

LUMA METALL®

We Make the World's

Finest Wires



LUMA METALL Presentation 1106 v1.0



"The future isn't wireless!"

Fine Wire Products
Precious Metal Plating Technologies

Our business idea:

With a flexible and service-orientated organization develop, produce and provide global markets with high-quality precision wire with focus on long term business relationships characterized by high technology and niche needs.

Our vision:

Becoming the natural choice partner No. 1 for our customers in development of innovative solutions within the Fine and Ultra Fine Wire (UFW) sector....

..... By:

...creating long-lasting "sustainable" customer relationships.





Luma History

85 years of experience in fine wire production

- Head Office and manufacturing in Kalmar, Sweden
- Founded 1931 as Lumalampan -
- a state owned light bulb producer (Tungsten)
- 1954: Gold Plating started (grid wire for electrical tubes)
- 1976: relocation of all wire products to Kalmar
- 1998: ISO 9001
- 2003: business transformation started
- 2004: Luma-Metall acquired by american SMG group; installation of new gold plating and polishing lines
- 2010 ff: Luma covering new application areas
- 2011: ISO 14001
- 2015: installation of new laboratory for internal
- and external quality analysis
- 2018: 23 highly qualfied employees; Shipping worldwide to over 40 countries





Competences

Our Core Competences

Fine wire drawing:

W, W-Re & Mo ≥ 10 μm

Etching & Electropolishing:

W, W-Re & Mo ≥ 4 µm

Plating on various base metals:

W, Mo, W-Re, Au, Ag, Ni 0.01 - 5 μm

Material analysis:

SEM, EDS, Corrosion, AAS, Eddy Current



Non-plated wire

- Automotive
- Lighting
- Strings for music instruments











Gold-plated wire

- Electronics: conductors and connectors,
- Integrated circuit testing
- Spacial communication technology
- deployable antennas
- Detectors used in security areas at airports, harbours....
- Medical: Guide Wires for balloon dilators, X ray contrast wires
- Particle accelerators such implemented by CERN
- Printing / Copying
- Technical Research







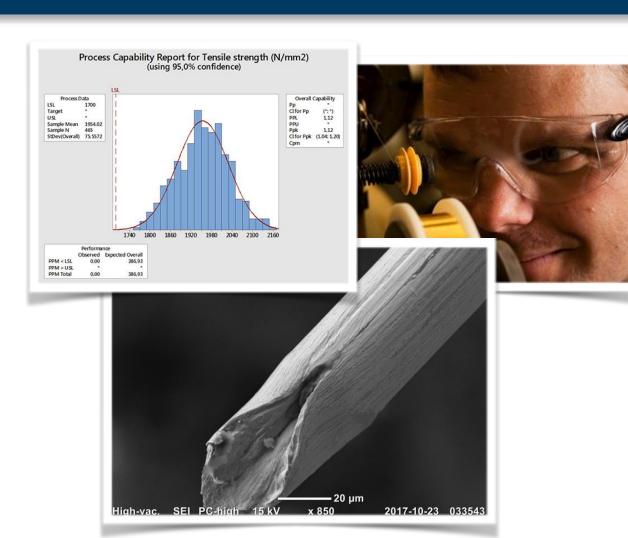


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Quality Analysis

- Crack testing
- Dimension control
- Ovality
- Surface appearance
- Straightness
- Tensile strength
- Ductility
- Electrical resistance
- Coat thickness
- Adhesion of coating
- Corrosion



LUMA METALL Presentation 1106 v1.0 7 µm



Luma R&D

We cooperate with and support universities and leading research organizations all over the world.





Luma R&D

Technology group:

3 PhDs:

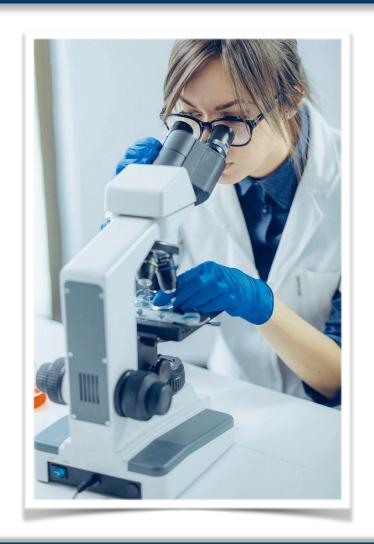
- Inorganic Chemistry
- Precious metal chemistry
- Materials Process Science

1 M.Sc:

- Material Physics
- Electrical Engineering

Devices and Processes

- Atomic Absorption Spectroskopy (AAS)
 Used for quantitative determination of elemental composition of an analyte in solution
- Scanning Electron Microscope (SEM) JCM 5000 and JCM 6000
 Factor 40-60000 max. for topographic information
 (core wire and coating surface) and atomic number contrast analysis.
- Climatic Test Cabinet: Temperature and humidity
- Laser LDS 0200 for ovality checks
- Light optical microscope (LOM) for metallographic studies





International Projects

































LUMA METALL Presentation 1106 v1.0 **10μm**



Make the future brighter. With Luma Fine Wire and Plating Technology.