

# Electrodes

## Conformable, Secure, Consistent.

As a long-established supplier of adhesive coated materials for Electrode applications, Lohmann has built-up a knowledge and reputation for supplying high quality performance products. With the option of three adhesive strengths combined with a selection of backing materials, including Polyethylene foam, non-wovens and aluminium foil, Lohmann is able to supply Electrode manufactures with a range of materials matched to the functional requirements of the end-product. These materials have been selected to ensure compatibility with Electrode components as well as being suitable for high-speed processing. Lohmann can provide materials in various presentation formats, including full width logs, slit rolls and die-cuts.



### Stress Electrode

For patients with suspected heart related issues or for people that need to evaluate and understand their tolerance to exercise, Stress Tests are commonly used. The patient is moving during the test, building up body temperature and sweating, it is therefore important that the adhesive on the electrode remains firmly attached.

For this application Lohmann provides an adhesive coated carrier which is easy to apply and bonds securely to the skin for the duration of the Stress Test.

### Neutral Electrode / Grounding Pad / Defibrillator

During electrosurgery or for emergency procedures to restart the heart, it is necessary to take induced electrical energy to ground in order to avoid potential injury to the patient. Due to the nature of these applications it is of critical importance that the materials are reliable and consistent.

Lohmann provides high quality adhesive coated foam, single-coated aluminium foil and double-coated filmic tapes that are used as components in these very demanding applications.

### Holter Electrode

When it is necessary to perform a thorough evaluation of the cardiovascular system, typically over a time period of one to fourteen days, Holter electrodes are used. Due to the length of time that the electrodes can remain on the body, it is important that the skin can breathe in order to prevent irritation. It is also beneficial for the electrodes to be thin and discrete, to limit the risk of catching on and being displaced by clothing.

For these reasons Lohmann offers solutions that use non-woven carriers. The non-woven is offered in white as standard but can be supplied in a range of different colours.

### Monitoring Electrode

In addition to stress tests, electrodes can be used to monitor the cardiovascular system of patients in many other situations, including during surgery and post-operative or following a cardiac arrest. When designing monitoring electrodes it is important that the range of different applications and the diversity of patients are considered.

To support this Lohmann can provide a range of adhesive coated materials that offer bond strengths suitable for different skin types and application conditions.



## Lohmann, The Bonding Engineers

### Integrated innovative solutions.

As a world-leader in the development, manufacture and supply of adhesive tape solutions, Lohmann is a trusted partner for the design, scale-up and commercialisation of your medical device.

Our "local for local" approach together with a fully integrated supply chain gives Lohmann a truly unique position and one which our customers appreciate as real added value to their business.

At Lohmann we have an in-depth knowledge and capability in many chemistry platforms, including Acrylic, Synthetic Rubber, Silicone, Cyanoacrylate, Epoxy and Polyurethane. Our experience in coating solvent, water-based, hot-melt and multi-component reactive systems ensures that we are never restricted in our ability to develop and deliver customers with the best solution for their application.

By choosing Lohmann as their partner our customers have access to a highly specialised, experienced and effective Medical team who together with the Lohmann organisation can offer:

- a dedicated project management team
- experience of sourcing, developing and processing high-value functional materials
- a broad die-cutting capability including roll-to-roll flat-bed, rotary, pick-and-place and laser-on-the-fly
- expert in-house testing equipment and test method development
- product development and validation processes tailored to customers requirements
- to supply small quantities to support scale-up
- robust, well documented, traceable and fully auditable processes in accordance with EN ISO 13485 Quality Management System.

We look forward to receiving your challenge!

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