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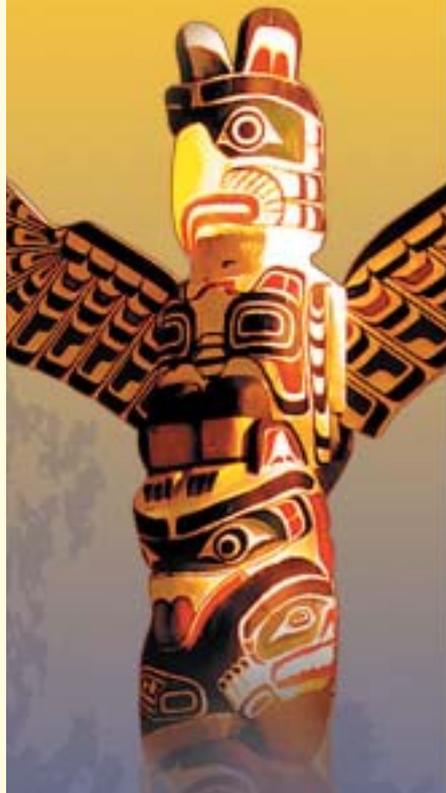
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ICF Congress

VANCOUVER

OCTOBER 08-12, 2003



The working groups for the business sessions have been working hard even during summer holidays and now all the speakers are confirmed:

- (1) Intelligent Transportation Systems (ITS), Wire & Cable Applications for Road Networks and Automotive Vehicles
 - *Mr. Neil Schuster, President & CEO, ITS of America
 - *Mr. Dave Wright, Director, Advanced Engineering, Delphi Packard
 - *Mr. Kazunori Sakai, Project General Manager, Advanced Vehicle Engineering Division, Toyota Motor Corporation
 - *Mr. Bob McQueen, Vice President, ITS services, PBS&J
- (2) Overhead vs. Underground -Update
 - *Mr. Alec Campbell, Partner, Gorham & Partners
 - *Mr. Reinhard Schroth (Pirelli), Chairman CIGRE SC B1
 - *Mr. Per Christensen, Project Manager, NESA (Denmark)
- (3) North American Logistics & Distribution Consolidation
 - *Mr. Richard Worthy, President, Sonepar North America
 - *Mr. Robert Grubbs, CEO & President, Anixter International
 - *Dr. Robert Spekman, Professor, University of Virginia
- (4) Regional Survey: Report on "Americas"
 - *Mr. Paul Dewison, Managing Director, Metalica

Wake-Up Call?

You will remember well the news on the huge power blackout in the East Coast of North America that happened in the middle of August. Whatever the cause of the power failure was, it seems to be inevitable to improve the transmission lines in North America. President Bush said "We will use this rolling blackout as a wake-up call for the need to modernise our delivery systems". You can imagine the chaos if the huge blackout continues more than several hours when it will shut down not only home appliances but also the server of your office. Today, majority of business people are doing business through computers/PCs and mobile-phones. Now, so called ubiquitous society is closer by, more and more stable supply of the electricity will be essential. More comprehensive solutions to cope with the increasing demand for the stable supply of the energy and electricity will be required definitely. Wire and Cable industry will be able to play an important role for such solution!

New Member

We are very pleased to welcome EUROCABLE GROUP of Croatia as a new member. They are manufacturing mainly power cables, building wires, data and LAN cables.

Migration of Manufacturing Out of the United States: The Implications

There are now clear signs that the United States economy is on the mend. The nature of the recovery, however, gives us cause for concern. While much of the service sector is showing a rebound manufacturing, especially of durable goods, remains sluggish. It appears that industrial production in 2003 will be below the level of 2000. For durable goods, output in the first half of 2003 was 1.8% below that of 2002. Even taking into account the expected improvement in the second half, we still expect to see durable goods output slightly below that of last year for 2003 as a whole, and around 6% down on 2000. The reason most commonly cited for the sluggish performance of durable goods manufacturing in the United States is the shift of production offshore, primarily to China. The figures presented in this article clearly point to this being the case. Whatever the reasons, the reversal of the United States rapid industrial growth of the late 1990s has major implications for the wire and cable industry, not only in OEM markets, but also in markets related to industrial construction.

The US Economy

While improving US consumer confidence and buying activity give some grounds for optimism, at government

level the assessment of future prospects is becoming more cautious. Alan Greenspan has recently announced a range of expected GDP growth in 2003 from 2.50–2.75%, reducing the estimates by 0.75%. Particularly worrisome is the widening federal budget deficit, expected to be US\$ 455 billion in 2003 and even higher, at US\$ 480 billion, in 2004. Such a wide gap could push up interest rates, already on a rising trend, to the point where the still buoyant residential construction market turns down and the weak revival in consumer confidence is killed off. In this context, with net imports of durable goods still rising, prospects for manufacturing in the United States this year and into next do not look very good at all. It should be remembered that industrial capacity utilisation today is at a very low level in the 72–74% range. Industry may be regarded as healthy when capacity utilisation exceeds around 85%.

The Role of Trade With NAFTA

In assessing the role of trade, we look at cross border movement of general machinery (HS Code 84), electrical and electronic machinery (HS Code 85) and we also refer to trade in vehicles and parts (HS Code 87). The figures show that the rise in imports into the United States is by no means a new phenomenon. Between 1995 and 2001, total imports rose on a constant 1996 dollar basis by 53%, from US\$ 771 billion to 1,180 billion. For much of the period, however, US exports of manufactured goods were also increasing quite strong-

Industry and the US Economy 1997-2003 (1996 US\$ billion)

	1997	1998	1999	2000	2001	2002	2003f	Average % Change
Industry	1972	2059	2153	2230	2137	2165	2209	1.8%
Agriculture	144	146	155	167	164	164	167	2.3%
Mining	117	120	115	102	107	108	111	-0.9%
Construction	325	349	368	378	372	372	379	2.4%
Manufacturing	1387	1444	1514	1585	1490	1519	1553	1.9%
Durables	813	893	949	1044	990	989	981	3.5%
Non-Durables	575	556	571	558	518	540	571	-0.2%
Services	5150	5481	5794	6046	6152	6323	6519	4.0%
Government	1036	1047	1061	1089	1108	1128	1151	1.7%
Not Allocated	2	-529	-149	-174	-182	-175	-189	n/a
Total GDP	8160	8059	8859	9191	9215	9440	9690	2.9%

Source: US Department of Commerce. Metalica Ltd.

United States Trade in Machinery and Other Products With Key Partners in 1995 and 2001 (US\$ billion)

All Products

	Exports				Imports				Balance	
	1995		2001		1995		2001		1995	2001
	Value	Share	Value	Share	Value	Share	Value	Share	Value	Value
Mexico	46.3	7.9	101.5	13.9	62.7	8.1	132.8	11.3	-16.4	-31.3
Canada	126.0	21.6	163.7	22.4	148.3	19.2	220.1	18.7	-22.3	-56.4
China	11.7	2.0	19.2	2.6	48.5	6.3	109.4	9.3	-36.8	-90.1
Total	583.0	100.0	731.0	100.0	770.8	100.0	1,180.1	100.0	-187.9	-449.1

General Machinery (HS Code 84)

	Exports				Imports				Balance	
	1995		2001		1995		2001		1995	2001
	Value	Share	Value	Share	Value	Share	Value	Share	Value	Value
Mexico	6.3	5.5	14.6	10.1	6.4	5.1	18.3	11.1	-0.1	-3.7
Canada	24.7	21.9	32.2	22.2	13.5	10.8	17.4	10.5	11.2	14.8
China	2.2	1.9	4.1	2.8	3.8	3.0	14.3	8.7	-1.6	-10.3
Total	113.0	100.0	145.1	100.0	125.4	100.0	164.9	100.0	-12.5	-19.8

Electrical & Electronic Machinery (HS Code 85)

	Exports				Imports				Balance	
	1995		2001		1995		2001		1995	2001
	Value	Share	Value	Share	Value	Share	Value	Share	Value	Value
Mexico	11.0	12.0	24.9	20.3	16.5	14.2	33.5	21.3	-5.5	-8.7
Canada	17.3	18.9	20.0	16.3	7.0	6.0	11.2	7.1	10.3	8.8
China	1.3	1.4	3.4	2.8	8.2	7.0	20.6	13.1	-6.9	-17.1
Total	91.9	100.0	122.6	100.0	116.2	100.0	157.4	100.0	-24.3	-34.8

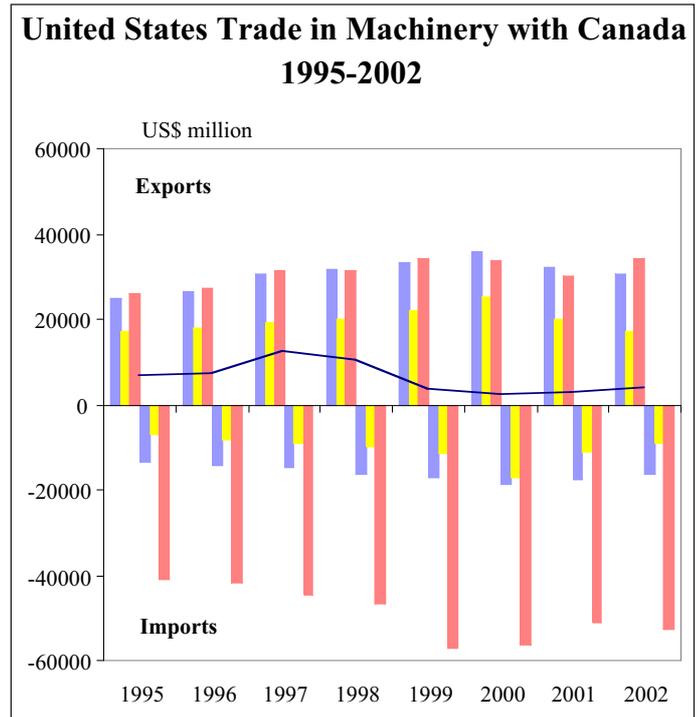
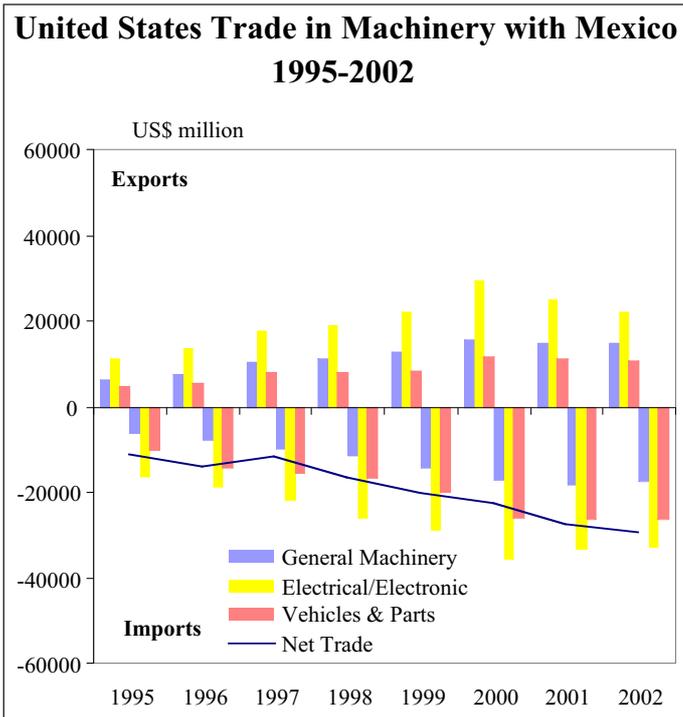
Source: United Nations, Metalica Ltd.

ly. While steadily rising, the United States trade deficit in all products remained below US\$ 300 billion until the late 1990s, surging forward in recent years to reach US\$ 450 billion and above in 2001/02.

Underlying the strong growth in trade volume through the 1990s was the economic integration of the United States with its NAFTA (North American Free Trade Area) neighbours, Canada and Mexico. With the lowering, then removal of tariff barriers between these countries and special bilateral agreements, especially the Mequildora concessions in Mexico, it became economic for US-based companies to carry out part of their manufacturing operations offshore, re-importing finished goods made in their neighbouring countries. Low labour costs and a beneficial fiscal environment in Mexico proved to be a powerful magnet, drawing in business

from the United States and elsewhere. As a result, trade with NAFTA partners grew in importance. US exports to Mexico and Canada grew from 28.5% of all exports in 1995 to reach 36.3% in 2001. The share of imports grew nearly as quickly faster, from 27.3% in 1995 to 30.0% in 2001, despite a relative decline in Canadian trade. For Mexico, the United States became the dominant factor in external trade, to the point where, today, the United States accounts for around 90% of all of the nation's exports.

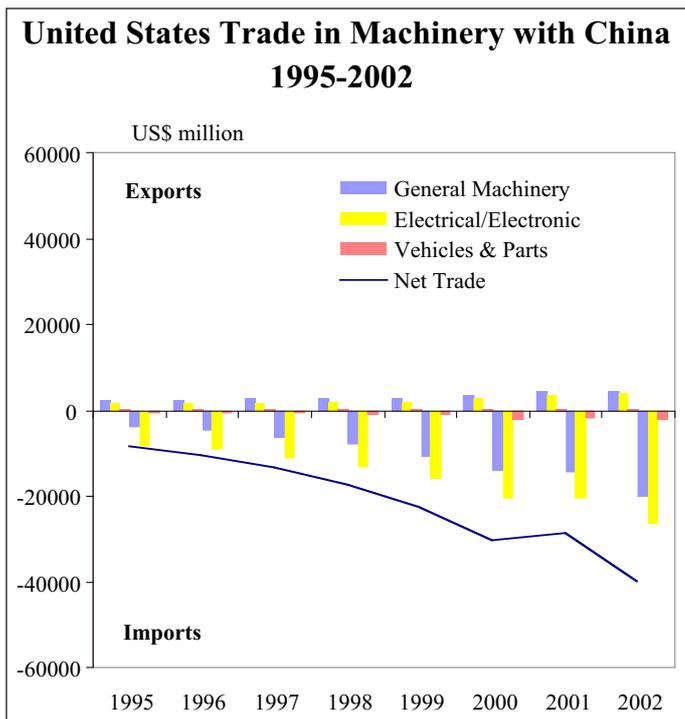
The importance of NAFTA trade is very evident in the machinery sector, to which nearly all OEM wire and cable is destined. Including only products classified under HS Codes 84 and 85, US exports to NAFTA countries increased from 27.1% of the total in 1995 to 34.8% in 2001. Including vehicles and parts (HS Code 87) in-



creases the NAFTA share of machinery exports by around five percentage points, as Mexico is a major location for harness and other parts assembly and Canada has a large finished vehicle assembly business, for products finally destined for the US market. While US exports of machinery to NAFTA neighbours have risen, however, imports have been rising at a faster pace. Including vehicles and parts, exports of machinery from NAFTA countries grew by US\$ billion between 1995 and 2001 (from US\$ 90.1 billion to US\$ 132.9 billion), while imports grew by a much greater US\$ 67.0 billion (from US\$ 95.0 billion to US\$ 158.0 billion). The result was a growing NAFTA trade deficit, rising from US\$ 4.9 billion to US\$ 25.0 billion. Most of the increase in trade, especially import into the United States, was from Mexico. While NAFTA trade growth has historically been a very important factor in determining the trend in US manufacturing, 2002 appears to have been a turning point. In that year, bilateral trade in machinery between the United States and both of its neighbours decreased in both directions. A further reduction in trade is evident in 2003. Although the United States' NAFTA trade deficit increased a little more in 2002 (to US\$ 26.0 billion), it appears that the free trade area was no longer such an important driving force.

The China Phenomenon

While NAFTA may be declining in relative importance, China is rising dramatically. Despite a dip in imports into the United States in 2001, machinery exports in HS classes 84 and 85 nearly trebled from US\$ 12.0 billion in 1995 to US\$ 34.9 billion in 2001. Including trade in vehicles plus parts increases the 2001 figure by a modest US\$ 1.7 billion to US\$ 36.6 billion. Where NAFTA sourced imports fell slightly in 2002, those from China surged forward, rising by a massive 32.7% to reach US\$ 48.6 billion. While the growth in Chinese trade has been quite spectacular, the absolute volume of machinery imports from China is still much less than from either Canada or Mexico, and less than one-third of the two combined. There are important differences, however. Apart from the sheer speed of change, the focus of Chinese imports on particular product groups and the lack of a counterbalancing flow of goods from the United States to China make this trade quite different in nature from that with NAFTA. Unlike NAFTA, Chinese exports do not include a large vehicles and parts component. Excluding the HS Code 87 category would put Chinese exports of machinery to the United States at considerably more than half the level of NAFTA trade. More importantly, because of the lack of flow of goods from



the United States to China, net imports of machinery from China now greatly exceed those from NAFTA. In 2002, net imports of machinery from China totalled US\$ 40.3 billion; over 30% higher than net NAFTA imports.

The machinery products that are imported from China into the United States generally have quite a large wire content. Although China has not yet started to displace Mexico in the automotive harness business, its exports of electrical and electronic equipment are approaching a similar level while, since 2002, exports of general machinery have been higher. Looking at specific product groups, we see an especially high export of goods such as motors and generators, computers and domestic appliances. Taken together, China exported US\$ 12.5 billion of product in these categories to the United States in 2002. The pace of trade growth in this product group is particularly rapid, rising by over 40% in 2002.

As well as increasing in volume, the breadth of products imported from China into the United States is extending. In the motors business, China has established its international presence only in the smaller sizes. China's largest motor manufacturer, Johnson Electric, makes two million small and micro motors per day, many of which are for export. It is significant that this company

is developing its product range to include larger types, suitable mainly for major domestic appliances. On the domestic appliance front, China has virtually captured the small appliance sector in the United States, exporting items such as hand tools, blenders, mixers, fans and vacuum cleaners. In 2003, however, a major influx of major appliances, such as refrigerators and freezers, air conditioners and washing machines, has become evident. China's largest electro-domestic supplier, Heier, is particularly active.

While Chinese companies are major exporters of wire-containing goods, subsidiaries of the main US and Japanese the main manufacturers are also very evident. The argument for locating production in China is very convincing. China possesses a labour force that is both cheap and well trained and also a rapidly growing domestic market. Indeed, with domestic sales growth of many items of machinery in the 20-40% p.a. range, it would be prudent for manufacturers to establish a strong production base in China, even if products made there were not particularly competitive in the international market.

Insofar as the location of production to China represents a new market opportunity for manufacturers, the implications for US business are not very serious, If, however, manufacturers are closing plant in the United States and importing goods made in China, then the implications for US business (and for North America as a whole) are very serious indeed. The evidence to date appears to indicate that the latter is the case. Since 2000, manufacturing jobs in the United States have been disappearing at the rate of nearly one million per year. Despite the muted revival of the US economy, employment in manufacturing continues to fall. Capital investment in industry in the United States is near an all-time low, while that in Mexico has fallen dramatically. One of the United States' main motor manufacturers has recently been quoted as saying that it will not be installing a new production facility in North America again. At the same time, foreign direct investment (FDI) in China is increasing at a phenomenal pace, more than appears justified by domestic market growth alone. During the 1990s the United States was the largest net recipient of FDI. In contrast, in 2002 the United States saw a net FDI outflow of US\$ 98 billion. China achieved the clear number one spot for inward investment, receiving US\$ 53 billion.

Trade Between the United States and China in Machinery (US\$ million)

	1995	1996	1997	1998	1999	2000	2001	2002
MAIN PRODUCT CLASSES								
General Machinery (HS Code 84)								
Exports	2190	2304	2477	2719	2572	3481	4069	4103
Imports	3783	4640	6193	7903	10661	14039	14322	20175
Electrical & Electronic Machinery (HS Code 85)								
Exports	1270	1433	1520	1754	1985	2695	3433	3956
Imports	8188	9219	10931	13242	15804	20510	20574	26303
Vehicles & Parts (HS Code 87)								
Exports	172	159	353	149	213	198	245	290
Imports	547	591	773	929	1190	2151	1708	2129
EQUIPMENT SUBGROUPS								
Air Conditioners								
Exports	47	45	46	29	28	42	42	44
Imports	4	12	41	106	175	203	260	424
Refrigerators & Freezers								
Exports	70	73	100	74	86	142	194	216
Imports	26	28	43	55	75	142	190	323
Computers								
Exports	247	182	225	575	578	942	957	739
Imports	1326	1461	2119	2896	4278	6540	6160	9429
Motors, Generators & Transformers								
Exports	46	63	132	64	65	113	129	103
Imports	616	937	1276	1488	1812	2287	1927	2004
Domestic Appliances								
Exports	3	5	5	3	3	7	5	3
Imports	281	370	425	405	426	607	853	1066
Wire Harnesses								
Exports	15	4	12	16	25	13	4	14
Imports	69	51	48	104	135	142	110	125
Wire & Cable								
Exports	30	24	35	50	46	57	68	56
Imports	276	332	411	499	599	721	663	762

Source: UN Trade Statistics. Metalica Ltd.

Implications for US Wire & Cable

With such rapid growth of manufacturing in China, it is natural that suppliers of OEM goods such as wire and cable should follow. With US companies relocating production to China, the need to establish a presence in China becomes much more urgent. OEM suppliers must be present in China if they are to serve their customers globally. Developments in wire and cable clearly indicate the trends. For many years, output of OEM wire and cable products has been either static or declining. If we define OEM products to include apparatus wire and cordage, winding wire and automotive wire, Copper Development Association figures show US output in

2002 to be lower in 2002 than it was in 1993. The fall-off has been dramatic in recent years; output dropped by 1999 and 2002. Until recently, much of the decline in output resulted from the build-up of winding wire and automotive wire output in Mexico, although the loss of apparatus wire and cordage business in China and elsewhere in Asia also played a role. The Mexico factor continues to play a role, but more recently China has been much more important, primarily through the import of wire containing goods made in China. In coming years, the direct relocation of production of US cable-makers to China will also become important, especially in winding wire. Rea Magnet Wire started production at



OEM Wire & Cable Output in the United States 1992-2002 ('000 tonnes Cu)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Apparatus Wire & Cords	79	96	107	83	95	96	104	107	113	98	102
Winding Wire	245	258	299	305	324	326	317	353	324	279	249
Automotive Wire	112	122	129	82	86	91	95	104	109	105	111
OEM Products	437	475	535	470	505	512	517	564	546	482	463

Source: Copper Development Association

its joint venture plant in Nanhai earlier this year, while Phelps Dodge has recently broken ground at its wholly owned Chinese subsidiary.

Just how far the shift of wire and cable making out of the United States will go is open to conjecture, although the main winding wire producers are far from optimistic. Consensus opinion puts current annual winding wire consumption in NAFTA countries at 370,000 in 2003 (down from around 400,000 tonnes in 2002), and sees it falling to around 300,000 tonnes before the North American market stabilises. As Mexico is taking an increasing share of the North American market, the decline underway in the United States is even more dramatic.

For automotive wire, consumption in the United States in harness assembly has already been decimated. Automotive wire output could also fall dramatically. Around 60,000 tonnes of automotive wire is made by Delphi Automotive in the United States, but the company has no remaining US-based harness assembly operations. Although it would be extremely difficult for the company to relocate wire making because of a strong labour union presence, the situation is far from being stable.

The rapid pace of transfer of manufacturing out of the United States is becoming a political issue in the United States, but with conflict in the Middle East and more recently the power outage that affected the North East of the country in August, it is far from being at the top of the political agenda. The National Electrical Manufacturers Association (NEMA) has done much to address the issue, carrying out a detailed survey of sourcing of electrical products from China and presenting its findings to the US Senate. A more general concern over the role of China in trade amongst developed countries may serve to reduce the pace of Chinese export growth. It is widely expected that China will adjust the value of the Yuan, which at present is probably around 15% overvalued. Even if this does happen, however, we expect

Chinese export growth in machinery to continue, not least because of the momentum behind foreign investment into China. If this conclusion is correct, OEM wire and cable product output in the United States appears destined to fall further. Construction-related product use related to capital investment by industry also faces a very uncertain future.

News in Brief

(provided by Metalica Ltd. UK)

Corning Inc. On the Road to Recovery: Fibre optic company **Corning Inc.** has announced that, despite falling sales and a net loss of US\$ 22 million, that it exceeded guidance targets for the second quarter of 2003. While at face value the results are not encouraging, if special items and charges are excluded the second quarter saw the first profit for Corning in two years. Corning's debt has been reduced by US\$ 2.0 billion since the peak, while the company has cash and short term investment holdings of US\$ 1.5 billion.

Furukawa Electric Gives Profits Warning: Japanese cablemaker **Furukawa Electric** has announced forecast losses of ¥72.9 billion (US\$ 612 million) for the year ended March 2004. This figure doubles Furukawa's previous loss estimate. The company blames continued heavy losses on low sales and high restructuring charges at **OFS Brightwave**, the US-based optical fibre and fibre optic cable company that it acquired a majority holding in when **Lucent** retreated from the business in November 2001. Further job cuts by Furukawa in the United States are to come, a planned reduction of 780 taking the headcount down to 1300 by the end of this year. The company also announced the closure of a fibre optic plant in Brazil and the downsizing of operations Denmark. Furukawa Electric president Hiroshi



NEWSLETTER

Ishihara claims that this will be the end of the phase of major restructuring.

Yazaki and Furukawa to Part Company in Fibre Optics: The 51% share in the Japanese fibre optic company **Optoconnect** owned by **Furukawa Electric** is to be sold to its partner **Yazaki Corp.** Furukawa is believed to be intending to upgrade its own fibre optic facilities in Japan. Yazaki and Furukawa remain partners in **Bangkok Telecom** in Thailand, a company in which both companies have a 40% stake. This will change, as Yazaki plans to sell its share in Bangkok Telecom to Furukawa.

Superior TeleCom Files Plan: On July 31st **Superior TeleCom** filed a proposed Plan of Reorganisation in order to bring the company and its operating subsidiaries out of Chapter 11 bankruptcy rulings later this year. If sufficient votes by major creditors in favour of the plan are received, the next step will be a hearing before the Bankruptcy Court. The provisionally set for the hearing was September 2nd. The plan would reduce Superior's existing debt of US\$ 1.3 billion by around US\$ 1.0 billion. Despite its troubles, **Superior Essex** (the main operating subsidiary) is showing an improved operating performance, reporting net income of US\$ 6.6 million for the second quarter of 2003.

Plant Closure by Essex Electric: The number of building wire plants operated by former **Superior Essex** building wire division **Essex Electric** is to be cut from three to two with the closure of the Sikeston plant, with the loss of 135 jobs. Sikeston city officials are challenging the move.

Chapter 11 for Rome Cable: United States power cable company Rome Cable, together with its parent Rome Group Inc, has filed for protection for creditors under Chapter 11 rulings.

Further Cuts at Habia Cable, Sweden's data cable company **Habia Cable**, a subsidiary of Beijer Alma, is to cut its workforce by 40 reducing its headcount to 290, with an estimated cost saving of US\$ 2.5 million. The plan involves the shift of some of the company's German production to Sweden and some Swedish production to China. The company blamed low margins for the move

Consolidation in Malaysia: Followed calls from Malaysia's national power utility Tenaga Nasional Bhd to consolidate the cable industry into three consortia, **Federal Power, Furukawa Electric Cables** and **Central Cables** announced the combination of their cable

business in Malaysia on June 5th More recently, **Wonderful Wire & Cable** announced that it is to buy **Guning Kabel** and that it is to adjust its holdings to make it a Bumiputera company, thus becoming a Malay rather than Taiwanese controlled operation. Wonderful Wire has also been holding talks with **Federal Power** with a view to further integration of Malaysia's cable businesses.

US Investment in Winding Wire in China: Ground has been broken for the construction of a wholly owned winding wire facility in Suzhou, near Shanghai by **Phelps Dodge Magnet Wire**. The company, due to commence operations in the first quarter of 2004, will have an initial capacity of 8,500 tpy of copper and aluminium wire and will cost US\$ 15 million. Meanwhile, **Rea Magnet Wire** has recently commenced production at its **Jingda-Rea** plant in Nanhai, in joint venture with **Tongling Jingda**. This plant's initial capacity is 3,600 tpy, with plans for later expansion to over 10,000 tpy.

Tyco International Acquisition in China: The power cable business of China's **Jiuli's Power Cable** is to be acquired by **Tyco International** for US\$ 10 million. Tyco intends to ramp up production to make this company the largest fireproof power cable producer in Asia.

Electrical Equipment Manufacturer Moves into Cable: The French electrical equipment maker **Schneider Electric** and **Clipsal Industries** of Singapore have formed a joint venture to make and distribute electrical wiring products. Schneider will also buy **Gerard Industries' Wiring** in Australia from Clipsal and the Gerard family.

Electrical Distributor in Trouble: Dutch based electrical distributor **Hagemeyer** posted a huge US\$ 141 million loss for the first half of 2003. Having secured a temporary waiver from banks and lenders after breaching loan covenants, the future of the company appears to hang in the balance. Hagemeyer is one the top three distributors in Europe and one the top ten in the United States. It still employs over 20,000 people, after cuts of 1,300 earlier this year.

The ICF Newsletter is published several times each year by The **International Cablemakers Federation**, P.O.Box 26, A-1014 Vienna

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