

# Products & Solutions

Exclusive solutions Consultancy & Research Quality Assurance

### www.getelec.com

## Our international presence means that **GETELEC** technologies are available in Europe and worldwide

#### G Our industry sectors

- Aeronautics, Defence, Automotive
- · Civilian and military professional electronics
- Railway, Marine, Space and Land Industry

G Our most prominent clients

Thales Alenia Space
Dassault Aviation

Safran • Saab • Bharat Electronics

Johnson Controls
Tyco Electronics

• Thales • Cobham • Zodiac Aerospace

Airbus • Barco • Alstom • Liebherr

DCNS • EADS • Nexter • Matra Electronique

• Medical, Telecommunications

#### G ISO 9001-EN 9100 quality assurance

- American standards: MIL G 83528, STD 285
- French standard: (GAM EG -13)
- Fire-resistant seals: (UL 94 HB-VO)
- Products to current EC standards
- 40 years' unequalled experience
- Tests conducted to ASTM standard

#### G Trade Fairs



lutions are used in key industrial, civilian and military settings. Our consultancy teams attend the major trade events in France and throughout Europe.

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GETELEC

Ever since 1968, expertise, innovation and our customers' satisfaction have been at the core of GETELEC's mission

Your satisfaction has been our raison d'être for nearly 45 years.

Unwaveringly focused on finding exclusive solutions, our R&D teams' expertise and know-how are dedicated to defining and implementing bespoke high technology solutions for microwave shielding products, technical sealing solutions and heat dissipation.

Designing, developing and implementing highly reliable and effective systems are our qualitative imperatives, going hand in hand with our customer relationships management, from the initial project definition stages through to design and implementation of your bespoke solutions.

GETELEC is a key partner in today's European EMC shielding market. This success is due to the involvement of all our operational services in a rigorous quality setting.

Thanks to these actions, GETELEC has an organised Quality and Environment structure, sufficient to earn the full confidence of our current and future customers. This Quality and Environmental framework is a powerful development marker in international markets.

Our constant focus on developing and improving our quality assurance policies has meant that GETELEC has secured the award of ISO 9001 and EN 9100 certification, warranting our commitment towards putting our expertise into practice.

This new version of our products and solutions catalogue fully subscribes to this global quality commitment and, more than ever, we are by your side to innovate, turning our actions into the drivers for your next technological success.

Most sincerely

François Dusailly CE0

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## Areas of application

GETELEC has used its experience to develop shielding products suited to severe environmental conditions. By mastering the formulation and transformation processes, GETELEC is ready to bring you a custom solution tailored to your microwave shielding problem. Our teams of engineers and chemists are at your disposal to assist you in achieving all your projects.

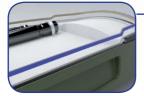


GETELEC has been developing its own MIL G 83528-compliant conductive formulations for more than 40 years. Our expertise in sealing materials has brought us to work in close collaboration with the major military sector procurement agencies to meet their contractual demands.





Pre-cut conductive gaskets ensure sealing and electromagnetic shielding. Gaskets are cut from sheets made in a range of conductive materials and thicknesses from 0.3mm to 10mm.



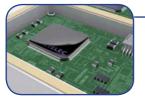
#### Corrosion-resistant silicone gaskets

Bi-material seal made of a conductive silicone and an insulating silicone bonded together by co-extrusion into one seal. By separating the shielding and sealing functions the seal is much more resistant to salt fog type extreme environments.



#### Tinned steel shielding covers

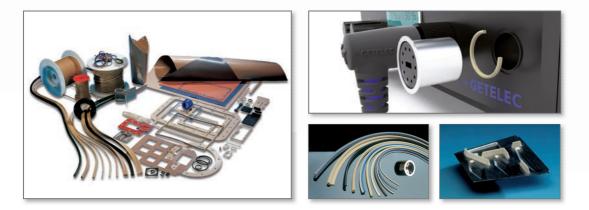
These covers enable the rapid shielding of part of a circuit, either radiating or susceptible to EMI/RFI interference on a printed circuit board. Several standard shapes available as are custom formats.



#### Heat sinks

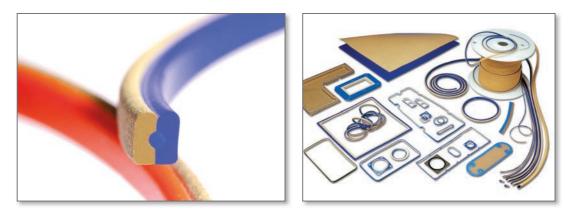
To reduce the thermal resistance which could damage a component, it is useful to dissipate the heat emitted by its power. These products are available as custom-cut seals in different thicknesses.

## Range of products and solutions



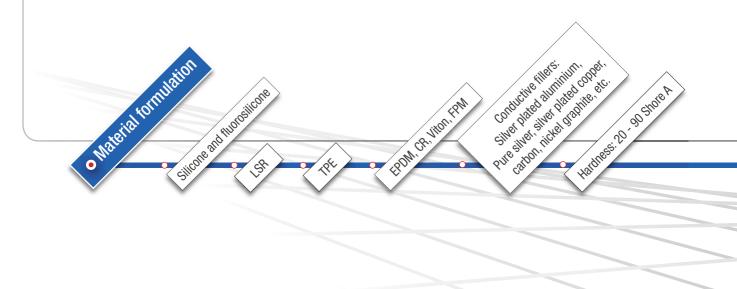
## Loaded conductive silicones

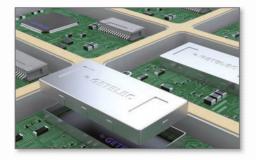
For over 40 years, GETELEC has been developing its own conductive silicone formulations to meet the requirements of MIL G 83528, MIL STD 285 and GAM EG-13. Our expert EMC engineers are at your disposal to work with you to define your projects and carry them through to completion. These seals are available as moulded, die-cut, extruded, vulcanised and form-in-place.



## 2 Corrosion-resistant silicone gaskets

GETELEC offers an effective solution to the problems of corrosion encountered with the use of conductive seals, when they are in contact with different electrolytes such as salt fog or acid. Seals for these applications are described as bimaterial, as they are made of a conductive silicone and an insulating silicone bonded together by co-extrusion process into one seal.





## <sup>3</sup> Metal shielding products

Standard and special bronze beryllium contact solutions, shielding covers, ventilation panels, metal braids and shielded windows.

Our teams of expert EMC engineers are at your disposal to work with you to define your projects and carry them through to completion.



### 4 Aircraft grade seals

These are silicone (VMQ), fluorosilicone (FMVQ) and liquid silicone rubber (LSR) seals.

These elastomers are used for the manufacture of moulded items, extruded seals, cut flat seals and seals vulcanised in place. They maintain their mechanical characteristics over a broad temperature range. Full range of MIL-DTL-25988-compliant aeronautical-grade material.



## <sup>5</sup> Heat sinks

ADC. PSHIA deformation

Volume resistivity

This range consists of highly conductive thermal pads and thermally conductive electrical insulators. Manufacture of low density, high stability products. Broad range of thicknesses and optional specific shapes available.



Hardness

materia

## <sup>6</sup> Microwave absorbent materials

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resistance

(1831

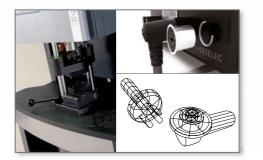
Our microwave absorbent materials are available in sheets that we cut to shape in different thicknesses and also in bespoke mouldings. They are made of small diameter ( $5\mu$  approx.) carbonyl iron spheres, dispersed in an appropriate resin. The mixture's homogeneity is ensured by a complex mixing system, perfected by GETELEC.

Breaking strength



## 7 Technical shielding products

Range of seals for waveguide flanges, glues and paints, silicone foam, and silicone and Monel wire seals.



## <sup>8</sup> Thermoplastic overmoulding

Overmoulding, also known as insert moulding, is very close to the injection moulding process,

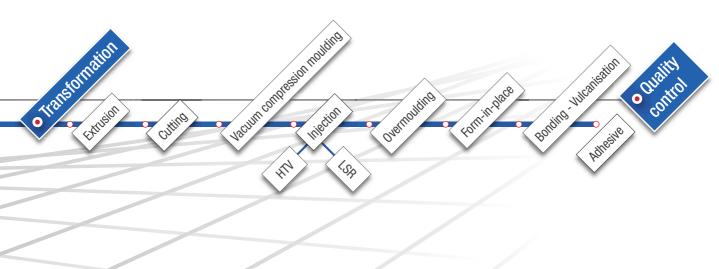
since it builds on classic moulding techniques.

GETELEC has taken over KAP Presses' design and manufacture activities with an extended development programme of interest to all in the plastics fabrication sector.



# Consultancy, research, exclusive solutions

Ever since 1968, from the project definition stage through the design and manufacture phases of your custom solutions, the involvement of our consultancy and delivery teams remains constant. Our rigorous quality assurance, appraisal and certification procedures ensure you benefit from exclusive solutions to go hand in hand with your next technological success.



# From the creation of materials to specialised technologies



#### G Our EMC expertise at the service of your projects

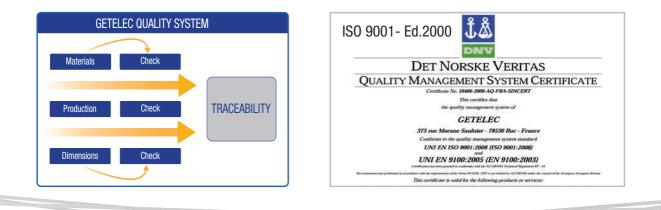
For over 40 years, GETELEC has been developing its own formulations of conductive silicones to meet the requirements of French, European and American standards. Our engineering teams, with all their expertise in EMC, are there to guide you and advise you through every stage of your project, from the definition phase through to realisation.

#### G Mastery of shapes: unique know-how

With their extensive production tools, our experts guide you from choosing the right material through to the design of your finished products. We advise you on the best specifications in terms not only of hardness and crushability but also of volume resistivity, additional treatments and elasticity so that there is a perfect fit between our finished products and your manufacturing objectives.

#### G GETELEC standard and quality: the dual requirement

GETELEC has set up a quality system ensuring the precision and reliability of your seals based on the three criteria of materials, production and dimensions.





Find out more about all our products and solutions

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#### GETELEC

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