diameter control of wires, cables and steel products, now offers a new,

elegant and efficient solution.

With a high-speed laser head, mounted on a new pivoting device, the relevant thickness is detected and measured by dynamic minimum value detection. This method delivers highly accurate readings, fully independent of the product orientation or variable torsion. High measuring rates of up to 2,000/s and sophisticated processor software are an essential part of the system.

The system is basically composed of an ODAC F laser head, a DVW pivoting device for the dynamic scanning and an USYS processing/display unit. If the width is also of interest, ODAC-XY heads with two axes capture thickness and width simultaneously. Various laser head models and DVW devices are available to cover each particular application and size.

Zumbach Electronic AG – Switzerland

Fax: +41 323 560 430

Email: sales@zumbach.ch

Website: www.zumbach.com

High-performance wire-drawing capstan

Yellow zirconia ceramic products produced by Jingdezhen Tonphin Electrical Co Ltd have been toughened and modified on the basis of white zirconia ceramic, which is renewed ceramic steel.

With a uniform faint yellow colour, brightness and unique temperament, the yellow zirconia ceramic has advantages of high strength, toughness, hardness, abrasion resistance and anti-corrosion.

It has been widely used in the field of ceramic wire-drawing capstans. It is also a suitable material for ceramic cut tools, top grade tableware, and anti-corrosion and high temperature products.

The main performance parameters of yellow zirconia ceramic include 6.01g/cm³ density, 1,200 MPa bending strength, 12 MPam^{1/2} fracture toughness, hardness of 90 HRA, modulus of elasticity of 260 MPa, and coefficient of linear expansion of 10.8 x10⁻⁶/C°.

Jingdezhen Tonphin Electrical Co can provide raw material porcelain, original products and final products.



○ Integral ceramic capstans applied in Niehoff integral fine wire-drawing machine

Jingdezhen Tonphin Electrical Co Ltd – China

Fax: +86 798 2816777

Email: leimm66@163.com

Website: www.tonphin.com

New range of reinforced fluoropolymer compounds

Colorant Chromatics, a wholly owned subsidiary of the ColorMatrix Group, produces a full range of high quality colour concentrates, speciality compounds, pigment dispersions and inks for processors of fluoropolymers and high performance plastics.

The company is promoting a new range of reinforced fluoropolymer compounds, which it claims exhibit superior impact strength when compared to other polymer compounds while retaining the high temperature, flame retardant, chemical resistance and electrical properties for which fluoropolymers are renowned.

In particular the company highlights its compounds for foaming of PVdF; carbon fibre compounds in PVdF, ETFE, ECTFE and PFA; glass fibre compounds in ETFE and PFA; cross-linkable ETFE (X-ETFE) and PVdF (X-PVdF), and PEEK compounds.

Colorant Chromatics' extensive melt-processable product line includes colour concentrates and compounds for polymers including FEP, ETFE, PFA, PVdF, ECTFE, MFA, THV, PEEK, and polysulfone (PES, PSU and PPSU).

The colour concentrates are offered in various pigment strengths and resin viscosities to assure optimal performance in the end use manufacturing process.

In addition to its standard line of colours and compounds, the company offers special services such as colour matching, pre-colouring and custom compounding.

The company also supplies a full range of pigment dispersions for PTFE extrusion, as well as printing and striping inks for FEP, ETFE, PFA, PVdF and PTFE.

Colorant Chromatics AG – Switzerland
Fax: +41 41 741 01 02
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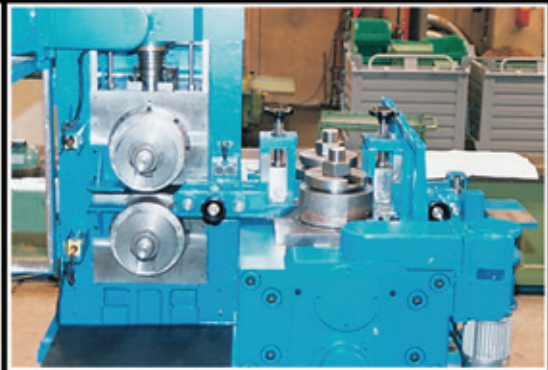
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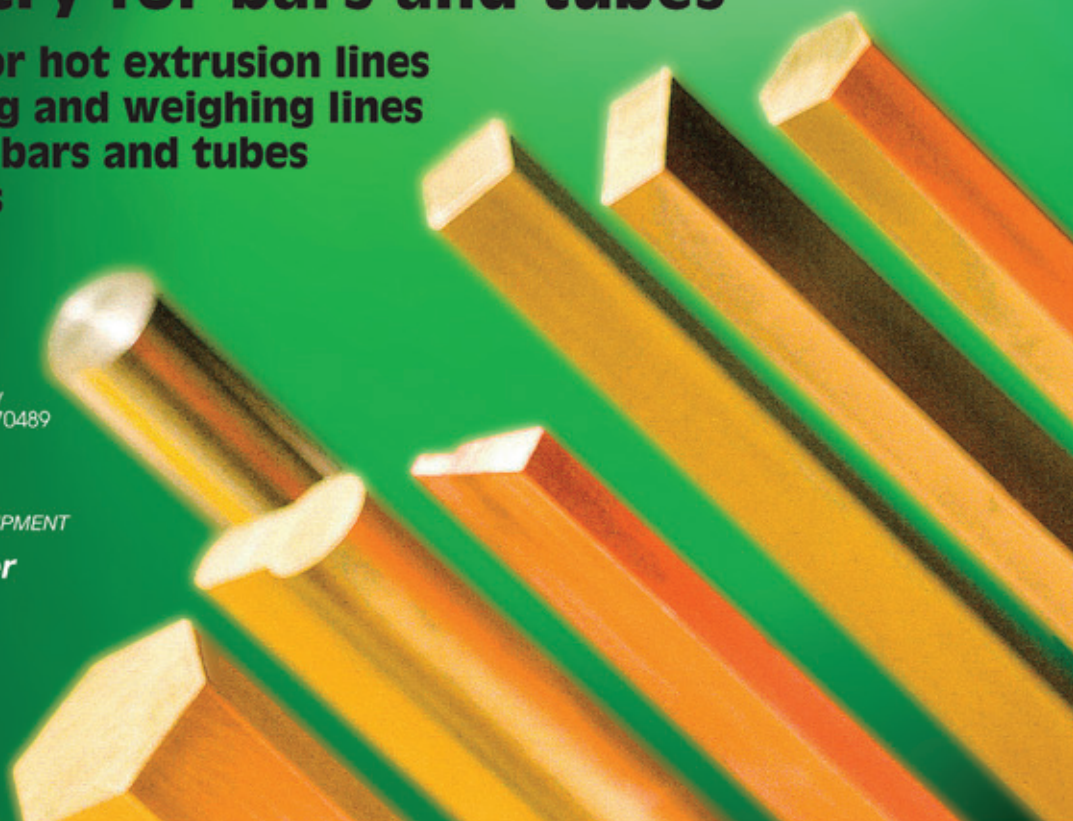
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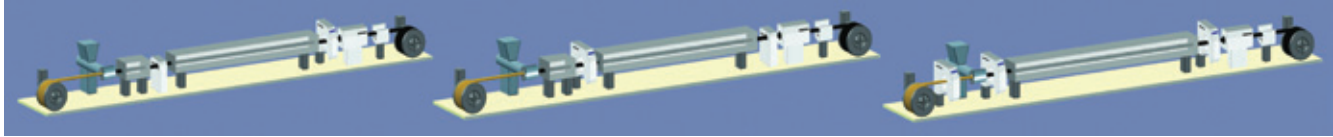
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EXTRUSION AND COLD DRAWING EQUIPMENT

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Measuring technology in insulating and jacketing lines



○ Possible configurations of Sikora measuring technology in insulating and jacketing lines

CABLE manufacturers are obligated to fulfil customer specifications at the production of cables.

These specifications refer to the dimensions of the cable as well as their material or signal transmission characteristics.

In order to meet the demands there are measuring technologies used in the lines that continuously monitor cable quality during production.

In insulating and jacketing lines, where for example energy cables or communication cables are produced, the X-Ray 6000 helps to permanently comply with the required specifications.

With online measurement the measuring values of the wall thickness, eccentricity, outer diameter and ovality are available at the processor system Ecocontrol 6000.

The eccentricity measuring values are displayed at eight points and allow the operator an optimal centring of the extrusion tools and controlling of the wall thickness or the diameter to the nominal value. The values are numerically or graphically displayed as cable cross section.

The measuring device is, depending on the application, installed between two cooling trough sections or after the cooling trough.

It measures the insulation wall thickness of the material layers as well as the position of the conductor in the insulation.

The conductor has to be absolutely concentric in the insulation to assure the mechanical and electrical function

of the cable and to minimise material consumption.

The application field of the X-Ray 6000 ranges from one or two layer insulations (common in the insulating and jacketing area) to RF cables with foamed PE-insulations.

By using an X-Ray 6000 as hot measuring head after the extruder and a diameter measuring head after the cooling trough in combination with a control, a constant diameter can be achieved.

With the hot/cold control module HC 2000 the material shrinkage can be calculated and automatically considered for the control of the diameter or wall thickness.

Besides the X-Ray 6000, which measures the dimensions of the cable, testing and measuring devices are necessary to assure cable quality regarding material properties.

Customers can configure their lines with Sikora measuring devices tailored to their needs.

The insulation is tested online with a spark tester (high voltage spark tester).

As a result possible irregularities in the insulation are detected and documented at an early stage.

An implemented quality management system assures that only faultless cables are delivered.

For cables for which the decision is made to run without eccentricity control, the conventional method of the average wall thickness measurement, by the diameter differential calculation, is available.

During production cable manufacturers can measure the cable length with the help of Length 6000 and ensure that precisely the required length of cable is produced.

Continuous quality control during cable production is a precondition for economical production, as risks can be identified and faults can be prevented at an early stage.

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Ready to be best-seller?

WHEN you are looking for a robust and powerful timing belt drive that also is a paradigm for successful industrial design, you cannot help checking out the Joachim Uhing KG portfolio.

You will find an innovation launched by the internationally renowned engineering company: the motorised AZ 1040.

It succeeds the tried and tested AZ 2004 the company based at Mielkendorf has been selling since 1991. The new timing belt drive was developed for all applications in mechanical engineering.

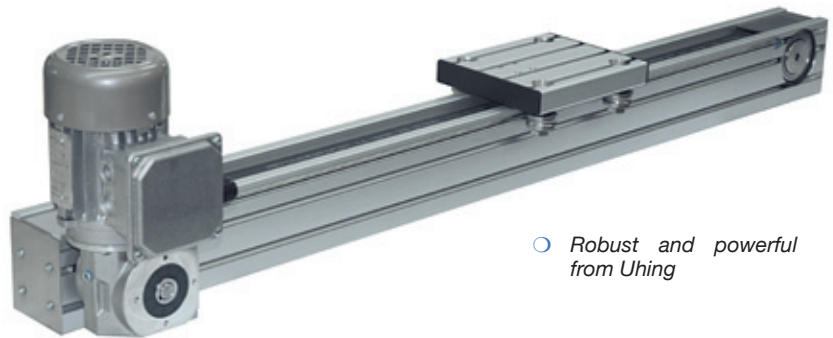
The AZ 1040 has the potential to quickly take the place of its predecessor in the Uhing product range and to become the bestseller.

Even at first glance, it convinces by its design, giving you an idea of optimal applicability: the one-piece profile with integrated carriage guide allows for greater free stroke lengths than were possible with AZ 2004.

Compared to the previous model, several installation and attachment options were added to the AZ 1040.

For this purpose, head pieces made of the same profile as the drive itself were integrated. The T-slots are integral part of the profile and facilitate mounting of additional attachments. Slide blocks can be inserted laterally.

Like all Uhing timing belt drives, the AZ 1040 is made of a bend-proof and torsion-proof aluminium profile.



○ Robust and powerful from Uhing

A belt lock fastened to the roller-mounted load carriage transmits the power from the timing belt to the load carriage running on round, corrosion-proof and hardened guide bars mounted on the aluminium profile.

Uhing offers the new timing belt drive as a complete pre-assembled unit with motor, making assembly and installation fast and smooth.

The AZ1040 proves to be particularly practical because its motor can be mounted in several positions.

This feature more or less excludes space issues design engineers have often to deal with when integrating such units.

During operation, the AZ 1040 proves to be particularly robust and powerful. The carriage covers a distance of 200mm per shaft rotation.

The motorised drive features a

maximum traversing speed of 5/s and an idling torque of 0.7Nm.

The dead weight of the drive for a stroke of 0mm is 9.1kg, the weight per 100mm stroke is 0.9 kg. The carriage weighs 2.3kg.

The wide range of accessories for AZ 1040 comprises: a coupling shaft assembly, motor cones, overload slip clutches, elastic couplings, rotary encoders, cable chains, guide units for multi-axis systems, and position read-outs.

Special accessories available for the AZ 1040 are: proximity switches, wipers, lubrication and wiper unit, increased corrosion protection, an enclosure, and carriages with special threads.

Joachim Uhing KG GmbH & Co – Germany
Fax: +49 434 790 640
Email: weber@uhing.com
Website: www.uhing.com

S&E Specialty Polymers expands concentrate offerings

S&E Specialty Polymers LLC, a leading producer of speciality plastic compounds, has added numerous concentrates to its product portfolio.

While flame retardant (FR) concentrate technology has been a speciality of S&E since its founding in 2004, the company's research and development team has been working on developing a variety of other compounds and alloys to expand its product line.

New offerings include:

- ultraviolet (UV) concentrates for polyolefin, PVC, TPR and other polymer families

- FR concentrates targeting different UL ratings
- combined FR and UV concentrates
- blowing agent concentrates
- custom designed concentrates for specific customer needs
- percentage of active ingredients as high as 75%

"We are always working to expand our product lines to meet customer needs," said Duane Shoultz, chief operating officer at S&E.

"With these new concentrate options we have taken a major step forward towards providing customers with the

full spectra of plastic compound options they require. Customers will realise cost savings, as these new concentrates will allow them to reduce their raw material inventory."

As part of the concentrate development process, S&E invested in upgrading its feeding system for its polyolefin line. This helped the company to produce consistent quality concentrates with minimal waste.

S&E Specialty Polymers – USA
Fax: +1 978 840 8200
Email: info@sespoly.com
Website: www.sespoly.com



○ New series recently launched onto the market

One of the new machines from CEMSA

CEMSA has recently launched onto the market a new family of multi-head resistance welding machines named "GRG – MPS".

This new series is dedicated to the welding of stainless steel or carbon steel wire panels, both basic and special ones, like those used as shelves in supermarkets.

The panels accepted by the machine can be composed by long and cross wires of different diameters as well as by cross wires wires on longitudinal bearing bars.

The machine can operate by a shuttle tooling, either along the length-wise axis (parallel to the multi-heads) and/or along a 90° axis, perpendicular to the front, like in integrated systems.

A similar machine can be offered equipped with a pallets re-circulation shuttle, with automatic loading and unloading, as well as with automatic wires feeder (hopper).

Heads can be 4, 6, 8, 10, or even 12 and 16, each fed by an AC transformer, or with two AC transformers, working in parallel and located besides the heads. This last arrangement is convenient for medium productions, where the mechanical cascade is within an acceptable time frame.

45-60 kVA is the rating of the transformers fit to each head, whilst 250 kVA is the suggested rated power of the two transformers working in parallel. Therefore, depending upon the production needs, it is possible to choose the most suitable arrangement (all-together, electrical cascade, mechanical cascade).

A more advanced alternative is the version with the medium frequency (1,000 Hz) power package which is recommended wherever the energy consumption is an issue.

The control systems can be provided strictly in accordance with the production needs to be effective either for simple local management, up to fully integrated production lines.

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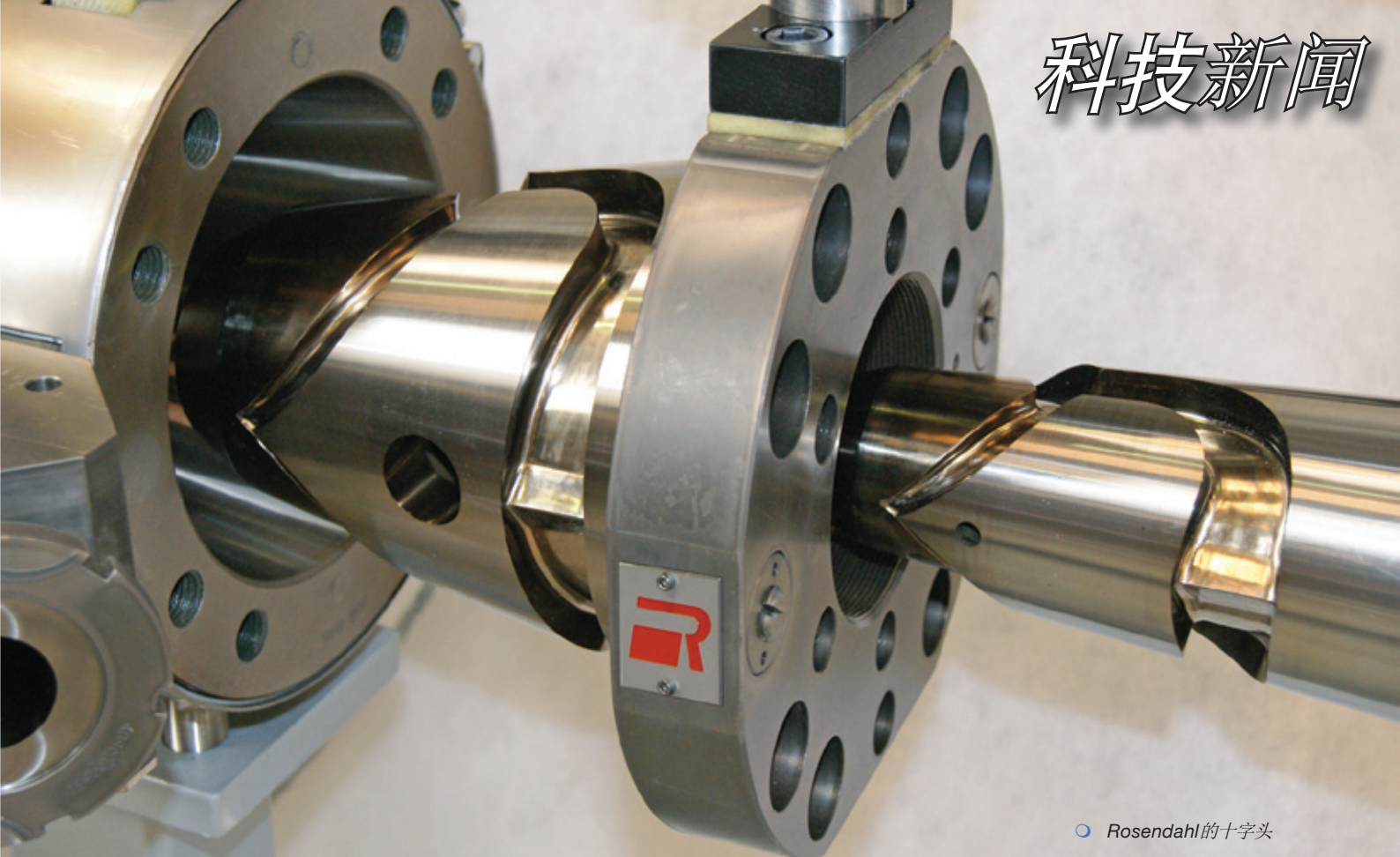
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○ Rosendahl的十字头

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Rosendahl Maschinen GmbH – 奥地利
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 电子邮件: office@rosendahlaustria.com
 网址: www.rosendahlaustria.com

新产品 – 增强型氟聚合物母料

Colorant Chromatics是ColorMatrix Group的一家全资子公司,生产各种优质的色母料、特种母料、染料分散剂和油墨,用于氟聚合物和高性能塑料。公司推出一种新产品:增强型氟聚合物母料。与其它聚合物母料相比,它具有优异的抗冲击强度,同时保留了氟聚合物著名的抗高温、阻燃、抗化学性和电气性能。公司的特色在于其PVdF发泡母料;PVdF、ETFE、ECTFE和PFA的碳纤维母料;ETFE和PFA的玻璃纤维母料;可交链的ETFE (X-ETFE)和PVdF (X-PVdF)、以及PEEK母料。

Colorant Chromatics广泛的熔融产品处理装置包括:色母料和聚合物母料,包括FEP、ETFE、PFA、PVdF、ECTFE、MFA、THV、PEEK和聚砜(PES、PSU和PPSU)。提供的色母料具有各种染色强度和树脂粘度,以保证最终用户制造工艺的最优性能。除其标准的色母料和母料装置外,公司还提供特别服务:例如配色、预调色、客户定制母料。公司还提供各种染料分散剂,用于PTFE挤出、FEP、ETFE、PFA、PVdF和PTFE的打印和条纹油墨。

Colorant Chromatics AG – 瑞士 传真: +41 41 741 01 02
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客户定制式冷焊磨具便于连续生产



○ PWM为客户定制的模具

英国公司PWM设计和制造高性能冷焊设备，正在加快生产其为客户定制的模具，将两种不同尺寸的有色金属线和棒焊接在一起的模具。

根据PWM总裁Steve Mepsted所述，越来越多的线材制造商正在寻求能在线材拉伸工艺期间焊接不同尺寸线材的冷焊模具。

“我们为客户定制的模具特别用于这种应用，能使制造商在更换线轴时快速焊接不同尺寸的线材，”Mepsted先生说。

“例如，制造商无需中断生产就能将2.5毫米直径线材焊接到2.7毫米直径线材，从而带来了许多成本优势。”

PWM在公司自己的车间内，严格按照质量标准，采用顶级优质钢材，由其技术工程师手工制造这种双腔膜具。

尽管最近大多数需求是要获得直径为0.30毫米到1.80毫米(0.011"到0.071")线材的焊接模具，但PWM已经制造出更大直径线材的焊接模具，例如8毫米棒材焊接到9.5毫米棒材。

PWM能为制造商提供非常快的切换，能在接到订单2周内提供为客户定制的膜具，能在24小时内提供标准尺寸的膜具。

PWM Ltd - 英国
电子邮件: pwm@btinternet.com

传真: +44 1233 820 591
网址: www.coldpressurewelding.com

光纤和铜芯混合电缆

德国Hradil Spezialkabel推出一种包含光纤(FOC)和铜芯的新型混合电缆。

这种特殊的宽带混合电缆增加了Hradil的FOC业务领域，组合了两种效益。

一种是光纤能够为网络层高速传输数据，另一种是“传统铜芯”保证为连接的应用供电和运载触发和信号。

采用关键词‘光纤到家’，光纤技术已经发展到个人客户领域。最终的目标是毫无损失地将所有声音和图像数据传输到最终用户。

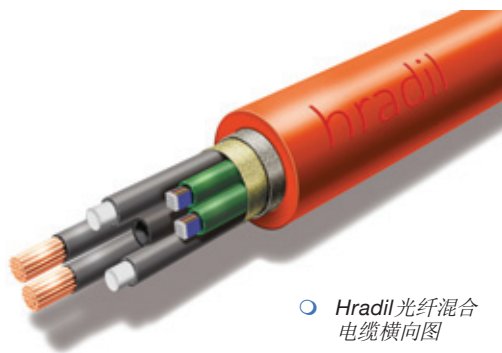
这种要求体现了Hradil开发的这种新型混合电缆的主要FOC性能之一。光纤不需要中继器就能够无损传输光学信号到很远的距离，完成诸如3D-电视(远高于100Mbit/s)之类的急需应用。

Hradil专用电缆产品设计师Jürgen Albrecht说：“没有一种铜缆能具有这些优势。光纤技术为诸如数据下行和上行之类的应用提供一种全对称宽带。”

另外，其价格比铜技术低得多，这是它的另一个优点。

Hradil Spezialkabel GmbH - 德国
电子邮件: info@hradil.de

传真: +49 714 278 891 22
网址: www.hradil.de



○ Hradil光纤混合电缆横切面图

S&E Specialty Polymers扩展其母料产品范围

S&E Specialty Polymers LLC是特种塑料母料的领先制造商，在其产品范围中增添了许多种母料。

自公司于2004年成立以来，阻燃型(FR)母料技术是S&E的一个特殊技术，同时，公司研究和开发团队一直不懈努力，开发各种其它母料和合金，以扩大其产品范围。

新产品包括:

- 用于聚烯烃、PVC、TPR和其它聚合物家族的抗紫外线母料
- 用于不同的抗紫外等级的FR母料
- FR和抗紫外线组合母料
- 吹塑剂母料
- 按客户需要定制的母料
- 含量高达75%的活性拼料

“我们总是努力扩展我们的产品范围，以满足客户的需要”，S&E操作总监Dusane Shooltz说。

“拥有这些新型母料可选项后，我们取得了重大进步，为客户提供他们所需的全范围的塑料母料可选项。客户将实现其成本节约，因为这些新型母料能使他们降低其材料库存。”

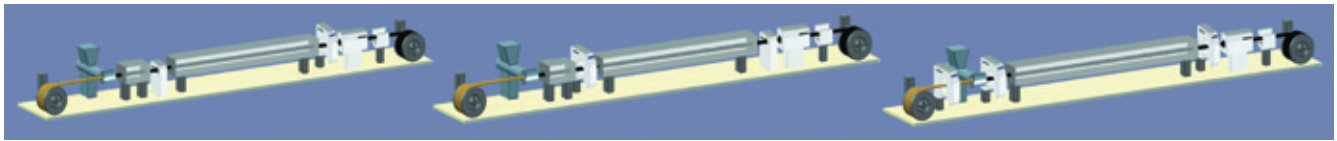
作为母料开发过程的一部分，S&E投资升级其聚烯烃装置的进料系统。这有助于公司生产品质一致的母料，最小化废料产生量。

S&E Specialty Polymers - 美国
传真: +1 978 840 8200
电子邮件: info@sespoly.com
网址: www.sespoly.com

○ S&E Polymers的一部分新产品



绝缘和护套装置中的测量技术



○ 绝缘和护套装置中Sikora测量技术的可能组态

电缆制造商有责任在生产电缆时达到客户规格要求，这些规格是指电缆尺寸、材质或信号输送特性。为了满足需求，需要有测量技术，以便在生产期间连续监测装置生产的电缆质量。

在绝缘和护套装置中，例如，生产能源电缆或通讯电缆，X-Ray 6000能帮助永久符合所要求的规格。

采用在线测量，Ecocontrol 6000处理器系统测量厚度、偏心度、外径和椭圆度。测量数据显示8个点的偏心度，能使操作人员优化挤出工具的对中、控制壁厚或直径达到标准数据。用数字或图形数据显示电缆横截面。

根据应用，测量装置安装在两个冷却槽之间或在冷却槽之后，测量材料的绝缘壁厚、绝缘材料中的导体位置，而且，导体

必须在绝缘材料中绝对对中，以保证电缆的机械和电气功能，使材料消耗最小化。

X-Ray 6000的应用领域包括在RF电缆上复合一层或两层发泡PE绝缘材料（通常在绝缘和护套区域）。

在挤出机后，可以将X-Ray 6000用作热量检测仪，在冷却槽之后再加一个控制器，可以将X-Ray 6000用作直径测量仪，能够达到一致的直径要求。采用热/冷控制模块HC-2000后，就能计算材料收缩率，自动控制直径或壁厚。

为了保证电缆在材质特性方面的质量，除了测量电缆尺寸的X-Ray 6000外，测试和测量装置也是必要的。客户可按照具体需要，把他们的装置与Sikora测量装置组合。用火花检测仪（高电压火花测试仪）在线测试绝缘性能，就能早期发现和记

录可能的绝缘缺陷。一个实施质量管理的系统能保证所生产的电缆都是无缺陷的。

如果决定在没有偏心度控制下生产电缆，可用传统的平均壁厚测量方法，通过直径偏差计算。

在生产期间，电缆制造商可用Length 6000测量电缆长度，保证精确地达到要求的电缆长度。

电缆生产期间的连续质量控制是经济生产的前提，因为尽早识别了风险，预防了缺陷发生。

Sikora AG – 德国
 传真: +49 421 48900 90
 电子邮件: sales@sikora.net
 网址: www.sikora.net

潜力十足,成为最畅销产品?

当你在寻找某种稳健有力的齿形皮带驱动——同时又是一种成功工业设计的典范时，你情不自禁地回去查找Joachim Uhing KG的产品目录。

你将发现由这家国际知名的工程公司所推出的一种革新：电机传动式AZ 1040，它秉承了历经试用和测试的AZ 2004，公司以Mielkendorf为基地，从1991年起就一直在销售AZ 2004。

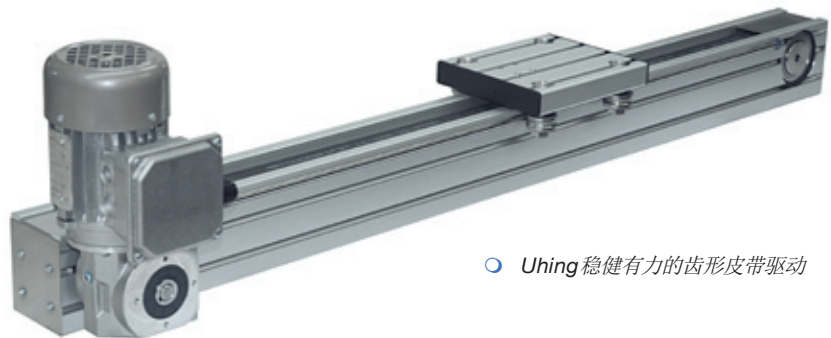
新型齿形皮带驱动开发用于机械工程的所有应用。

AZ 1040具有快速接替Uhing产品系列中前身的潜力，成为最畅销产品。即使你只看一眼，它的设计就足以让你信服，是你感到最优化的适用性：包括集成的车架导轨板在内的一体化框架，使其自由行程长度超越AZ 2004。

与以往型号相比，AZ 1040增添了若干装置和附件可选项。为此，顶横梁采用与驱动本身相同的框架。

T型槽也是一体化结构的一部分，以便安装附加件。能横向插入滑块。

与所有Uhing齿形皮带驱动一样，AZ 1040采用抗弯曲、抗扭曲铝框架。皮带锁定装置固定在装有轱轮的负载车架上，将动力从齿形皮带传送到负载车架，负载车



○ Uhing 稳健有力的齿形皮带驱动

架在圆形防腐硬化导杆上运行，导杆在铝框架上。

Uhing提供的新型齿形皮带驱动是一套经过预组装的配备电机的装置，便于你快速顺利组装和安装。AZ 1040被证明是非常的实用，因为它的电机可安装在若干个位置。

这种性能或多或少消除了设计工程师在集成这些装置时经常会遇到的空间问题。在操作期间，AZ 1040被证明是尤其稳健有力。轴每旋转一次，车架涵盖距离达200毫米。

电机驱动特性为最大横向速度达到5/s、怠速力矩达0.7Nm。

每个0毫米行程的驱动装置自重是9.1公斤，每100毫米行程的重量是0.9公斤。车架重量为2.3公斤。

AZ 1040拥有各种辅助件，包括：联轴器轴组件、电机锥形体、超载滑差离合器、挠性联轴器、转速判读器、锚链、多轴系统导向装置、位置读数。

AZ 1040拥有的特别辅助件包括：渐进开关、扫刀、润滑和扫刀装置、增强型防腐、护罩、配备特殊螺纹的车架。

Joachim Uhing KG GmbH & Co – 德国
 传真: +49 434 790 640
 电子邮件: weber@uhing.com
 网址: www.uhing.com

避免废品和省钱



Medek & Shörner的VST系统

Medek and Shörner的视频打印质量监测系统(VST)是一种很受欢迎的好方法,它能避免产生废品和为你省钱。

VST视频频闪观测仪设计用于连续监测快速移动电缆打印机的打印质量。系统还能使你方便地通过监测屏用各种放大倍数来监测整个打印区域。

系统的一体化软件可使你对显示的打印区域进行各种评价;例如,打印质量差和/或错失报警。系统还能用来检查绝缘质量以及颜色是否正确。

VST系统为操作人员提供更高的舒适性,能使操作人员轻易地检查打印和/或绝缘质量。而且,通过画屏来检查质量,使操作人员更加安全,因为他能远程控制画面,无需近距离检查快速移动的电缆。

系统的最大优点是实时检查和报警,避免了产生许多废品,在生产几卷电缆后,VST的价格就得到分摊和回收。

Medek & Shörner GmbH – 奥地利
电子邮件: info@medek.at

传真: +43 198 272 96
网址: www.medek.at

高性能拉丝轮

由Jingdezhen Tonphin Electrical Co Ltd生产的黄色氧化锆陶瓷产品在白色氧化锆陶瓷基础上经过韧化和改性,成为陶瓷钢。黄色氧化锆陶瓷拥有均匀的淡黄色、光亮和独特的性能,具有高强度、韧度、硬度、耐摩擦和抗腐蚀优点,广泛地应用于陶瓷拉线轮领域,也是陶瓷切割工具、顶级餐具、抗腐蚀和高温产品的合适材料。黄色氧化锆陶瓷的主要性能参数包括:密度6.01g/cm³、弯曲强度1,200 MPa、抗粉碎韧度12 MPam^{1/2}、硬度90 HRA、弹性模量260 MPa、以及线性膨胀系数10.8 x 10⁻⁶/C°。

Jingdezhen Tonphin Electrical Co能提供瓷原料、原产品和最终产品。

Jingdezhen Tonphin Electrical Co Ltd – 中国
电子邮件: leimm66@163.com

传真: +86 798 2816777
网址: www.tonphin.com



Niehoff一体化细线拉线机上应用的集成陶瓷拉线机

双扫描是解决方案

ZumbachElectronic增强和扩展其钢材、铜或任何金属精密层面的无接触精确测量系统范围。动态双扫描(DDS)方法是解决方案。

在生产装置(例如冷轧或拉伸)中精确厚壁测量精密层面历来是一项艰巨的工作。触觉式系统受制于触点磨损或损坏;对于所有光学系统来说,层面若稍有与光学传感器相关的扭曲,就有误差大的问题;对于强制机械导引而言,因为会损坏产品,所以经常被禁止使用。

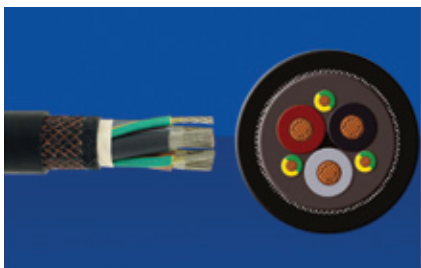
Vision系统基于光切割原理,可以作为一种变通方案,但太贵了。

Zumbach长期致力于线材、电缆和钢材产品直径控制的ODAC[®]激光扫描器,现在能提供一种新颖、精致、有效、成本适中的解决方案。这种方法将一个高速激光头安装在一个新颖的绕轴旋转的装置上,用动态最小值检测来测量相对厚度,能提供高度精确的读数,与产品取向或可变扭曲完全无关。可达2000/s的高速测量速度、高级的处理器软件是系统的一个最基本部分。

系统基本上由1个ODAC F激光头、1个DVW动态扫描用绕轴旋转装置、1个USYS处理/显示装置组成。如果对宽度特别感兴趣,那么用双轴的ODAC-XY头可同时测量厚度和宽度。可提供各种激光头模型和DVW装置,用于各种特定的应用和尺寸。

Zumbach Electronic AG – 瑞士
传真: +41 323 560 430
电子邮件: sales@zumbach.ch
网址: www.zumbach.com

用于核电站!



Tratos的用于核电站的电缆

领先的电缆制造商Tratos创建了一种特别设计用于核电站吊车的低压电力电缆Tratos Nuclear[®]。

电缆采用镀锡挠性导体、HEPR绝缘材料和高强耐久的EVA护套。对于抗张强度、弯曲半径、温度和操作速度是重要因素的应用,Tratos Nuclear的设计给出了可能拥有的最好性能。电缆操作速度为200米/分钟,工作环境温度为-25°C到90°C。

Tratos Nuclear经过广泛的严酷测试,获得了IMQ批准,达到BTS 74 068000、NF M 64-001、CEI EN 61074和UNI ISO 4650标准。

Tratos Nuclear是Tratos开发的移动应用电缆中的一种,它包括单旋和多旋卷取、蓝式卷取、缘垛、延展,具有供电、控制和信号功能。

Tratos Ltd – 英国
电子邮件: info@tratos.co.uk

传真: +44 1246 858 001
网址: www.tratos.co.uk

Compounds & colourants

Two decades ago, compounds for telecom wire and cable were simple jacket and insulation products protecting telephone wires.

Today, a catalogue of these wares encompasses everything from PVC jacket compounds for twisted pairs and polyolefin separators, to durable jackets over foamed PE COAX cores, to ultra-thin wall buffer compounds for multimode fibre. Compounds are complicated.

A provider of colourants might seem to have had an easier time of it over the same period – but a glance at

its catalogue suggests otherwise. The company offers colour-coding schemata for telephone cables containing up to 26 pairs; for cables containing more than 26 pairs; for the wrapping of multiple bundles of 25 pairs with coloured binder thread; for separating multiple-binder bundles of cables containing more than 600 pairs.

The wire and cable specialties evolve in tandem. Partners in excellence, the companies reviewed here make their complementary contribution to the ongoing development of the industry.

S&E expands concentrate offerings

S&E Specialty Polymers LLC, a producer of speciality plastic compounds, has added numerous concentrates to its product portfolio. While flame retardant (FR) concentrate technology has been a speciality of S&E since 2004, the company's research and development team has been working on developing a variety of other compounds and alloys to expand its product line which include:

- ultraviolet (UV) concentrates for polyolefin, PVC, TPR and other polymer families
- FR concentrates targeting different UL ratings
- combined FR and UV concentrates
- blowing agent concentrates
- custom designed concentrates for specific customer needs percentage of active ingredients as high as 75%

As part of the concentrate development process, S&E invested in upgrading its feeding system for its polyolefin line. This helped the company to produce consistent quality concentrates with minimal waste.

S&E Specialty Polymers – USA

Fax: +1 978 840 8200

Email: info@sespoly.com

Website: www.sespoly.com

Fluoropolymer compounds

Colorant Chromatics produces a full range of high quality colour concentrates, speciality compounds, pigment dispersions and inks for processors of fluoropolymers and high performance plastics. The company is promoting a new range of reinforced fluoropolymer compounds, in particular its compounds for foaming of PVdF; carbon fibre compounds in PVdF, ETFE, ECTFE and PFA; glass fibre compounds in ETFE and PFA; cross-linkable ETFE (X-ETFE) and PVdF (X-PVdF), and PEEK compounds.

Colorant Chromatics' extensive melt-processable product line includes colour concentrates and compounds for polymers including FEP, ETFE, PFA, PVdF, ECTFE, MFA, THV, PEEK, and polysulfone (PES, PSU and PPSU). The colour concentrates are offered in various pigment strengths and resin viscosities. In addition to its standard line of colours and compounds, the company offers special services such as colour matching, pre-colouring and custom compounding, and supplies a full range of pigment dispersions for PTFE extrusion, as well as printing and striping inks for FEP, ETFE, PFA, PVdF and PTFE.

Colorant Chromatics AG – Switzerland

Fax: +41 41 741 01 02

Email: info@colorant-chromatics.com

Website: www.colorant-chromatics.com

SACO buy out unites the leaders

SACO Polymers Inc (formerly known as Padanaplast USA) has bought out AEI Compounds Ltd, headquartered in Sandwich, Kent, UK.

This transaction represents a combination of the market leaders in the US and Europe/Middle East in the crosslinkable and polymer compounds manufacturing industry based on Sioplas technology.



○ AEI's UK headquarters at Sandwich, Kent

The companies share a market focus on the wire and cable and PEX plumbing pipe industries.

In addition, AEI Compounds is one of the major suppliers worldwide of thermoplastic and silane crosslinkable halogen free flame retardant (HFFR) compounds to the wire and cable industry.

The acquisition of AEI Compounds with principal markets in Europe, Middle East, Asia and Africa combined with Saco's prominence in North America is a key step in Saco's strategy to create the first truly global manufacturing and product development platform in this industry to better serve its expanding customer base.

In support of this aim, AEI Compounds has recently made significant investments in new production capacity for the manufacture of HFFR compounds as part of the relocation to its current facility in Sandwich.

AEI Compounds Ltd will continue its current operations as a wholly owned subsidiary of Saco Polymers Inc. The entire senior leadership team of AEI Compounds will remain with the business.

Saco expects that the combination of the respective product offerings and geographic strengths will greatly expand both businesses in the coming years.

AEI Compounds Ltd – UK

Email: info@aeicompounds.co.uk

Fax: +44 1304 616 170

Website: www.aeicompounds.com

电缆料和色母料

二十年前，电信电线和电缆的化合物是保护电话线的简单外壳和绝缘产品。今天，这些制品包括保护双绞线和聚烯烃分隔的聚氯乙烯护套化合物，包裹发泡聚乙烯同轴电缆核心的耐用外壳，多模光纤的超薄壁缓冲化合物。化合物变得复杂多样。

同时期的着色剂供应商似乎没这么复杂——但从其产品目录来看却并非如此。

公司提供的电话电缆的彩色编码图式多达26对；电缆的超过26对；用于包裹25对有色粘结剂线程；用于分离多胶捆绑电缆的超过600对。

电线电缆行业协同发展。以上提到的公司和优秀的合作伙伴对此行业的持续发展做出了补充性贡献。

氟聚合物混合料

Colorant Chromatics公司生产全套高品质色母料、特殊混合料、着色用分散颜料和油墨，用于氟聚合物和高性能塑料加工。

公司正推广一系列新的加强型氟聚合物混合料，尤其是用于PVdF发泡的混合料；PVdF、ETFE、ECTFE和PFA中的碳纤维混合料；ETFE和PFA中的玻璃纤维混合料；交联ETFE (X-ETFE) 和 PVdF (X-PVdF)，以及 PEEK混合料。

Colorant Chromatics公司广泛的可溶性生产线包括FEP、ETFE、PFA、PVdF、ECTFE、MFA、THV、PEEK、和聚丙烯 (PES、PSU 和PPSU) 等聚合物色母料和混合料的生产。这些色母料适合各种着色强度和树脂粘度。

除了色料和混合料标准生产线，公司还提供特殊的服务，比如配色、预着色和定制配料，并提供一整套用于PTFE挤出生产的色料分散剂，以及用于FEP、ETFE、PFA、PVdF和PTFE的印刷油墨和条纹墨水。

Colorant Chromatics AG – 瑞士

传真: +41 41 741 01 02

电子邮件: info@colorant-chromatics.com

网址: www.colorant-chromatics.com

SACO买断合并领先公司

SACO Polymers Inc有限公司（前身为Padanoplast USA）全面收购了总部位于英国肯特桑威奇的AEI Compounds Ltd有限公司。

此次交易表示在基于Sioplas技术的可交联聚合物混合料制造工业内美国和欧洲/中东地区市场领导者的结合。



○ 位于英国肯特桑威奇的AEI总部

公司在电线电缆和PEX水管行业占有一定市场份额。

此外，AEI Compounds 是全球电线电缆行业热塑性塑料和硅烷可交联无卤阻燃(HFFR)混合料主要的供应商。

对在欧洲、中东、亚洲和非洲占有主要市场的AEI Compounds的收购以及Saco在北美洲的突起是Saco在行业内创建第一个真正的全球生产和产品开发平台这一战略的关键的一步，以更好的为其不断扩大的客户群服务。

为支持这一目标，AEI Compounds最近在新生产能力上做了大量投资，用于HFFR混合料的生产，这也是目前搬迁到桑威奇工厂的一部分。

AEI Compounds Ltd有限公司作为Saco Polymers Inc有限公司的全资子公司将继续现有的经营范围。

AEI Compounds的整个高层团队将继续留在企业。

Saco期待各自产品组合和地理优势的结合在未来几年将大大扩展双方的业务。

AEI Compounds Ltd – 英国

传真: +44 1304 616 170

电子邮件: info@aeicompounds.co.uk

网址: www.aeicompounds.com

S&E扩大色母料供应

特殊塑料混合料生产商S&E Specialty Polymers LLC公司为其产品系列增添了很多色母料。

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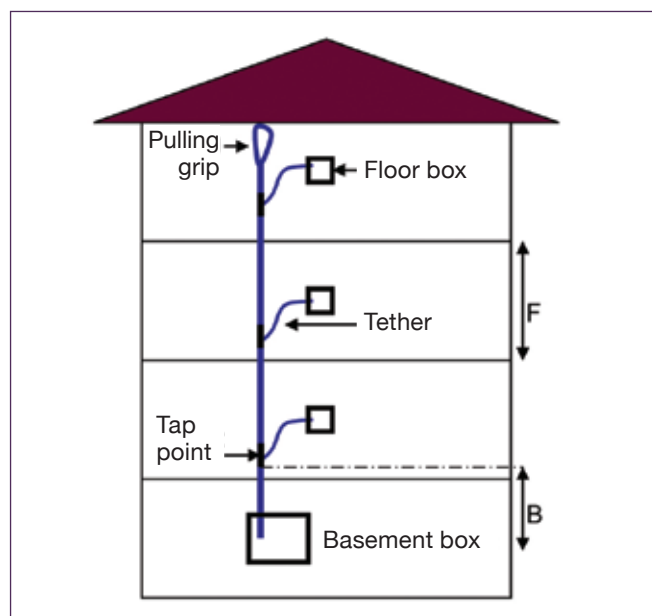
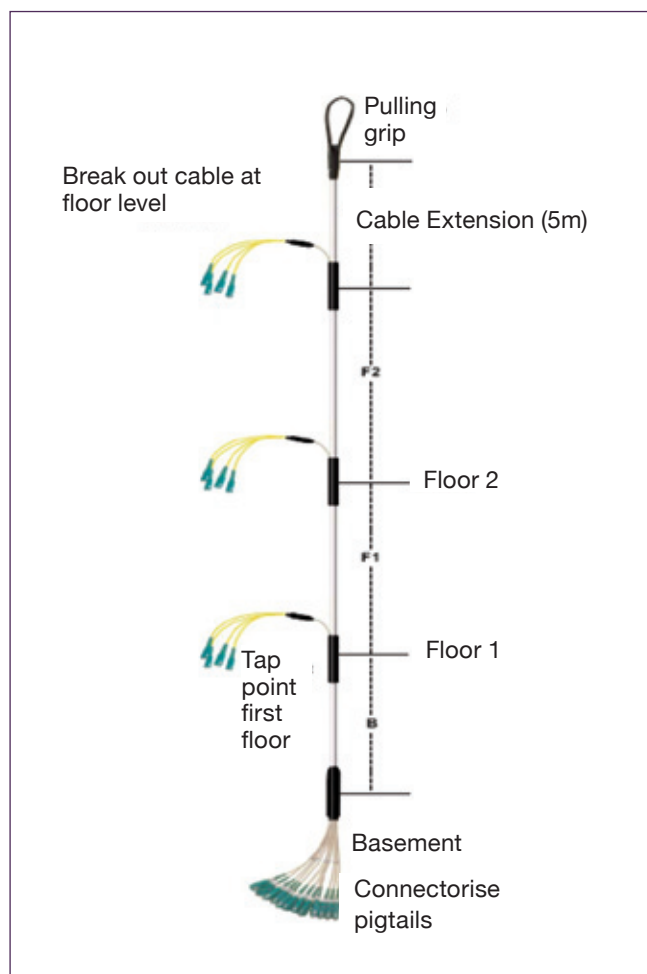
Flexible bend insensitive riser cable for fast FTTH deployments

By Grzegorz Tosik, Paweł Kołodziej and Magdalena Mirynowska of Corning Cable Systems

Abstract

Nowadays a Fibre to the Home (FTTH) network plays a crucial role in developing the information society. The increasing popularity of FTTH deployments observed over the last few years has resulted in millions of homes already passed, but in comparison the homes connected market penetration is still relatively small (2.9% of households in US, less than 4% in Europe, and approximately 25% in Asia^[1]).

○ Figure 1: Riser cable assembly



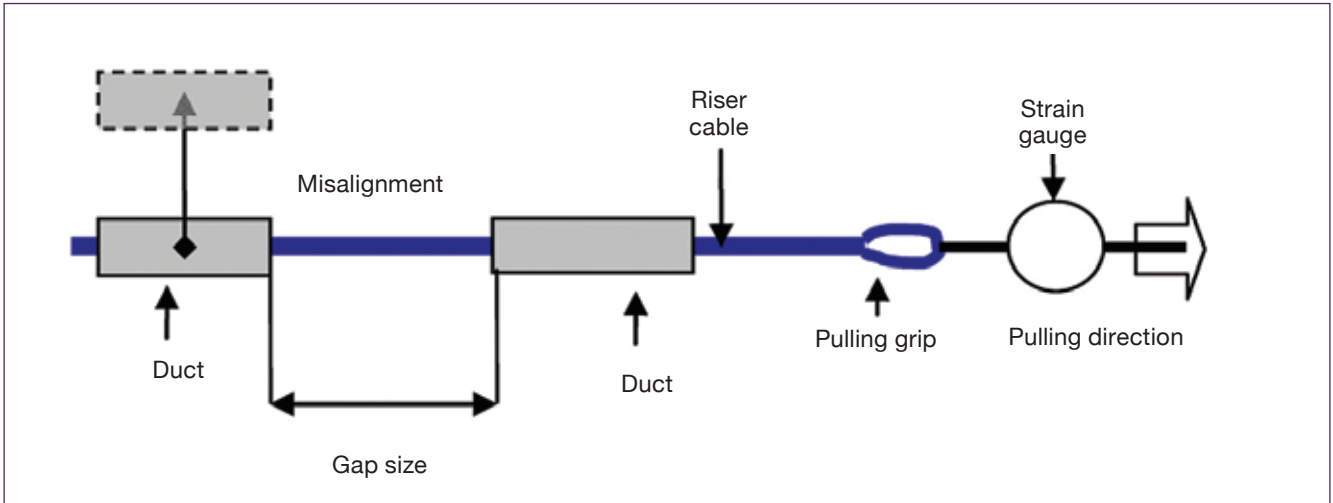
○ Figure 2: Typical MDU Architecture

The next growth opportunity in FTTH that enables acceleration of market penetration is coming from Multi-Dwelling Units (MDU) deployments. In typical MDUs the fibre is brought to the floor level and shared by several dwelling units. Network deployments in challenging MDU environments are different than in any single-family house and require an adequate technology. Additionally, as deployments increase, customers will have trouble finding enough skilled splicing technicians to realise large roll outs.

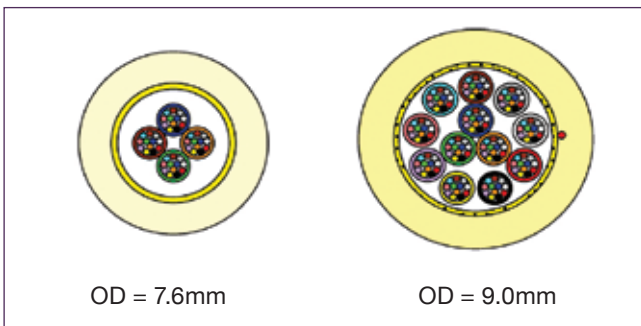
To meet today's market demand Corning designed a FTTH MDU solution (ASCEND™) which uses an advanced riser cable assembly named OptiRise™. Riser Cable Assembly solves major deployment issues and enables MDU installations to be faster, easier and more reliable.

The fibre optic cable consists of network access points which are pre-installed at customer-specific locations distributed along the length of the cable.

The system is manufactured and tested in the factory, then packaged and shipped to the customer for immediate deployment.



○ Figure 4: Testing setup



○ Figure 3: Micromodule cable (up to 144f)

1 Riser cable assembly

The recent emergence of single mode fibres for FTTH applications with improved bending performance has been driven by the increasing amount of optical cable being installed inside buildings with all the associated bend challenges.

As mentioned before, the speed of deployment creates another main challenge in today's installations and the pre-connectorised riser solution has been specifically designed to overcome this issue. As the FTTH scale of deployment increases, customers will have trouble finding enough skilled splicing technicians.

Additionally, labour rates for highly skilled fibre craftsmen are already increasing. The proposed solution enables considerable advantages in the speed of deployment, while significantly decreasing the number of skilled installers needed to complete an installation successfully.

Faster deployment time will allow customers to generate revenue faster, thus increasing their ROI. The main element of the proposed solution is a pre-connectorised riser cable shown schematically in Figure 1.

This solution is based on bend insensitive fibre, which makes it ideal for deployments within the challenging MDU environment. The riser assembly provides single connectors (SC or LC type) on the basement side to be connected to a basement distribution terminal and individual fibre breakouts on each floor level to be connected to the individual customer apartments.

All connectors and the breakouts on the floor level are factory assembled and therefore avoid the critical step of a typical mid span access of the cable.

The cable is already 100% factory tested before being delivered to the deployment site ie MDU. The riser assembly is built according to the exact individual MDU architecture.

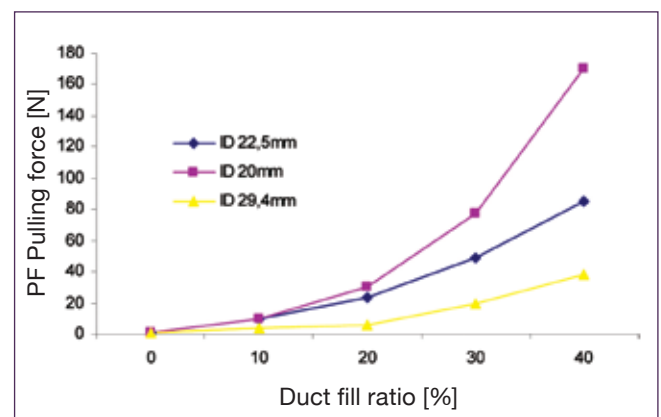
Only very basic parameters like the distance between floors (F) and the distance from the basement distribution terminal to the first floor breakout point (B) have to be provided in order to enable this (Figure 2).

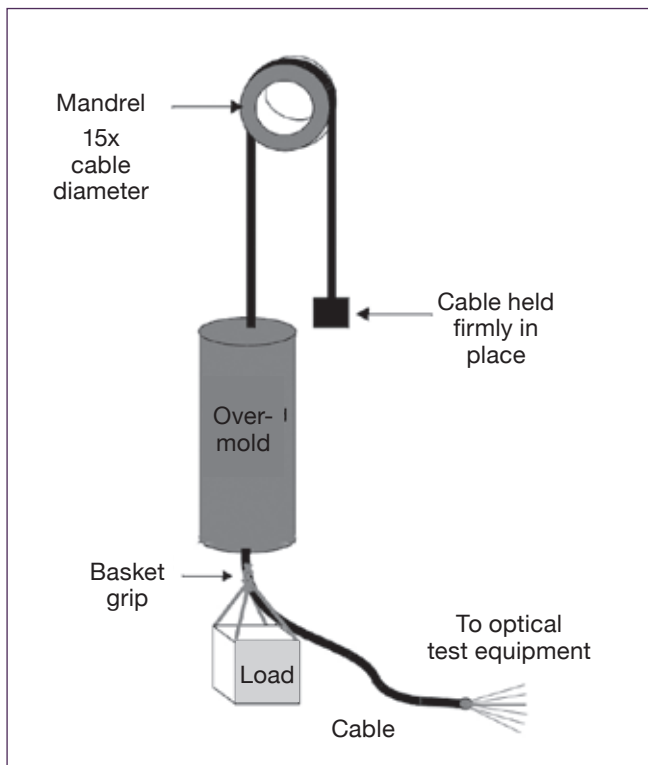
Based on this information even installers not used to handling fibre can deploy the proposed cable very quickly. The basement tail length is predefined at 120cm for easy connection into the basement distribution terminal.

The length of the individual breakout tethers at the floor level depends on the given floor height (F) and are predefined as F-15cm as the maximum length. In order to minimise the cable diameter during installation the connectors at each floor level are staggered along the main cable during the installation procedure.

The cable assembly comes with a pulling grip for easy installation. The extension distance from the last tap point to the pulling grip is predefined at 5m. Different connector types such as SC or LC can be chosen for the complete assembly.

○ Figure 5: Pulling force vs Duct fill ratio





○ Figure 6: Sheath retention setup

In order to route vertical cables efficiently and unobtrusively inside buildings, Corning's design efforts for this product focused on smaller diameter and more flexible units leading to FRNC micromodule cables as shown in Figure 3.

An additional advantage of this cable is the extremely small bend enabled by ClearCurve[®][2] fibre that allows discreet storage of fibre in the building, either for tether or for excess pigtailed lengths.

The flexibility and the small outer dimensions of the riser cable assembly ensure the very easy installation of the cable and routing through the wall or on the various levels of the building.

2 Installation conditions

One of the most critical issues related to cable installation is pulling through the vertical duct already installed in MDUs (Figure 2).

The following tests were performed to simulate installation conditions and define installation limits of the cables in terms of duct congestion. The installation process was simulated for several duct diameters and shapes both with and without copper cables already installed. Additionally, duct misalignment and gap size shown in Figure 4 were considered.

Tests were performed for 3m duct pipes with different dimensions.

This simulates typical 3m distances between floors in the MDU building.

Each cable was pulled three times for every configuration. Figure 5 shows the pulling force for a 6x4 configuration measured for three duct with various inner diameters (ID) and with different filling ratios.

Results showed that the most important factor is the number of riser tap points, which will be pulled simultaneously through the duct. However, the pulling force for different fill ratios depends also on copper twisted pairs arranged inside the duct.

The total pulling force during installation should not exceed 500N. Based on duct size, fill ratio and misalignment data, the maximum number of tap points pulled simultaneously can be calculated as:

$$\text{Max. \# of tap points} = \frac{500N - F_{\#} \cdot MF}{PF} \quad (1)$$

Where, F# is number of floors, MF is misalignment force and PF is pulling force.

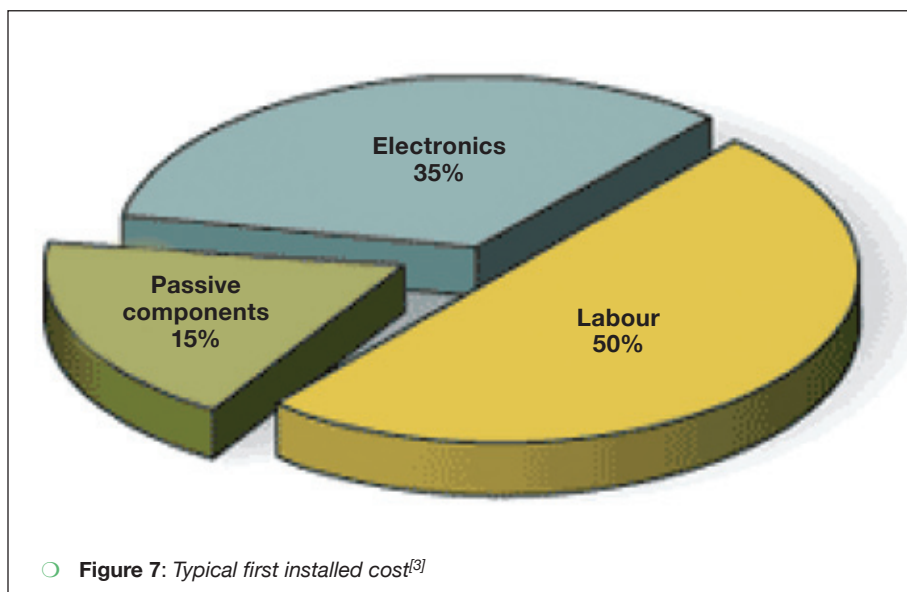
3 Reliability

The qualification test plan was a variation of the GR-3122 specification, modified to reflect indoor usage.

Test samples were prepared in the most common configurations; 6 x 4 – 6 tap points, each with 4f, 12 x 4 – 12 tap points, each with 4f and 12 x 8 – 12 tap points, each with 8f.

For such a set of samples the following tests were performed: thermal aging, thermal and humidity cycling, sheath retention, cable flexing, compression, assembly installation, pulling through ducts, cable pulling and straight and 90° tether pull. All tested samples passed both environmental and mechanical tests without any issues.

As an example for the extensive test programme the sheath retention test set-up is presented in Figure 6.



○ Figure 7: Typical first installed cost^[3]

Test condition:

The entire test was performed using typical indoor temperature cycles and an applied force of 500N (50kg).

Two access jumpers were connected to the sample during the test. Optical monitoring of insertion loss was carried out both before and after the test.

All samples were put inside a walk-in chamber with two access jumpers on both ends. Samples were conditioned for 1h at each temperature and tested for 15 minutes. System measurements were taken before and after test exposure.

4 Deployment cost

Estimations of typical first-installation costs of fibre to the home networks is shown in *Figure 7*.

Labour typically represents half of the first installed costs of fibre to the home networks while passive components represent only 20% of the total investment.

There are two elements concerning the labour costs, namely the time to deploy, test and troubleshoot, and the hourly rate of the installer required to install the network. That hourly rate depends on the skill set and equipment required to install the components.

Major MDU architectures used for MDU deployments are shown in *Figure 8*:

- a) traditional point to point solution – all fibres are individually terminated at the customer side
- b) blowing fibres – individual fibres/ cables blown from basement to the customer
- c) mid-span access – cable sheath is cut and fibres are selected and extracted on each floor
- d) pre-connectorised riser – 100% factory tested ‘plug and play’ solution

The approach of a point-to-point as well as of blowing fibre has been to run individual fibre cables from a single point in the basement to each floor of a building, because of the need to centralise splitters or electronics.

Both these approaches result in significant labour time and a high level of craftsmanship of the skilled splice technician who covers the feeder and distribution segments of the network being needed.

Even more for mid-span solutions, where the cable sheath needs to be cut and individual fibres are selected and extracted on each floor, highly skilled installers are required and significant constraints in the deployment time appear.

Additionally, owners of MDUs are sometimes reluctant to grant approval

for a service provider to install new cabling and hardware within their buildings, due to the disruptions these activities will cause for their tenants – making the speed of deployment even more important.

Table 1 shows a comparison of major MDU architectures used for MDUs in terms of system characteristics.

The proposed riser cable can be quickly and easily deployed with minimal disruption of the end customer.

Instead of traditional deployment techniques involving a separate cable for each floor or the need to perform a mid-span access at specified locations, the OptiRise™ is simply pulled through the vertical riser conduit.

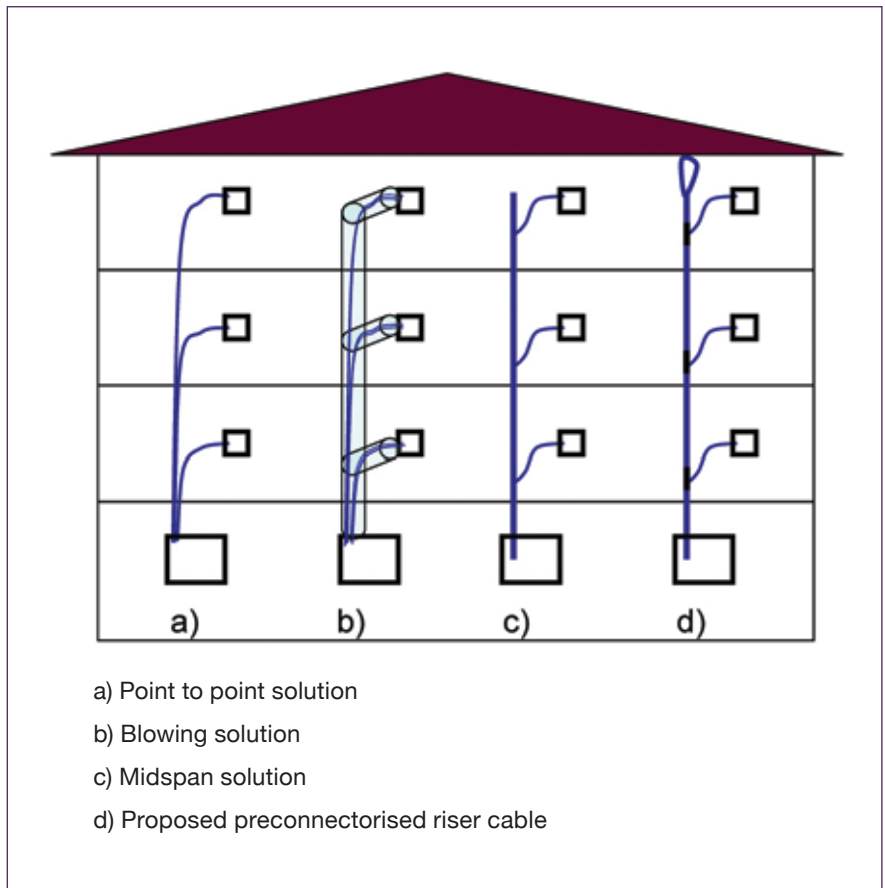
The network access points then line up with the openings in the riser conduit where the riser tethers can be accessed.

The benefits of this innovative approach enable considerable advantages in the speed of deployment, while significantly decreasing the number of skilled installers needed to complete an installation successfully.

At the same time, the risk of reworks and failures is reduced due to each fibre in the riser cable being 100% factory tested before shipping to the customer and provides valuable test points during deployment and for later trouble shooting.

A pre-connectorised solution reduces health and safety risks associated with fibre cable preparation and splicing.

○ **Figure 8:** Major FTTH architectures used in MDUs



Criteria	Point to point	Blown fibre	Mid-span	Proposed riser
Survey time	medium	long	short	medium
Installation time	long	long	very long	very short
Skilled labour required	yes	yes	yes	no
Material cost	low	high	medium	high
Total-installed cost (labour+material)	medium	high	high	low
Plug N Play (safety – speed, cable damage)	no	no	no	yes

○ **Table 1:** Comparison of major MDU deployments solutions

Connecting additional MDU customers later is easier than any conventional splice solution.

In combination with bend insensitive fibre, this system combines the advantages of a ‘plug & play’ approach with excellent cable bend performance.

5 Conclusions

This paper describes a fully pre-fabricated fibre optic distribution cable intended to be used as a key part of Corning’s Ascend™ MDU System inside MDU buildings.

The proposed riser solution is generally faster, and regarding total cost of ownership mostly cheaper vs standard splice architectures for FTTH installation in MDU buildings.

All environmental (thermal aging and thermal & humidity cycling) and mechanical tests have been successfully performed.

The simulation results show that the presented solution meets today’s market requirements for both brown field and green field MDU installations and is an ideal candidate for fast and cost effective FTTH deployments.

6 References

- [1] FTTH Council Press Release 23/7/2008
- [2] www.corning.com
- [3] C Mazzali, R Whitman, B Deutsch Lightwave, January, 2005

Corning Cable Systems
Polska Sp z o o
 Tulipan Park
 ul.Smolice 1e
 95-010 Strykow, Poland
Tel: +48 42 230 11 00
Fax: +48 42 230 11 01
Website: www.corning.com

对弯曲不敏感的挠性直立光缆用于快速FTTH安装

撰文：Corning Cable Systems公司Grzegorz Tosik、Paweł Kołodziej 和 Magdalena Mirynowskax

摘要

当今，光纤到家 (FTTH) 网络在发展信息社会的过程中发挥着重要的作用。以往几年所看到的、日益受到人们的欢迎的、来到成百上千万户的FTTH布置以及过去，但连接到家的市场渗透率仍然较低 (美国为2.9%户家庭，低于欧洲的4%，亚洲约为25%^[1])。

FTTH下一轮能加速市场渗透率的增长机会将来自多住户单元 (MDU) 布置。在典型的MDU中，光纤将穿越楼面，由几家住宅单元分享。在富有挑战的MDU环境中的网络布置与任何单个家庭住宅的布置不同，它要求一个充足的技术。另外，随着布置的增加，客户将拥有技术高超的拼接技术员来实现大量布置。为了满足当今市场的需求，Corning设计了一种FTTH MDU解决方案 (ASCEND™)，它采用一种先进的名为OptiRise™的直立光缆组件。直立光缆组件解决主要的布置问

图1: 直立光缆组件

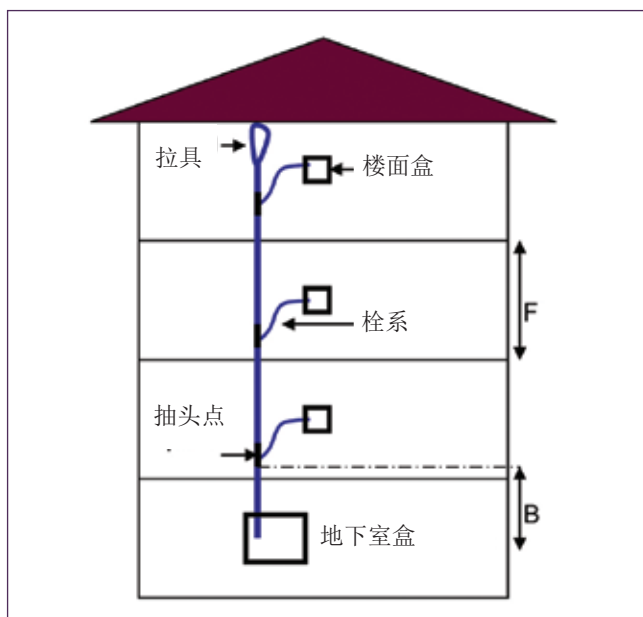
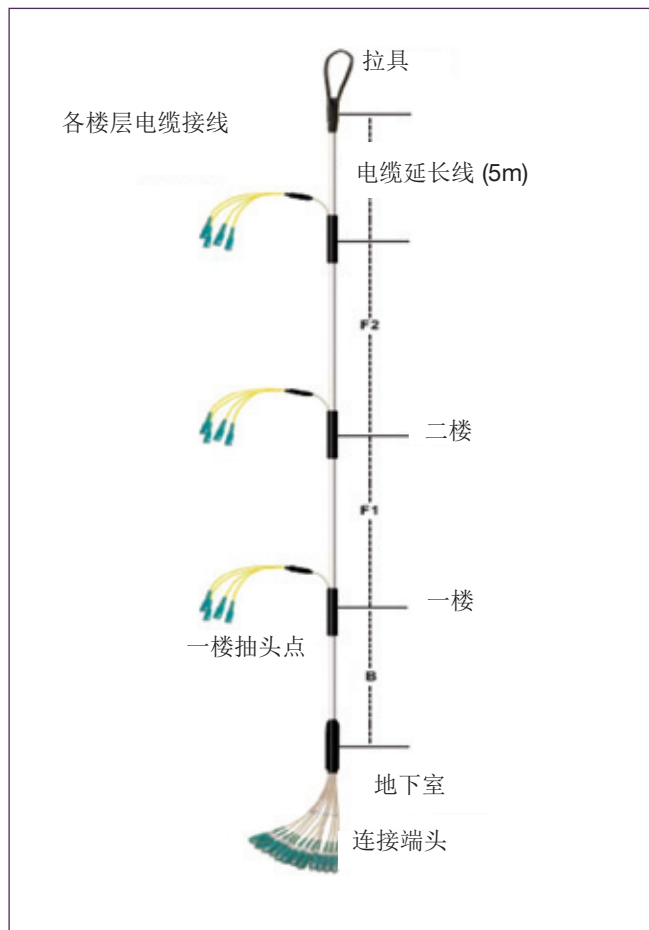


图2: 典型MDU结构

题，能使MDU安装更加容易和可靠。光缆包括网络接入点，它们沿着光缆分布预先安装在客户指定的位置。系统在工厂完成制造和测试，然后包装发运到客户，立即安装。

1 直立光缆组件

越来越多的安装在大楼内的光缆受到弯弯曲曲的通道限制，而最近出现的FTTH单模光纤为此改进了弯曲性能。如前所述，安装速度是当今安装中的另一个主要挑战，预连接的直立光缆组件解决方案经过特殊设计，克服了这个问题。随着FTTH布置规模的增加，客户将拥有技能高超的拼接技术员。另外，高技能劳务成本一直在上升。提议的解决方案在布置速度具有优势，大大降低了成功完成一项安装所需的高技能安装者数量。更快的布置时间使客户能更快地获得收入，增加其投资回报率。

提议的解决方案的主要元素是预连接的直立光缆组件，如图1所示。这种解决方案基于对弯曲不敏感的光纤，使之成为在富有挑战的MDU环境中的理想布置。直立光缆组件在地下室侧提供单接头 (SC或LC型)，连接到一个地下室分配终端以及各个楼面光纤分接头，然后连接到各个客户公寓。所有接头和楼面分接头都在工厂组装，从而避免了电缆典型中跨接入的关键步骤。电缆已100%经过工厂测试，然后再送到安装现场，即MDU。直立光缆组件按照各个MDU构造制作。只要提供非常基本的参数即可，例如楼面之间的距离 (F)、地下室分配终端到第一层分接头点之间的距离 (B) (图2)。基于这个

信息，即使不熟悉光纤的安装者也能很快地布置这种光缆。地下室尾长预定为120cm，以便于连接到地下室分配终端。各楼面分接长度取决于给定的楼面高度(F)，预定最大长度为F-15cm。为了尽量降低光缆直径，在安装过程中各楼面接头均沿着电缆交错安装。光缆组件配备一个安装拖夹。最后抽头点到安装拖夹的延伸距离预定为5米。整个组件可选用不同的接头类型，例如SC或LC能被选择。

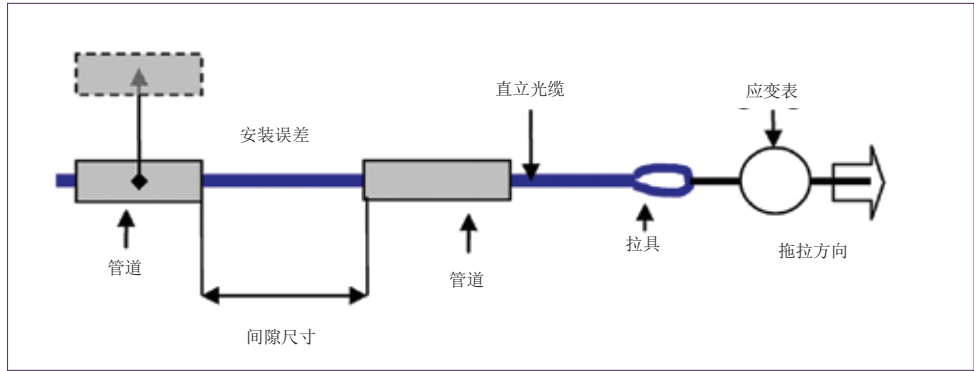


图4: 测试设置

为了有效、隐蔽地在大楼内布置垂直光缆，Corning设计这种产品时致力于直径更小、更具挠性的单元，从而创造出FRNC微型模块光缆，如图3所示。这种光缆采用ClearCurve®光纤，它的一个附加优点是可弯曲到极小的曲率，可隐蔽地存放在建筑物内，包括栓系或超长抽头。直立光缆组件的挠性和小外径保证在大楼内非常快速地安装光缆，穿越墙体或铺设在各个楼面。

2 安装条件

与光缆安装相关的最关键问题之一是将光缆拉过已经安装在MDU内部的垂直通道(图2)。我们进行了以下测试，以模拟安装条件，确定电缆安装极限 - 通道拥挤度。在若干种已经安装和没有安装铜电缆的通道直径和形状下模拟了安装过程。另外，还要考虑如图4所示的通道不对中和间隙尺寸。测试在3米长不同直径的通道中进行，模拟MDU建筑楼面典型的3米距离。对每种组态，每根光缆拉3次。图5显示3种不同内径(ID)和不同装填比的通道在6x4组态下的拉力。

结果表明：最重要的因素是直立光缆抽头点数量，它们被同时拖过通道。但是，不同填充率时的拉力还取决于通道内的铜绞线分布。安装时的总拉力不应超过500N。基于通道尺寸，装填比和不对中数据、同时拖拉的最大抽头数可以计算如下：

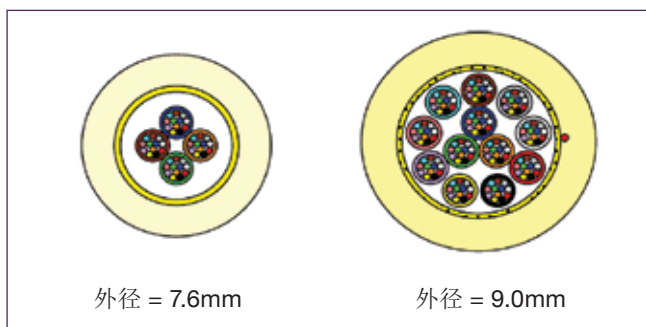
$$\text{最大抽头点} = \frac{500N - F_g \cdot MF}{PF} \quad (1)$$

F#是楼层数，MF是不对力，PF是拉力。

3 可靠性

质量测试计划源于GR-3122规格，修改到适合室内使用。测试样品被准备到最常用组态：6x4-6抽头点，每个有4f，12 x 4 - 12抽头点，每个有4f，12 x 8 - 12抽头点，每个有8f。对于这样一组样品，进行了以下测试：热老化、热和湿度循

图3: 微型模块光缆 (高达144f)



环、护套保留、电缆挠曲、压缩、组装、拉过通道、光缆拖拉、直拉和90度栓系拖拉。所有被测试的样品都通过了环境和机械测试，没有任何问题。图6显示了护套保留测试的设置，作为广泛测试计划的一个示例。测试条件：整个测试采用典型室内温度循环，施加力量为500N(50kg)。测试期间用两个接入夹具连接到样品。在测试前后还光学检测了插入损耗。所有样品放在一个恒温恒湿室内，两端有两个接入夹具。样品在每个温度经过1小时调温，测试15分钟。在测试暴露前后还进行了系统测量。

4 布置成本

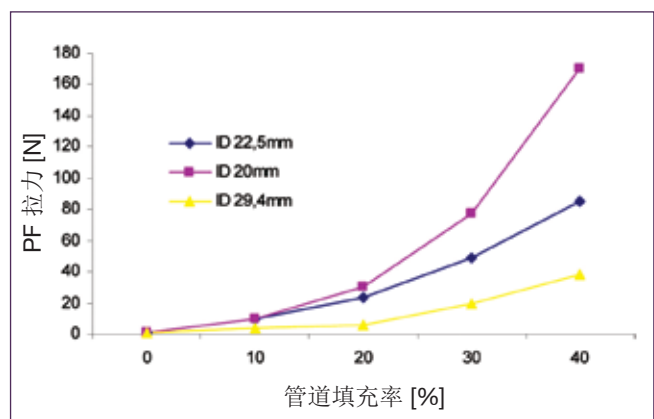
图7所示为预计的典型光纤到家网络首次安装成本。劳务成本通常是光纤到家网络安装成本的一半，被动元件为总投资的20%。有两个元素与劳务成本相关，即安装网络所需的布置测试和故障排除时间以及安装者小时费率。小时费率取决于安装元件所需的技能和设备。

图8所示为布置MDU的主要MDU结构。

- a) 传统的点到点解决方案 - 所有光纤都分别连接到客户端
- b) 吹光纤 - 将各光纤/光缆从地下室吹到客户
- c) 中跨介入 - 切割光缆护套，在每个楼面选择和抽取光纤
- d) 预连接直立光缆 - 100%工厂测试‘插入即用’的解决方案

点到点以及吹光纤的方法将各个光缆从地下室的一个点吹到建筑物的各个楼面，因为需要集中拼接或电子元件。这两种途径均需要大量劳务时间和高技能的拼接技术员，他要照顾到所需网络的馈线和分配段。对中跨解决方案则需要更多，需要在每个楼面切割光缆护套，选择和抽取光纤，需要高技能的安装者和大量的布置时间。另外，MDU业主有时不让服务提供商在他们的建筑物内安装新光缆和硬件，由于这些活动中断其房客 - 加快布置速度甚至更为重要。表1比较了用于MDU的主要MDU结构的系统特征。

图5: 拉力与管道填充率



基准	点到点	吹光纤	中跨	提议的直立光缆
调查时间	中	长	短	中
安装时间	长	长	很长	很短
要求有劳务技能	是	是	是	否
材料成本	低	高	中	高
总安装成本 (劳务+材料)	中	高	高	低
插入即用 (安全-速度、 光缆损坏)	否	否	否	是

图1: 主要MDU布置解决方案比较

提议的直立光缆的布置快速简易，对最终客户的干扰最少。它不采用传统的布置技术，因为这种技术涉及每个楼面分开的光缆，或要再规定的地点进行中跨，而OptiRise™只需简单地将直立光缆拉过垂直导管。这种创新在布置速度具有很大的优点，大大减少了成功完成安装所需的安装者数量。同时，降低了返工和故障风险，由于每根直立光缆经过工厂100%测试后再发运到客户，提供了富有价值的布置用测试点，而且有利于以后的故障排除。采用预接的解决方案降低了光纤准备和拼接期间的健康和安全性。与传统的拼接解决方案相比，更便于以后连接其它MDU客户。结合对弯曲不敏感的光纤，这种系统综合了‘插入即用’和优秀光缆弯曲性能的优点。

5 结论

本文描述了一种全预制光纤分配光缆，旨在用作Corning的MDU建筑物Ascend™ MDU系统的一个关键部件。提议的直立光缆解决方案一般而言速度更快，而且就拥有的总成本而言，比MDU建筑FTTH安装的标准拼接结构便宜。

图6: 护套保持设置

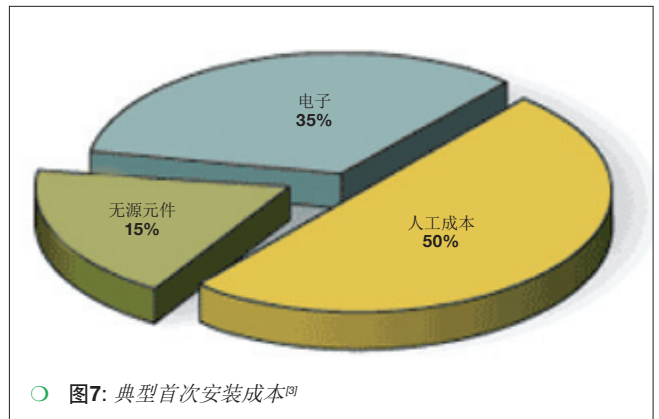
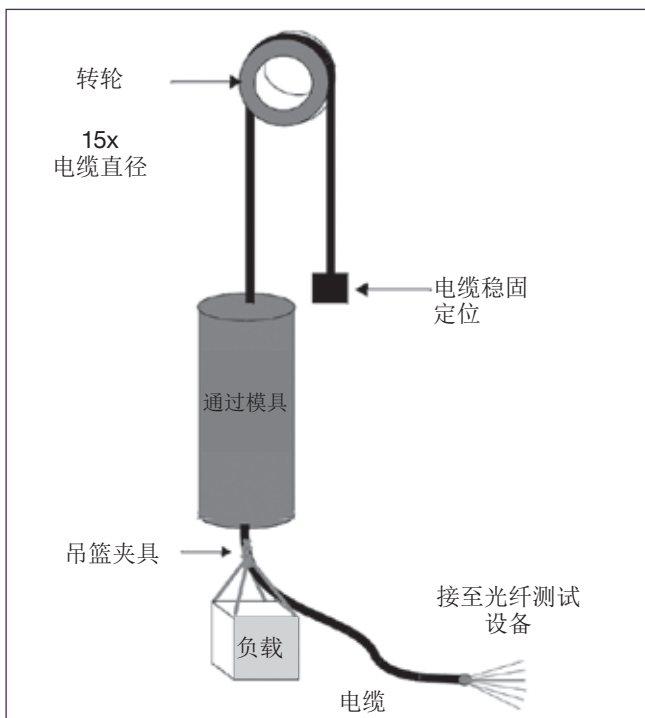


图7: 典型首次安装成本

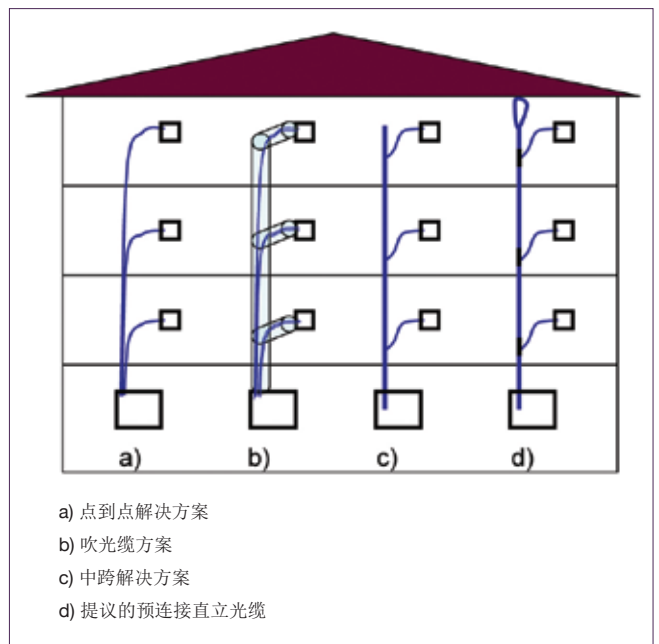


图8: MDU所用的主要FTTH结构

已经成功执行所有环境（老化、热力和湿度循环）和机械测试。模拟结果表明：所介绍的解决方案满足当今市场对褐地和绿地MDU装置的要求，是快速经济的FTTH布置的理想候选。

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Corning Cable Systems
Polska Sp z o o
 Tulipan Park
 ul.Smolice 1e
 95-010 Strykow, Poland
 电话: +48 42 230 11 00
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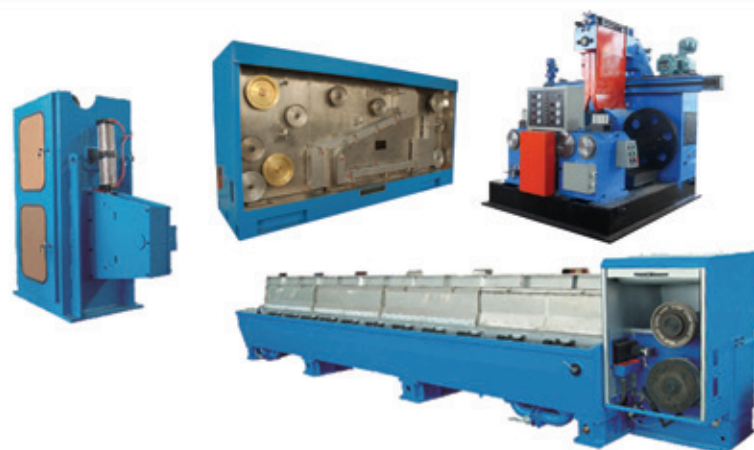
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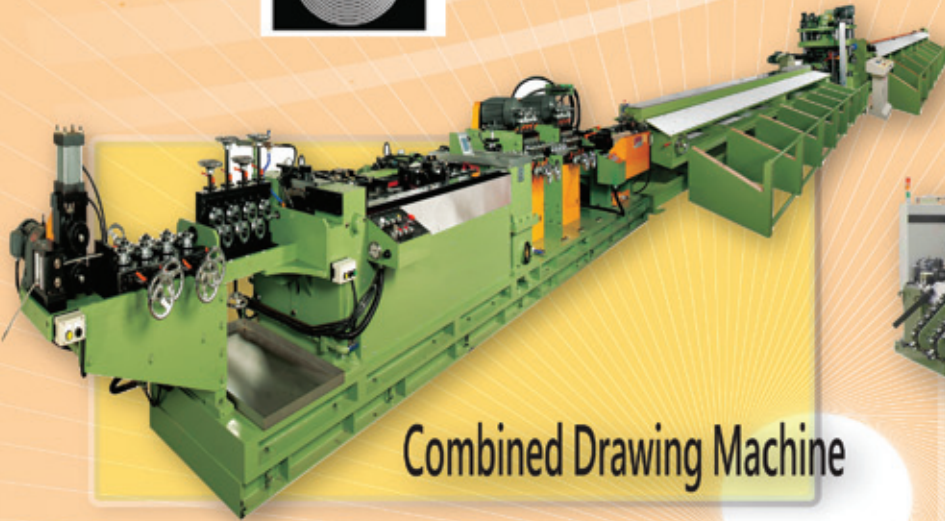
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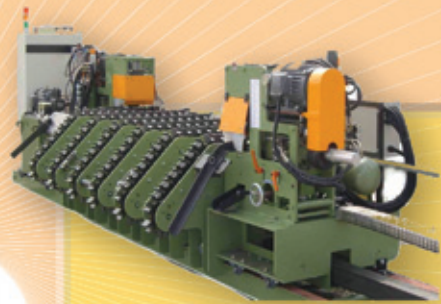
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