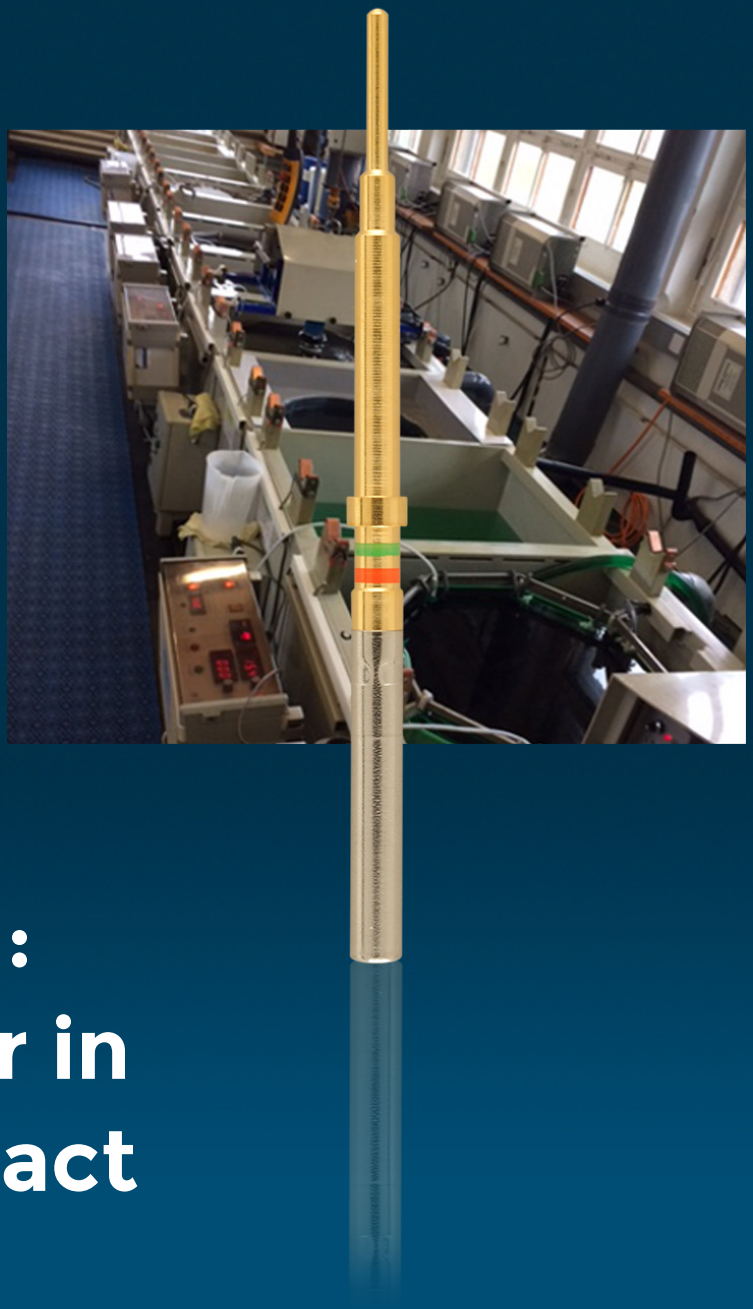

SWISSCOAT ™ : Gold cost-killer in Electrical Contact Production

Find out now how to reduce gold cost on screw-machined pin & socket contacts and inner bodies, without compromising high quality and performance!

LEMCO PRECISION
dominating precision
50 years precision

Context

Raw material costs have increased from the second half of 2020 and prices are predicted to significantly follow the same trend during 2021 and 2022. This pattern is reflected in all raw materials, (steel, thermoplastics, copper, amongst others) including gold. Consequently, prices within the Connector industry have increased.

Although the YOY increase for gold is small, this noble metal is still very expensive. Nevertheless, gold is still used extensively within the Connectors market due to many reasons.

The **economic downturn in 2020/2021**, because of the COVID pandemic is one of those reasons and it has tremendously contributed to the increase of gold price. The trend remains upward as markets are still recovering from the pandemic. Therefore, the price for screw-cutting contacts has raised and players have started to search for alternatives to gold, although gold still offers the best performance.

At Lemco Précision, based on our long-lasting expertise in high precision screw-machined parts, **we have created an economical, efficient** and **exclusive alternative solution to regular gold-plating: SWISSCOAT™!** This innovative gold-plating is conceived by using **less gold without compromising contact performance.**

Solutions

SWISSCOAT™ as the successful, exclusive and performant alternative to regular gold, reducing electrical contacts total costs production.

SWISSCOAT™
Gold Cost Killer

UP TO **20%** OFF ON TOTAL CONTACTS PRICE

SWISSCOAT™ plating solution results directly from the need of clients to reduce their costs without compromising high quality and high performance.

SWISSCOAT™ has specifically been optimised for the Connectors industry requirements. One of the key benefits of this **innovative contact plating** is that, compared to regular gold-plating, a **20% reduction on total contacts price could be achieved.**

INNOVATIVE COATING SYSTEM

- Thin gold layer
- 3 types of SWISSCOAT 1,2 & 3
- Wear rate in sliding behaviour 10-15 m2/ N
- Coefficient of friction < 0.2
- Corrosion resistance > 96 hours salt spray mist to DIN 50021
- Electrical contact resistance < <10mΩ with 1N load

ALL NEW SWISSCOAT™ clients

100% CUSTOMERS SATASFACTION who tested it, are still using the solution to produce electrical contacts

Definition

How is the electrical contact plating defined?

SWISSCOAT™ is a **galvanic multilayer with gold finish, offering similar properties to regular gold-plating,** conforming to MIL-C-45204 TYPE II Grade C Class 1.

ADAPTABLE TO ALL INDUSTRIES APPLICATIONS

MILITARY
MEDICAL
INDUSTRIAL
FIBER OPTICS
TRANSPORTATION
TELECOMS
TESTS & MEASUREMENT

Non-Exhaustive list

lemco-precision.com

Benefits

SWISSCOAT™ represents massive gold cost savings, with equivalent performance to regular gold.

SWISSCOAT™ guarantees different elements :

- **Long life cycle** and provides a **lubrification effect** of hard-soft type in the interface
- **Good thermal resistance** and high protection against corrosion
- **Great capacity of production** as the gold-plating is conducted in a bulk manner, unlike in selective gold.

It is adapted to most cables crimping sizes under certain configurations and enables the increase of **mating cycles**. In comparison with other platings, it also provides **wear resistance enhancement to electrical parts.**

Besides, the thin gold layer guarantees **small and consistent electrical contact resistance.**

The solution is **suitable** to all pin & socket and plug-in contacts along with inner bodies. **SWISSCOAT™** contacts are inter mattable with conventional gold-plated parts from other sources.

ASSEMBLY CAPABILITY

Easy to assemble on your Different Types of Connectors

- RF connectors (Coax, Twinax, Triax, Quadrax and Octoax)
- Fiber Optics
- PCB
- Circular, rectangular & triangular connectors

Costs optimization with In-house Surface Treatment

- Heat treatment
- Galvanoplasty
- Partial zone annealing

Robust & Resistant to Harsh Environment

- Vibrations
- Shocks
- Heat
- Thermal shocks
- Corrosion
- Salt spray, etc.

Some tests to evaluate the feasibility of your project

SWISSCOAT ™

The exclusive RELIABLE & ECONOMICAL GOLD COST-SAVINGS SOLUTION

DURABILITY TEST

Based on MIL-C39029D (3.5.9 & 4.7.10) contacts shall be subjected to 500 cycles of mating and un-mating at 300 cycles by hour maximum. After this test, contacts shall show no evidence of defects detrimental to the mechanical of electrical performance.

SALT SPRAY WITH VOLTAGE

Applied 500 hours (connectors only), to determine device capacity to be exposed to a salt laden atmosphere without physical degradation.

SOLDER TEST

To verify that the solderability of component leads and terminations, meets the requirements established in the standard J-STD-002B. It also checks that subsequent storage has had no adverse effect on the ability to solder components to and interconnecting substrate.

Company presentation

A few words about our company

Lemco Précision SA is the specialist in **screw-machined inner body, standard** and **custom-made contacts,** with vertical production in our Swiss plants. For over 50 years, we have been producing electrical parts of connectors that are used in many industries. Our expertise lies in co-design, manufacturing of **long & thin contacts with small diameter**, along with **bent parts, complex forms and miniature contacts** (from size #23 to #30).

Get in touch with us