

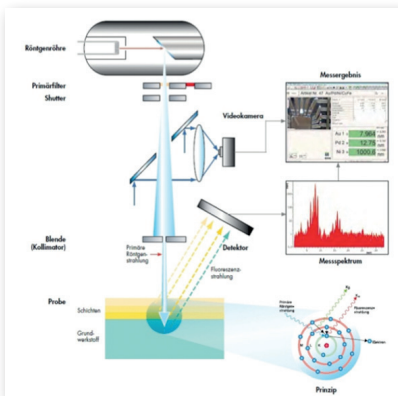


Pure Tin Detection with Fischerscope® at Tesat

According to ECSS-Q-ST-60: EEE components with pure tin (less than 3% Pb in case of SnPb alloy) used as a finish on the leads, terminations and external surfaces of components and packages shall not be used for space applications. Currently a new ESCC document (ESCC 25500 "Methodology for the detection of pure tin in the external surface finish of case and leads of EEE components") is under review.



Since many years Tesat is testing all parts lots during incoming inspection for "pure tin". The measurement is done on sample basis per delivery lot and documented. Tesat has dedicated equipment only for this purpose: the Fischerscope® (see picture on the left).



Extract from Helmut Fischer Catalog:

The Fischerscope® is based on the Energy Dispersive X-Ray Fluorescence Analysis. This is a method for ensuring the thickness of coatings and for analyzing materials. It can be used for the qualitative and quantitative determination of the elemental composition of a material sample as well as for measuring coatings and coating systems. X-ray fluorescence analysis has its basis in the phenomenon that, when atoms in a material sample are excited by the primary X-radiation, electrons from the innermost shells are released; the resultant vacancies are then filled by electrons from the outer shells. During these transitions, fluorescent radiation is generated that is characteristic for each element. This is read by the detector and provides information on the composition of the sample.

Source:

http://www.helmut-fischer.com/globalfiles/de_xray_program_en.pdf

European Space Components Conference ESCCON 2013



The **European Space Components Conference ESCCON 2013** coincides with the 10th anniversary of the ESCC foundation and will take place from **12.-14. March 2013** at ESA/ESTEC in Noordwijk.

The conference has four main themes:

1. Globalization of parts requirements and the evolution of the component standardization systems, including a Roundtable on March, 12th.
2. The technology needs and the harmonization efforts addressed by national space agencies and European organizations.
3. Technical Session on the status and trends of innovative technologies for space.
4. Stabilization of the component supply chain in the current economic context.

Tesat-Spacecom Parts Agent presentations at the ESCCON are:

Dr. Alexander Colquhoun (keynote speech):

Parts requirements for a Global Space Equipment Market – an equipment manufacturer’s point of view

Dr. Martin Veith:

The Obsolescence Management programme for ESA Human Spaceflight.

Anita Weinschrott-Schaaf:

Evaluation of parts for the low temperature environment on Mars

We are looking forward to meet you at the ESCCON!

Details at <http://congrexprojects.com/13c02> or via <http://www.escies.org>



Space Passive Component Days, 1st International Symposium

We would like to draw your attention to the **Space Passive Components Days**, which will take place at ESA/ESTEC on **24-26 September 2013**.

Passive Components represents more than 80% of the EEE parts used in spacecraft. Passive Components are therefore a major concern and our knowledge needs to be continually expanded in order to improve the design, reliability and safety of launchers, spacecraft and space instruments.

In recent years, the development of Passive Components has been driven by reliability, performances, new functionalities, mass saving and size reduction. The aim of this symposium is to promote discussion and exchange technical expertise and information among worldwide manufacturers, users, academia and agencies involved in the many disciplines related to EEE passive components.

Tesat-Spacecom will participate with a booth on the exhibition during the Symposium to show Tesat-Spacecom Passive Products.

Details at <http://congrexprojects.com/13a04> or via <http://www.escies.org>

Dates

12.03. - 14.03.2013	ESCCON, Noordwijk, The Netherlands
18.03. - 21.03.2013	Satellite, Washington, US
08.04. - 11.04.2013	National Space Symposium, Colorado Springs, US
24.09. - 26.09.2013	Space Passive Component Days, Noordwijk, The Netherlands

Your Tesat - Parts Agent