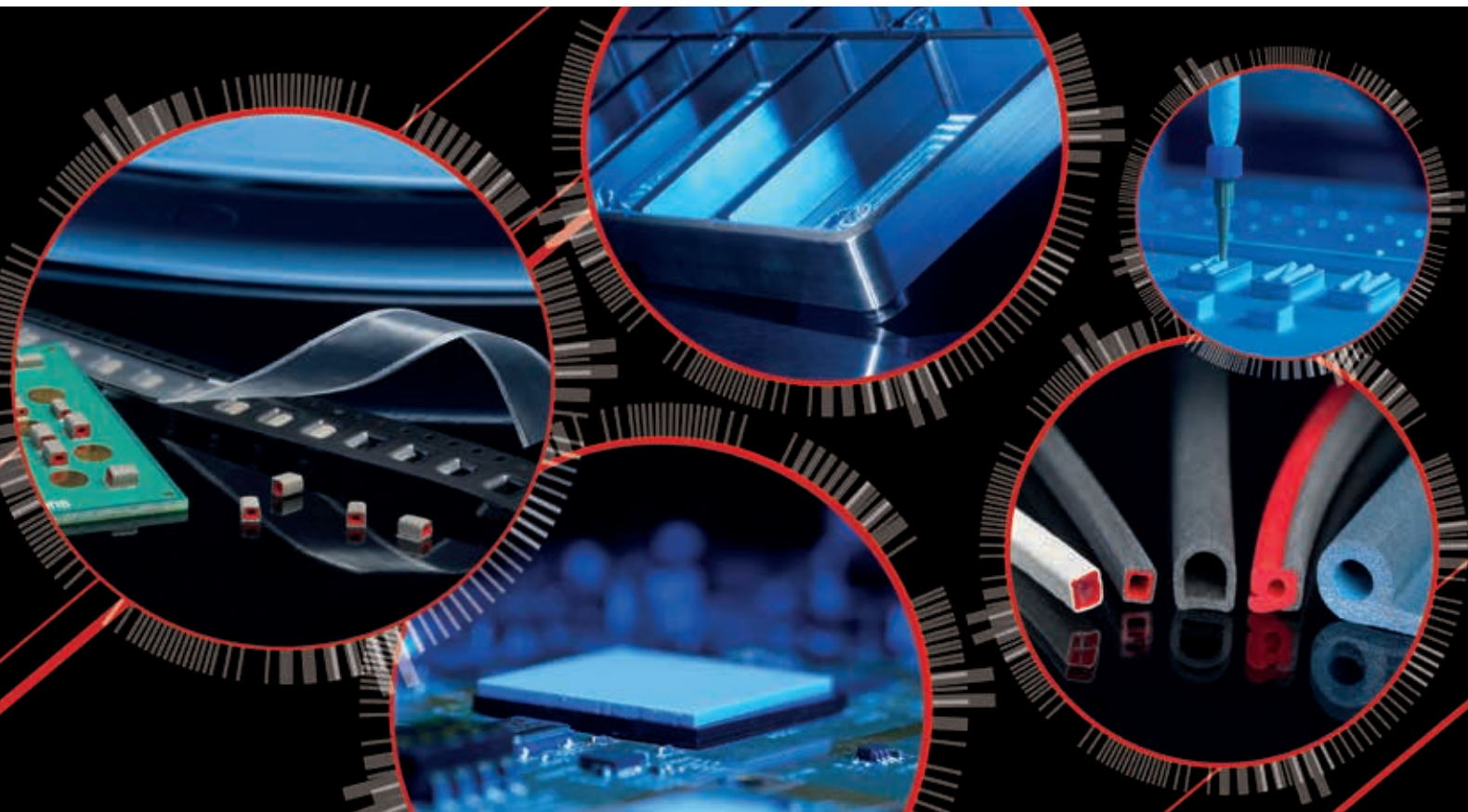




*Experience and Innovation*



Nolato is a world-leading developer of EMC and thermal solutions made of conductive silicone.



**Nolato is a global, high-tech developer and manufacturer of polymer product systems for customers in specific market areas.**

## THE NOLATO GROUP



**Expertise in Medical Solutions**



**Expertise in Integrated Solutions**



**Expertise in Industrial Solutions**

Nolato is an advanced high-tech polymer partner with operations in Europe, Asia and North America. We develop and manufacture products in materials such as plastic, silicone and TPE. Our customer offering comprises everything from concept development, product design and process optimization to high-volume production, post-processing, assembly and logistics.

### Corporate responsibility

It all starts with our company culture of empowering combined with the engaged people who drive your project and support you all the way from concept development to high volume production and beyond. The combination of these expertise

resources and our advanced technologies ensures that your products are made with the highest quality. The way we work ensures that we produce in the most cost efficient way possible for you. It all results in our extensive knowledge and experience to deliver for you on time and on budget.

### Our set of values

Ever since Nolato was founded in 1938, its operations have featured a down-to-earth combination of professionalism, ethics and environmental awareness.

### Our basic principles

We are professional, well organized and responsible.



**Nolato is a high-tech developer and manufacturer of polymer product systems for leading customers in specific market areas.**



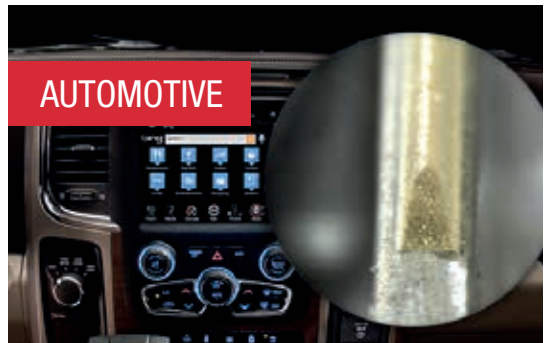
## NOLATO SILIKONTEKNIK

Nolato is a world leading developer and supplier of material and know-how for EMI shielding solutions made of electrically conductive silicone and Thermal Interface Materials. Our headquarters and Nolato Tech Center are located in Hallsberg, Sweden with additional manufacturing sites in Beijing and Suzhou, China and Penang, Malaysia Győr, Hungary & New Jersey, USA. Nolato offers local production on a global scale with more than fifty EMC Production Partners around the world manufacturing the Trishield gasket.

Founded in 1970, Nolato Silikonteknik became a part of the Nolato Group in 1988. Nolato's quality and environmental management systems have been certified with ISO 9001 and ISO14000.

## OUR CUSTOMERS

Ericsson, Nokia, Motorola Solutions, Huawei, ZTE, Autoliv, Harman, Philips, etc.





**Nolato offers optimal FIP material and know-how through our EMC Production Partners all over the world.**

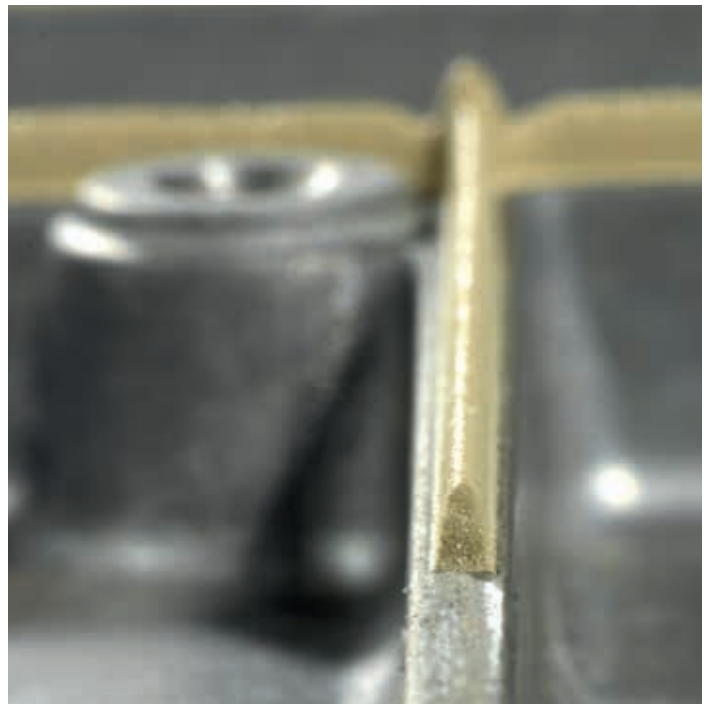
## FIP TECHNOLOGY

Form in Place (FIP) gaskets are dispensed by high precision XYZ robots on a carrier of aluminum, magnesium or metallized plastic. FIP technology has many advantages, such as no assembly, no tooling, rapid handling and cost-efficiency.



Nolato has a wide range of elastomeric compounds engineered to achieve excellent EMI shielding and mechanical properties.

Nolato's R&D center in Sweden is dedicated to develop optimized material that fulfill the customers' demands.





**Nolato has a unique technology for dispensing triangular shaped gaskets.**



## **TRISHIELD®**

Trishield®, Nolato's patented dispensing technology, has been widely used by leading companies in high-tech industries requiring EMI shielding for over a decade. Trishield® offers a solution that combines excellent shielding effectiveness with superior mechanical performance.

The Trishield® technology is used to form the dispensed EMC gaskets into a triangular shape, thus reducing material usage and the compression forces required.



Trishield® has been widely used throughout the telecom industry since it was first utilised by Ericsson in 2001.



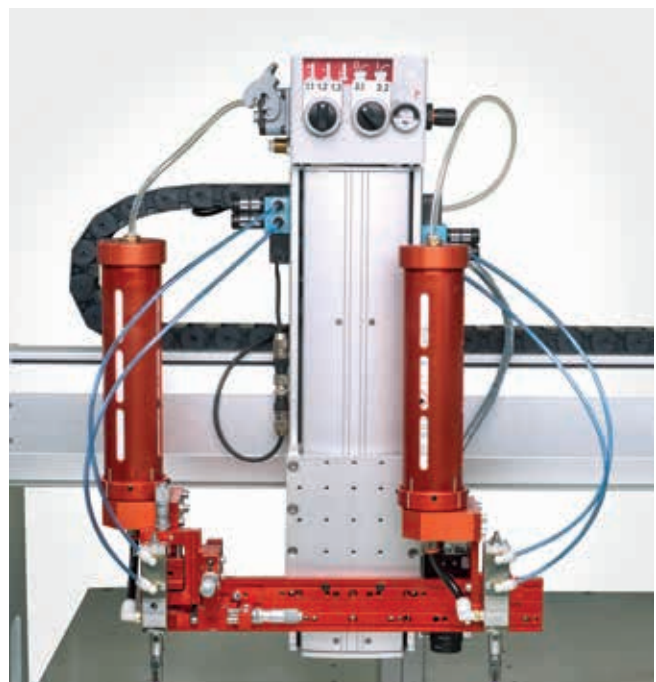
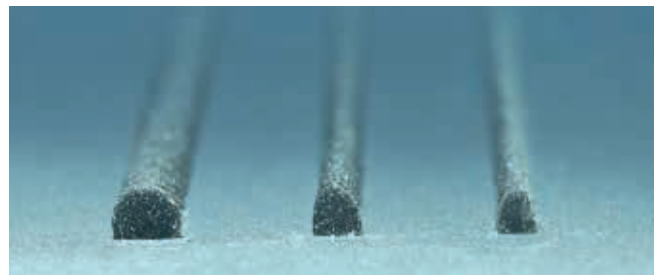
**Trishield® 2.0 The next generation FIP gasket from Nolato.**

## TRISHIELD<sub>2.0</sub>

Trishield® 2.0 is an innovative development of the Trishield® concept that further enhances the original benefits of the Trishield® concept. Trishield® 2.0 consists of an improved forming unit and a new family of conductive elastomer materials.

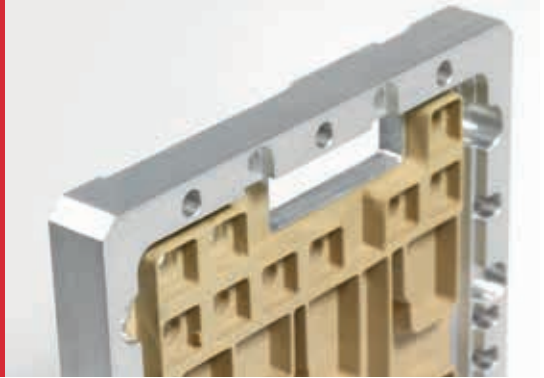
### Offers the lowest compression force requirements on the market.

- ▶ Up to 80 % lower compression force
  - Less fasteners needed
  - Possible to increase tolerances on mechanics
  - Less machining needed on mechanics
  - Thinner and more flexible covers
- ▶ Lower material consumption
  - Cost saving
- ▶ Optimal height/width ratio (narrow gaskets)
  - Space saving
- ▶ Double output
  - Possible to run with dual dispensing heads
- ▶ Excellent shielding properties
  - Up to 110 dB
- ▶ Global access
  - Our production partners are located all over the world



Trishield® 2.0 can either be directly installed in an existing Trishield® forming unit or as a new installment, depending on customer requirements.

Besides delivering optimal molding material, Nolato provides design and know-how for mold in place products.



## COMPASHIELD®

Nolato's molded and extruded products based on electrically conductive silicone rubber are offered under the Compashield® brand name. Compashield® products provide secure EMI shielding for PCB, connectors, cable antennas, etc.

### COMPASHIELD® COMPONENTS



Shielding components are molded with conductive silicone rubber in the exact size and shape required for the application. It may also be shaped into cans, plastic frames, covered with our unique electrically conductive silicone material onto a variety of substrates. Molded components are used for grounding and shielding small parts, such as cameras, I/O connectors, cable connectors, wave guides, etc.

### COMPASHIELD® SHEETS



Compashield® sheets are used for die-cut EMI shielding and environmental sealing. The gaskets are typically designed for flange to flange application. The Compashield® sheets are available in a wide range of conductive fillers to best meet our customers' demands. Compashield® sheets can be delivered in pre-cut size.





**Extruded gaskets from Nolato are widely used in military, automotive and telecommunication applications.**

## COMPASHIELD® EXTRUDED GASKETS

Our extrusion process involves gaskets of electrically-conductive silicone rubber being string-injected into the preferred shape and with the cross-section required by the customer. The cross-section can be rectangular, solid or hollow in various shapes and dimensions.

### COMPASHIELD<sub>EE</sub>



With the addition of the Compashield Press-Fit feature added to our Compashield EE gaskets, you'll also get not only an assembly that is easier

than ever, it also gives you 30 dB better shielding effectiveness than the standard EE profile and eliminates adhesive costs.

### COMPASHIELD<sub>ULTRA SOFT</sub>



Compashield® Ultra Soft is an extruded gasket with an Ultra Soft core that minimizes the compression force required. The unique properties of the core prevent the gasket from

collapsing in sharp corners and still keep excellent EMI shielding performance due to the thin conductive outside layer.

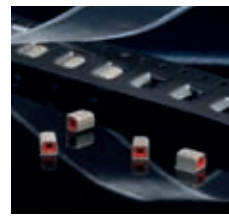
### COMPASHIELD<sub>2.0</sub>



Compashield® 2.0 is designed for 5G frequencies and will meet future shielding demands. Compashield® 2.0 combines optimal EMI

shielding and secure environmental sealing in a single gasket. Compashield® 2.0 has now been made even better with more flexible solutions in terms of material, construction and function. Two of the refinements that the Compashield® 2.0 features are reduced compression force and better compression set.

### COMPASHIELD<sub>SMT PAD</sub>



Grounding and shielding products should ensure electrical performance without breaking under mechanical or environmental stress throughout the life time of

the product. Compashield SMT Pad ensures reliable grounding performance in electronic applications. The Pads are delivered in tape-and-reel packaging for automated placement and soldering reflow using standard SMT equipment. The Compashield SMT Pad is used as a grounding contact on printed circuit boards commonly used in the electronics industry.



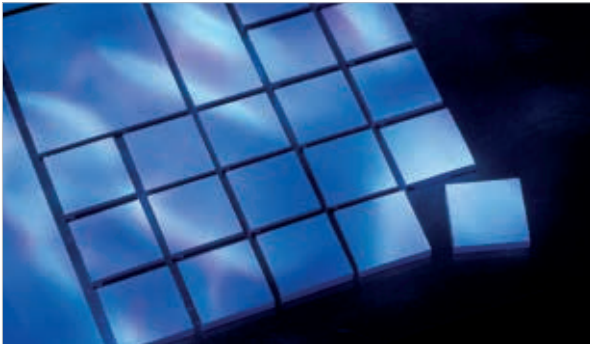
**Nolato has a wide range of thermal interface materials.**



Compatherm® is Nolato's brand for Thermal Interface Materials (TIM). Compatherm® is used to transfer heat from components to a heat sink. Nolato offers both thermally conductive pads and dispensable compounds (Filler and paste).

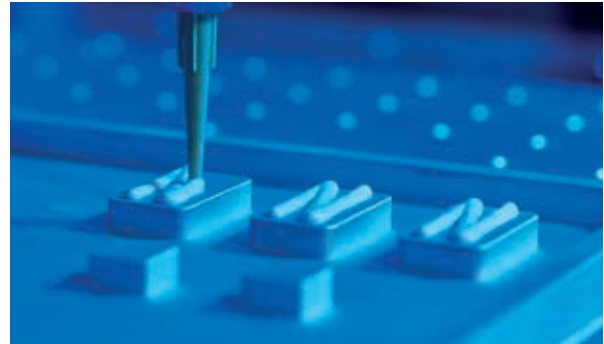
The materials are designed to fill in small air gaps and microscopic irregularities, providing dramatically lower thermal resistance and thus better cooling.

## COMPATHERM PAD



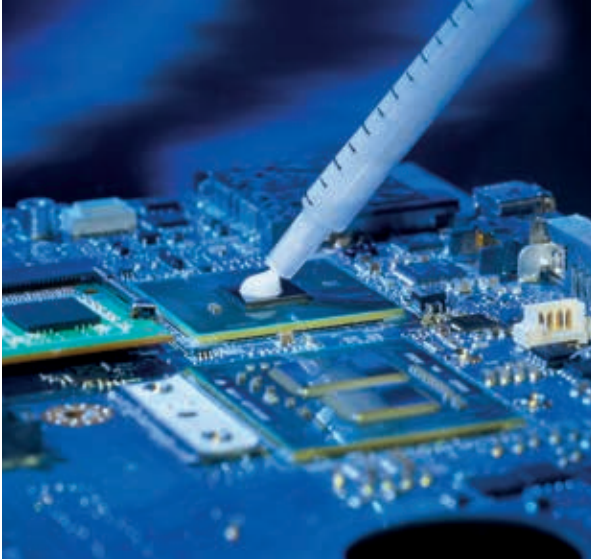
- ▶ Excellent thermal properties
- ▶ Ultra soft for low compression forces
- ▶ High conformability
- ▶ Wide range of standard materials
- ▶ Customized material available

## COMPATHERM FILLER



- ▶ Excellent thermal properties
- ▶ Available as both one- and two-part compounds
- ▶ Ultra conforming
- ▶ Excellent wetting
- ▶ Ideal for filling gaps between multiple components and a common heat sink.
- ▶ Machine-Material integrated solution for dispensing available
- ▶ Customized material available

## COMPATHERM PASTE



- ▶ Very high thermal performance due to ultra-thin bondline
- ▶ Allows bondlines down to tens of microns
- ▶ Reduced contact resistance due to superior wetting
- ▶ Dispensable and silk/stencil screen printable
- ▶ Highly thixotropic, with minimum migration
- ▶ Stable composition with no dry-out

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Nolato shall be the customer's  
first choice of partner.

# EASY TO ORDER FREE EMI GASKET SAMPLES

<https://gasketguide.nolato.com/>

OR CHECK OUT OUR TIM PORTIFOLIO

<https://thermalguide.nolato.com/>



## EMC PRODUCTION CENTERS AROUND THE WORLD



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