Since its formation in 1978, Rautomead has become the acknowledged global specialist in design and manufacture of innovative continuous casting systems for production of highest quality semi-finished products in non-ferrous metals and alloys.

The Company
Embracing Rautomead’s unique naturally oxygen-reducing graphite furnace technology, a whole range of horizontal, upwards and downwards vertical casting machines has been created, with scope to tailor individual machines to specific end-uses.

Ongoing programmes of research and development are undertaken into processing new materials to reduce manufacturing cost by traditional processes and in many cases to cast at near net shape and thus to eliminate intermediate process steps. Rautomead’s wealth of experience and knowhow is available to create customers to maintain real progress and to remain competitive in the continuous casting industry.

Rautomead places strong emphasis on continuing technical service to customers wherever they are located. Service response is, of course, vitally important, but includes next day dispatch of routine spares and consumables, routine updates of improvements in the technology as these are incorporated, advice on new materials supply, standard specifications, testing methods, specialist site service visits, and benchmarking of performance.
1. Wire and Cable
Copper rod casting machines; cathode to oxygen-free rod in a single furnace; plants 2,000 to 20,000 tonnes capacity.
Leading users include:
- ELEKTROKOPPAR SWEDEN
- PHELPS DODGE USA
- SARCHESHMEH IRAN
- CUMERIO BELGIUM

2. Alloy Wire
Casting machines for copper alloy wire including trolley wire, brass, bronze and nickel-silver wire.
Leading users include:
- HFB HETTSTEDT GERMANY
- KAO HSING TAIWAN
- SUNDWIGER MESSINGWERK GERMANY

3. Engineering Alloys
Copper alloy casting machines for production of solid and hollow sections in a wide range of copper, brass and bronze alloys for copper and brass tube, plumbing fittings, gas and electrical fittings, architectural and automotive components and engineering bearings.
Leading users include:
- DENS METALS UK
- LCL AUSTRALIA
- SAUDI MECHANICAL INDUSTRIES SAUDI ARABIA
- S V METALS THAILAND

4. Precious Metals
Gold and silver alloys for the minting, jewellery, electronics and dental alloy industries.
Leading users include:
- STULLER SETTINGS USA
- HERAEUS ORIENTAL HITEC KOREA
- THE ROYAL MINT UK
- THE ROYAL CANADIAN MINT CANADA

Markets Served
- CuOF oxygen-free copper
- Conductivity copper alloys
- Magnet wire

- Brass wire
- Bronze wire
- Welding wire
- Today wire

- Cu-DHP copper hollow shells and solid sections
- Bronze hollow shells and solid sections
- Brass hollow shells and solid sections

- Gold and silver sections for bullion coins and medals
- 99.999 purity gold for bonding wire
- Gold and silver alloy shapes for jewellery
- High-purity silver for scattering targets
- Dental alloy sections
Rautomead works in close co-operation with specialist companies in both upstream and downstream technologies to provide turnkey projects for integrated manufacture of finished products.

Turnkey Projects
Rautomead’s compact and easily integrated melting and casting solutions enable the production of the highest quality oxygen-free, high conductivity copper rod from cathode in a single furnace for drawing to wire to British Standard 4109 C103 and American ASTM specification B1, B2, B3, C10200.

Graphite furnace technology for oxygen reduction, degassing and optimal casting conditions. Electric heating system tailored to suit application. Automatic cathode feed to large machines.

Wire rod casting features advanced supercooler design for high speed rod production and consistent product quality. Extensive recording of production parameters linked to alarm system and to remote Plant Monitoring System for quality control and product traceability.

Clean as-cast surface of CuOF rod with low surface oxides well suited to downstream manufacture of enamelled wire and for drawing to fine and superfine wire using multi-wire machines.

Extensive background know-how available in production of wide range of bronzes and brasses. Production parameters pre-programmed to suit alloy and section profiles.

**Wire and Cable**

**OXYGEN-FREE COPPER**
- 2,000 - 30,000 tpy
- 8.0mm - 30mm dia
- Cathode feedstock
- RFS for recycling of clean scrap

**CONDUCTIVITY ALLOYS**
- Cu Ag
- Cu Sn
- Cu Mg
- Motor windings
- Trolley wire

**BRONZES & BRASSES**
- 500 - 12,000 tpy
- 8.0mm - 30mm dia
- Pre-alloyed molten metal feed

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- Pre-alloyed molten metal feed
Engineering Alloys

PRODUCT PROFILES
- Rounds 8mm to 200mm dia
- Hollows 20mm to 200mm
- Strip up to 400mm wide

PRODUCT OUTPUT
- 50 - 2,000 kg/hour

FEEDSTOCK
- Ingot
- Pre-alloyed molten metal
- Recycled scrap and machining swarf

Proven over many years in production of solid and hollow sections in copper, bronzes and brasses including machining and forging brasses, Rautomead machines may be fed directly with heat-weighed batches, with pre-alloyed ingot or with molten metal from a separate melting furnace.
Precious Metals

**CONFIGURATIONS**
- Horizontal casting: strips and rod
- Downwards vertical casting: tube shells

**PRODUCT PROFILES**
- Rounds 3mm to 150 mm dia
- Hollows 15mm to 150 mm OD
- Flats up to 400mm wide

**APPLICATIONS**
- Bullion coins and medals
- Jewellery
- Dental alloys
- Lead-frame alloys
- Gold-bonding wire
- Electronic solders
- Sputtering targets

Rautomead graphite furnace technology provides a naturally reducing environment for the production of metallurgically clean "as cast" products free from inclusions, voids or other internal defects.

A range of machine models, furnace size and machine specifications are available and can be configured to suit each customer’s particular requirement in terms of production output, section size and shape, preference for controls, gas monitoring and withdrawal model & drive technology. A comprehensive list of machine models and specifications is available for viewing on the Rautomead website.
For more information about us including detailed technical downloads on our machines, visit our website at:

www.rautomead.com