ENHANCE QUALITY MANAGEMENT AND PRODUCTION PERFORMANCE IN THE CABLE INDUSTRY

...TO BOOST YOUR YIELD

AESA Cortaillod

OUR JOB

CHECK AND UNDERSTAND CABLE PERFORMANCES THROUGH ACCURATE TESTING

BOOSTING YOUR YIELD IN THE CABLE INDUSTRY

Today, profitability is the driving force behind business operations. Cable manufacturers worldwide are striving to improve their productivity, and thus their profitability, in the face of increasingly complex challenges. To keep their competitive edge, manufactures must consistently introduce improvement initiatives to boost yield while ensuring, and continuously enhancing, product quality. A key requirement in helping cable manufacturers assess improvement initiatives is accurate, precise and reliable measurement data.

For decades AESA has been providing state-of-the art measuring systems, devices and quality-performance services to its clients. We ensure that our clients are well-positioned to make informed production decisions based on sound data provided by our instrumentation and quality-performance services. As a recognized leader in our field, our unparalleled knowhow and expertise in cable measuring systems, our mastery and focus on quality, combined with our commitment to customer service, make us the partner of choice for cable measuring and testing solutions.

ROI < 6 MONTHS*

Significant raw material savings through ultra-smart inspection of safety margin.

* Considering a ResTest 8130 on-the-line device and a reduced margin of 1% on a monthly copper consumption of 400 tons.

48 X FASTER*

Reduction of test cycle time through fully automated measurements of up to ~170 parameters.

* Reducing measuring time from 8 hours to ~10 minutes including preparation, evaluation and reporting (4 pairs LAN cable cat 8, 2000 points sweep up to 2 GHz).

OUR HISTORY

1978 AESA is created by the Cableworks of Cortaillod, Switzerland

1990 AESA moves to a larger building in Colombier, Switzerland

1994 AESA creates its own calibration laboratory, accredited EN45001

1998 MBO : AESA becomes independent and is owned by private investors

2007 Acquisition of MEA GmbH in Germany, today AESA GmbH

2019 Creation of AESA Measuring Equipment (Shanghai) Co. in China

2020 Move to a brand new office in Bevaix / Switzerland

ENDLESS INNOVATION

2020	AXIAL INJECTION	Axial current injection system for resistance measurement
2018	SCORPIUS	First coaxial measuring system with embedded VNA (Vector Network Analyzer) and PC
2016	CONDUCTIVITY	First equipment on the market able to measure conductivity
2014	PATCH CORDS	First balunless automatic measuring equipment for patch cords & connectors
2012	SEMACARE	First automatic measuring equipment for industrial cables
2011	BALUNLESS	First balunless automatic measuring equipment for LAN cables
2006	ALIEN XTALK	First automatic measuring equipment for Alien crosstalk
2002	ISO 17025	Our laboratory is accredited ISO 17025 and world wide recognised through ILAC
1994	CIQ	Specific quality data management system (software) for the cable industry
1985	8500	First combined automatic measuring equipment for low and high frequency parameters
1981	8130	Unique equipment for measuring cable resistance directly on the production line
1978	7078	First automatic measuring equipment for LF parameters

OUR OFFERING

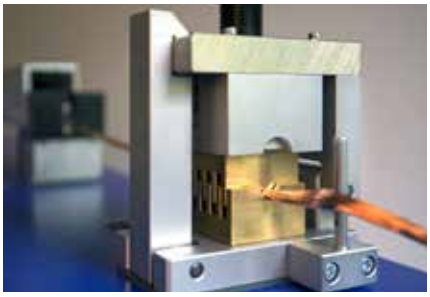
MEASURING EQUIPMENT, DATA MANAGEMENT SYSTEMS, CERTIFICATION, KNOWLEDGE AND EXPERTISE

LINEAR RESISTANCE MEASUREMENT

Take the opportunity to make significant savings in raw material quantities while ensuring cable conformance to the norms

The high cost of raw material means it is crucial to use such material as economically as possible. This goal can only be achieved with an extremely accurate and reliable measurement of the linear resistance of the conductor.

Conducting measurements in a timely manner during manufacturing, ensuring optimal result accuracy, combining facilitated data interpretation and simplicity of use, the ResTest family is the perfect solution to overcome major challenges facing cable manufacturers.



The AESA ResTest family consists of integrated equipment specifically designed for the cable industry. These resistance bridges not only offer operating comfort, but also allow you to master all related uncertainties (temperature, length, current distribution,...) to ensure full reliability of the measurement.

AESA provides a full range of equipment to match the specificities of all types of conductors, whether they be solid, stranded, flexible, insulated ..., no matter where the measurement has to be performed : directly on the production line or in the laboratory.

COMMUNICATION CABLE MEASUREMENT

Measure the LF & HF parameters of increasingly complex copper communication cables, conveniently and efficiently, while ensuring full traceability

In copper twisted pair wire networks, cable certification is achieved through rigorous testing conducted in accordance with the main international standards from organizations like TIA (Telecommunications Industry Association) or ISO (International Organization for Standardization).

Automatic test equipment (ATE) must be used to perform these numerous tests that not only provide “Pass” or “Fail” information but also the complete cable characterization profile.

The AESA range of automatic test equipment covers the performance tests required by the procedure defined in the standards. The low and high frequency modules or high voltage tester can be customized to match any type of specifications or requirements of the final user. From the Lynx RCKE system for intermediate testing to the balunless Cobalt for Cat 8 and higher frequencies and the Gaia for high voltage, AESA provides a complete set of solutions for all type of cables such as pairs, LAN or Coaxial cables, as well as for patch cords with connectors.

QUALITY DATA SOFTWARE

Optimize material usage while securing superior quality levels, ensuring proper documentation and records management

Today, a wide range of inspection technologies is available, and cable manufacturing plants are using complex equipment fitted with multiples on and off-line measuring & monitoring devices.

However, these instruments are very often specific to one particular process, which means that measurements are made in separate "quality islands". Clearly, maximum benefits from the data generated by these individual measuring systems is only achievable if such "quality islands" are connected together allowing to get an overall view of manufacturing performances.

The AESA Computer Integrated Quality system -CIQ- interconnects all measuring and testing devices into one common system and stores all the acquired data in a central database. This enables all the entities involved in managing the production process to have direct access to the processes and testing data – practically in real time.

The CIQ cuts testing and evaluation efforts and provides a sound basis for efficient production processes and optimized material usage.

SERVICES

Attest your credibility through certified tools and ensure equipment reliability for trustworthy data

Quality stems from processes, not from inspection. Nevertheless process improvements are only possible with reliable information that comes from dependable testing equipment used to conduct inspections.

Obviously, quality of inspection must remain at the highest level, whatever the age of your testing equipment and the evolution of technical standards.

AESA offers a wide range of services to help you face these challenges. For instance, we offer the possibility to extend the warranty period of your new equipment, or perform ISO 17025 calibrations thanks to our official accreditation. We can deliver customized training to your staff and maintenance contracts covering the most stringent requirements.

Even the most reliable systems require regular, planned and preventive maintenance to perform at optimum levels and according to specs.

For this reason, AESA proposes preventive service packages. Based on predefined cycles, these will help you extend the operating life of the equipment, keep the maintenance costs under control, and ensure optimal performances. Our packages can also include specific advantages such as extended warranty time, priority and remote support as well as discounted spare parts.

Moreover AESA also provides both hardware and software upgrades, so that you can always benefit from the latest technologies and capabilities.

OUR DRIVING FORCE

KNOWLEDGE TO SERVE INNOVATION IN CABLE METROLOGY

KNOW-HOW

With more than 40 years of activity worldwide in the field of cable metrology, AESA has acquired an unmatched expertise. Our understanding of test equipment performances, and how it relates to the measurement of electrical parameters, is best in class. We constantly strive to leverage our know-how to design innovative and cost-effective solutions which provide our clients with a clear competitive edge in terms of quality and process improvements.

At AESA, we don't reserve our know-how and expertise to providing effective solutions. We also share our knowledge through our active participation in normalization committees (e.g. IEC, TIA or CIGRE), as well as through our practice of publishing in technical papers. Equally important is our training offering allowing our clients to gain maximum benefits from our expertise. These actions are a clear demonstration of our commitment to improving the quality of cable measuring solutions, both today and tomorrow.

QUALITY

The quest for total quality and continuous improvement requires rigorous testing and traceability. At AESA, we are proud of our Swiss heritage and of our world-renowned reputation for quality and dependability. Our clients' confidence in our competences is the result of our unwavering commitment to ensuring top quality of our products and services.

The telecommunications and energy sectors are subject to very strict international standards and regulations. Consequently, cable manufacturers must be assured that their instruments are calibrated by accredited bodies. It's a matter of continuously demonstrating that the instruments used to assess quality have been prove to be top performant.

In order to do so, AESA has been accredited ISO 17025 by the Swiss Accreditation Service (SAS) for many years.

ISO 17025 & CALIBRATION SERVICES

The SAS is signatory of ILAC MRA (International Laboratory Accreditation Cooperation). That means our ISO 17025 certificates are automatically recognised by all national accreditation bodies signatory of ILAC MRA. With this strong foundation and within the framework of international standards, we aim to serve the industry by providing undisputable calibration services, as well as certified standards, thus reinforcing AESA's position as the global benchmark within this sector.

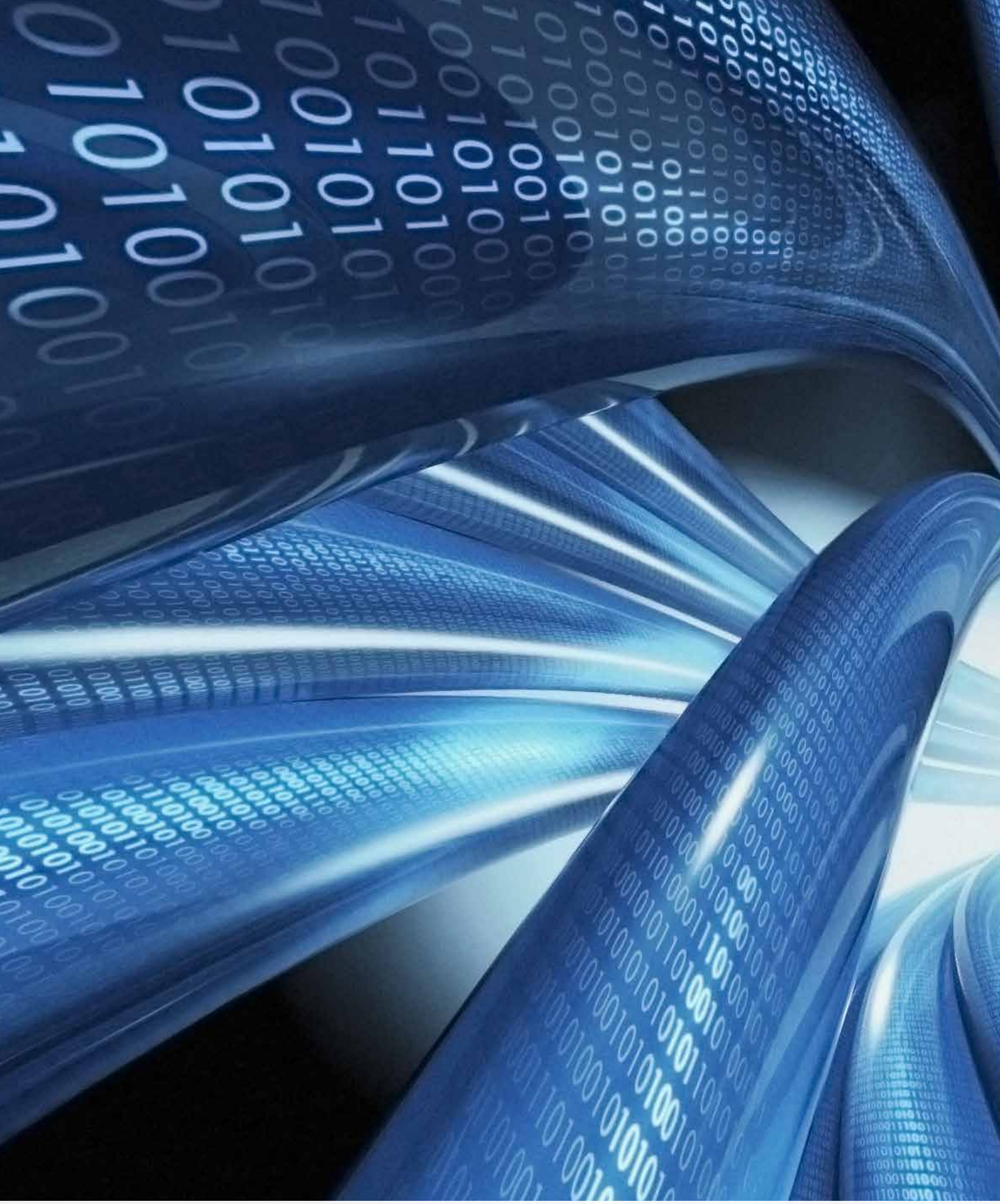
ISO 17025 ACCREDITED

SOME USERS

At AESA, we are proud to have the most prestigious cable producers, ranging from worldwide groups to family companies, within our client portfolio. Our strong sense of customer-orientation has allowed us to forge long-lasting, trusted partnerships with our clients, and to become the supplier of choice in our field.

More than 2000 AESA instruments are already in operation worldwide !

ACOME · ABERDARE CABLES · Bayka · BAOSHENG GROUP · BAHRA ELECTRIC · BELDEN · CARLISLE FOODSERVICE PRODUCTS · CABELTE · COFICAB · COMMSCOPE · DATWYLER · Draka · Ducab · ELSEWEDY CABLES · FURUKAWA ELECTRIC · General Cable · HELUKABEL · HUAWEI · HUBER+SUHNER · legrand · LEONI · LS Cable & System · MESC · exans · nkt cables · POLYCAB · PRYSMIAN · RADIO FREQUENCY SYSTEMS The Clear Choice · RFS · RR KABEL · Southwire · Sterlite Tech · SUMITOMO ELECTRIC · SUPERIOR ESSEX · ZTT



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