

LUMA METALL ^W/_{Mo}

We Make the World's
Finest Wires



“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....

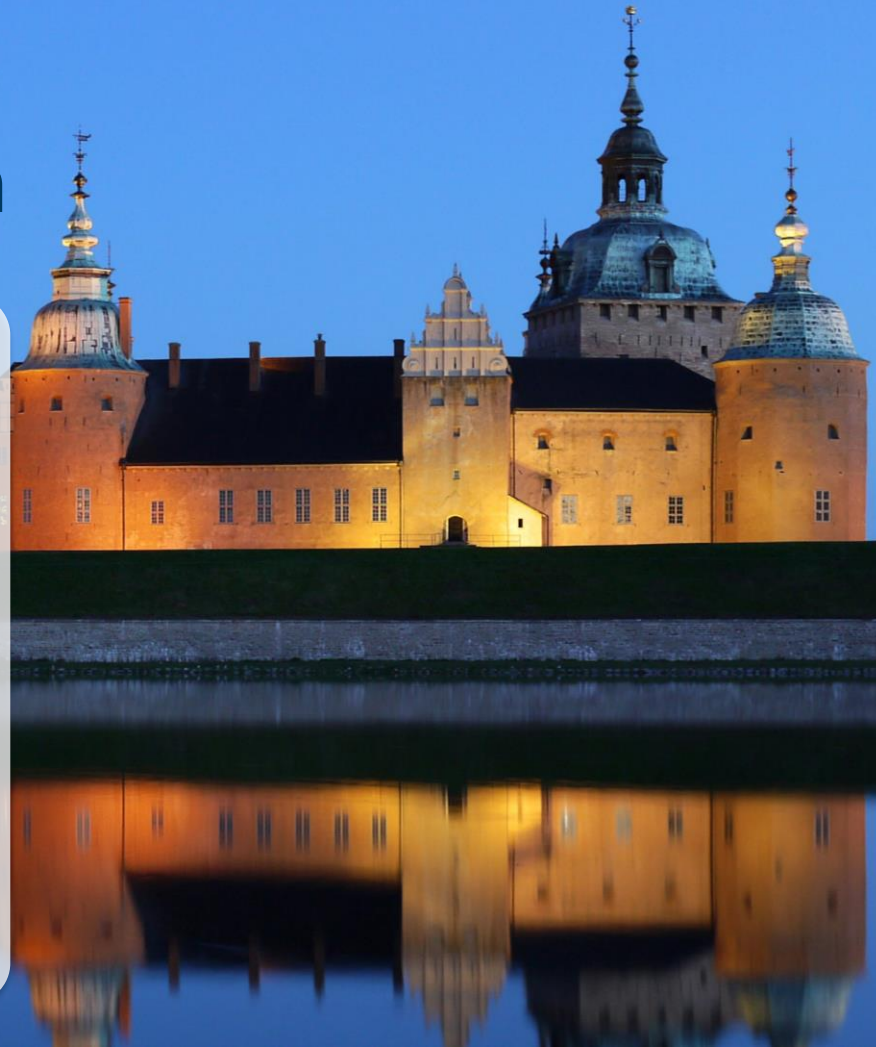
..... By:

...creating long-lasting “sustainable” customer relationships.



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 qualified employees; Shipping worldwide to over 40 countries



Our Core Competences

Fine wire drawing:

W, W-Re & Mo
 $\geq 10 \mu\text{m}$

Etching & Electropolishing:

W, W-Re & Mo
 $\geq 4 \mu\text{m}$

Plating on various base metals:

W, Mo, W-Re, Au,
Ag, Ni
0.01 - 5 μm

Material analysis:

SEM, EDS, Corrosion,
AAS, Eddy Current

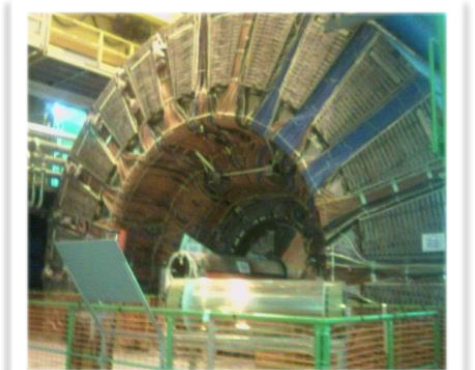
Non-plated wire

- Automotive
- Lighting
- Strings for music instruments

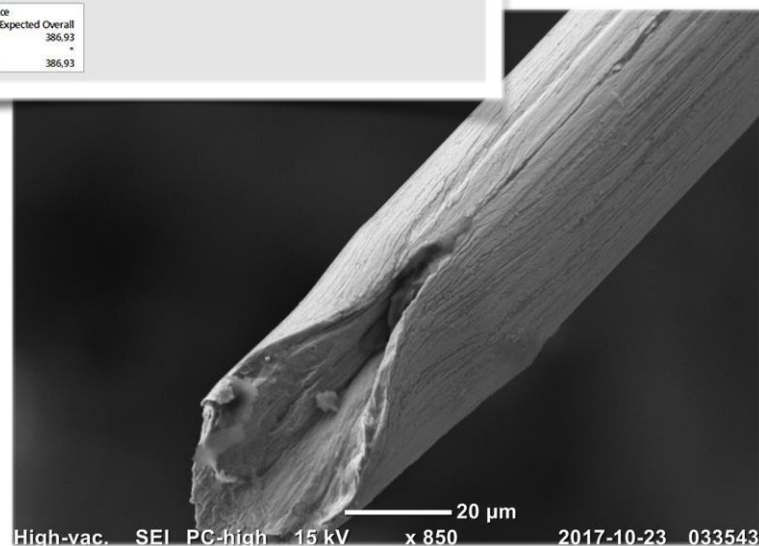
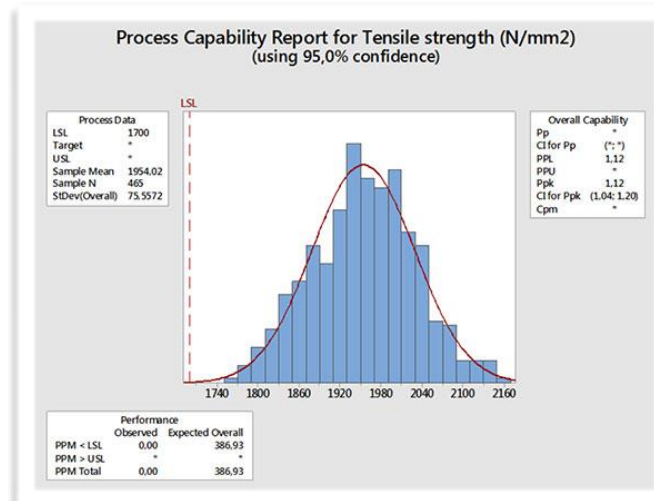


Gold-plated wire

- Electronics: conductors and connectors,
- Integrated circuit testing
- Spatial 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 as implemented by CERN
- Printing / Copying
- Technical Research



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



We cooperate in international consortiums and support universities and leading research organizations all over the world.



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
- **3 Scanning Electron Microscopes (SEM)**
Factor 40-100 000 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





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