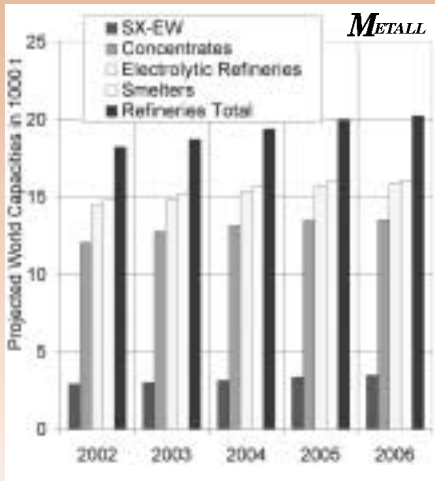


Usage of Copper per Month, worldwide (Source: ICSG)



Copper: Projected World Capacities until 2006 (Source: ICSG)

Planned smelter capacity

Planned smelter capacity has been revised upwards for the projected

period by amounts ranging from 60,000 t/yr to 210,000 t/yr. Total smelter capacity is expected to grow by 1.3 Mt over the forecast period, falling short of the 1.45 Mt projected capacity growth of copper in concentrates, but more than sufficient to meet the growth in concentrate production. Electrolytic refinery growth of 1.35 Mt is expected to essentially keep pace with the growth in smelters. Capacities for all types of refineries (electrolytic, electrowinning, fire refining) are projected to grow by 2.0 Mt over the four-year period 2003 to 2006.

The compound annual growth rate of projected mine capacity over the forecast period is 3.2%, split between concentrates, 2.9%, and SX-EW, 4.5%. Smelter capacities show an annual compound growth rate of 2.1% for the 2003 to 2006 period. The compound growth rate for refined capacity is 2.7%, of which 2.3% is attributed to electrolytic refining and 5.0% to electrowinning. Economic conditions, as well as technological and business factors, will result in production levels that vary from the indicated capacity. Similarly, production levels may be affected by newly announced capacity additions, expansions, and closures or by the delay, advancement, or cancellation of projects.

Every quarter, the International Copper Study Group releases its Directory of Mines and Plants. The Directory provides basic data for all copper

mining, smelting and refining operations on a world-wide basis and projects the development of future capacities for these operations. Each issue is complemented by a list of the web addresses of companies, enabling a quick and easy access to more company details.

New Edition of 'Directory of Copper Mines and Plants'

The Directory highlights capacities for over 700 existing and planned copper mines, plants, and refineries on a country by country basis, including separate tables for SX-EW plants. Salient details for each operation are included and the Directory separates operations between Operating & Developing and Planned (Exploration & Feasibility) stages.

Each issue charts long-term development of capacities (20 years) for World totals, broken down by production process, and summary data for each country for a 10-year period. The detailed tables of operations show the capacities for a base year and the projection of capacities for five years. These projections can serve as a basis for forecasts of the supply side development of copper.

The database is continuously updated to reflect recent announcements and operational changes. The updated issues are published on a quarterly basis. Available in print or PDF (electronic) format (www.icsg.org).

A look at the European scrapmarket at the beginning of the year

According to last BIR World Mirror (BIR - Bureau of International Recycling) the early part of 2003 has not been particularly enjoyable for the non-ferrous scrap sector. As the current statistics show, it is difficult to be optimistic about the non-ferrous scrap market.

In Germany there has been little movement in the scrap market in this time.

Prices for bright wire scrap (Kabul) have improved by around EUR 1 to between EUR 145 and 154.

Unalloyed copper wire scrap I (Kader) has fallen by around EUR 2 to EUR 138-148.

Higher nickel quotations on the LME have prompted a rise of around EUR 5 in alloy nickel

scrap (V2A) to some EUR 78-85.

Soft lead scrap (Paket) is unaltered at between EUR 33 and 40.

Zinc prices remain low in Germany with old zinc scrap (Zebra) fetching only EUR 47 to 55.

Aluminium scrap prices have showed a slight improvement

with pure aluminium wire scrap (Achse) gaining EUR 2 to reach EUR 127-134. Prices for mixed aluminium turnings (Autor) have increased by some EUR 4 to EUR 105-114.

In Italy the scrap supply situation is becoming serious and complaints from consumers are growing ever louder.

■ Copper and brass scrap are extremely scarce. Brass rod manufacturers are turning increasingly to primary material owing to the shortage of both these grades.

■ As for zinc, there appears to be a physical shortage of GOB zinc and, as a consequence, producers are now demanding higher premiums for this grade. Secondary remelted zinc is moving slowly because of the poor availability of scrap.

■ Aluminium secondary ingot prices have weakened mainly because of a slowdown in demand but following the general scrap shortage and the contradiction of higher LME quotations for secondary ingot compared to those for primary aluminium, prices for secondary ingot moved upwards despite a lack in demand. Contrary to expectations, scrap prices have strength-

ened considerably notwithstanding the difficulties involved in finding fresh supplies of the various grades. Strong demand for secondary aluminium for the steel industry has also served to push up scrap prices.

■ Stronger LME nickel has prompted further increases in stainless steel scrap prices, with 18/8 at around EUR 840-870 per tonne.

In France it is becoming increasingly difficult to sell non-ferrous scrap at a competitive price. Two months ago, an end user of zinc halted production in the south of France and, more recently, a lead end user has decided to cease production for the moment. In United Kingdom the great expectations for 2003 have in part come true.

■ Copper started the year at US\$ 1562.50 3M progressing to the January high of US\$1711 3M. Copper's long-term intention to remain around the US\$1700 3M level.

■ LME aluminium prices as well as scrap prices moved steadily upward. The tightness of secondary alloy pushed it above primary aluminium and a backwardation in both grades also crept in, rising to US\$59 for the alloy contract, at the time of writing.

■ Nickel base alloys rallied well in January as US\$7500 was easily passed and US\$ 8250 soon became the pivot point for the new trading range. Scrap prices followed..

In the Nordic countries the non-ferrous scrap market is largely unchanged, with a lack of almost all materials.

■ Good prices are continuing to be paid for copper scrap within the domestic market. The brass scrap situation is set to change in Sweden following news that the two major consumers – Nordic Brass and Boliden Gusum - are to merge their brass production in a joint venture to be managed by Boliden. That said, a significant tonnage continues to be exported to the Far East.

■ The aluminium scrap market has changed little over the last month. Aluminium alloy continues to be more expensive than before in relation to primary metal, thereby opening up the opportunity for new scrap formulas within the trade.

■ Battery collections have been almost sufficient to feed the secondary smelter in the southern part of Sweden, although there is a large demand for lead scrap.

More information: www.bir.org

Schrotte mit hohem Selbstversorgungsgrad

Für Kupfer, Zink und Blei belegen die Schrottbilanzen des Bundesamtes für Wirtschaft und Ausfuhrkontrolle einen hohen Grad der Selbstversorgung. Erfasst werden in den Statistiken das Aufkommen, der Außenhandel und der Einsatz von Schrott einschließlich Rückständen und Aschen.

Die Diagramme zeigen die Entwicklungen in Deutschland für Kupfer, Blei und Zink im Zeitraum von 1994 bis 2001.

Kupfer

Bild 1 zeigt die Verhältnisse für Kupfer. Nach den vorliegenden Statistiken ist

hier das Schrottaufkommen (Schrottaufkommen = Schrotteinsatz + Ausfuhr

+ Bestandszunahme - Einfuhr - Bestandsabnahme) im Zeitraum von



Schrottbilanz für Kupfer (Quelle: Bundesamt für Wirtschaft und Ausfuhrkontrolle)