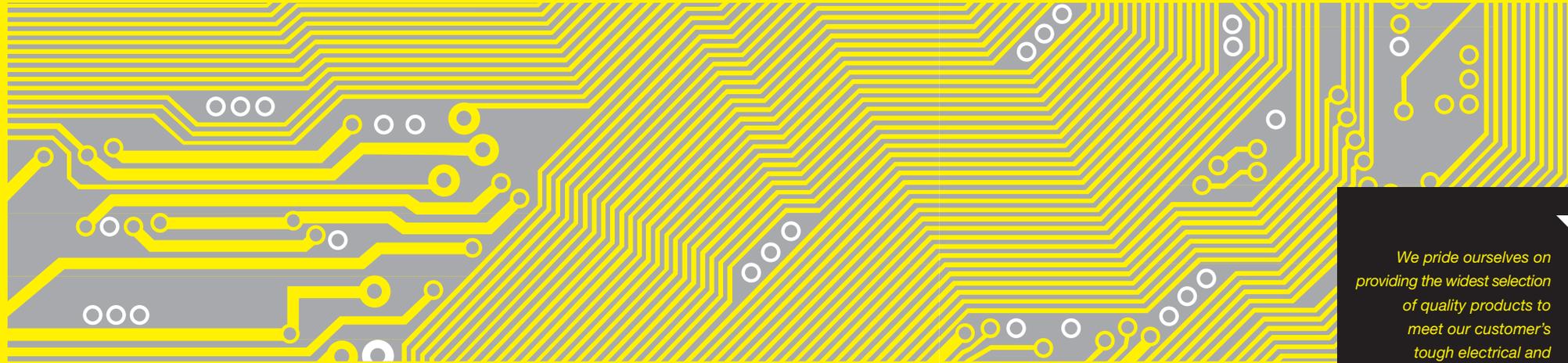


What's inside the machine?



HumiSeal[®]



www.humiseal.com

Welcome to HumiSeal®

The only partner you need

We pride ourselves on providing the widest selection of quality products to meet our customer's tough electrical and environmental requirements.

“
Manufacturing over 60 coatings, thinners, strippers and masking materials we can also offer custom formulations to meet unusual specifications.”

HumiSeal®, a division of Chase Electronic Coatings, is dedicated to providing conformal coating solutions that enhance the reliability of printed circuit boards operating in a wide variety of machines and devices in many market sectors such as:

- Aerospace
- Automotive
- Appliance Controls (White Goods)
- Consumer Electronics
- Defense
- Industrial Controls
- Renewable Energies
- LED

These electronic assemblies are becoming increasingly more prevalent and exposed to harsh environments including: high temperatures, salt spray, humidity, condensation, water immersion, noxious/corrosive gases, solvent splash / spill / immersion.

Reducing failures, enhancing reputation

By coating the printed circuit boards with a thin film (2mil, 50 micron) of HumiSeal's approved range of coatings we are helping customers around the world reduce field failures and so enhance reputation and profitability.

HumiSeal manufactures products at three strategic locations across the globe, each facility being qualified to produce any materials from the extensive product range. Both the North American and UK manufacturing plants

have recently been upgraded to become a 100,000 sq ft (10,000 sq metres) state-of-the-art facility, using fully automated, environmentally and computer controlled production equipment to ensure products are manufactured to the highest quality and consistency possible.




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HumiSeal®

An International Company

A global success

One of the original creators and innovators in conformal coatings, HumiSeal® has led the way for over 50 years and today stands out as a uniquely experienced and dynamic company.

We are the only company in the market whose sole business is the development and supply of conformal coatings. This

single-minded focus enables us to work as a partner with our customers, developing products that are tailored to their exact requirements. This has been our practice since the earliest days of the business when HumiSeal forged links with military and aerospace customers. Now we have a portfolio of over 60 products and facilities that span the globe.

But more importantly, we don't just sell products, we offer an unmatched level of support for them. This is why HumiSeal is the preferred partner to

many of the world's largest electronic manufacturers across diverse market sectors. Today, HumiSeal is a company renowned for its technical leadership, energy and vision. Our people are dedicated to getting each customers' process right and we know from client feedback that our expertise puts us well ahead of other suppliers.

In addition to our solid track record of performance, our customers also have the reassurance of knowing our parent company is Chase Corporation, an Amex-listed company.

With state-of-the-art manufacturing facilities around the world HumiSeal can meet all your requirements whatever your operational needs.

“

Of course consistent product quality and manufacturing volume redundancy means that you can rely on HumiSeal to deliver.

Win3 approach

Developing a conformal coating process involves a partnership between the end user, the equipment manufacturer and the coating supplier. We know from experience that the greater the interaction between the partners, the greater the chance of success of the project.

Our expertise in collaborative working means you'll get a product that delivers a perfect process within a short timeframe.

You won't have to spend months optimising your process to suit our product, helping to minimise lead times and keep your project on schedule.



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Our portfolio represents the widest product range and the largest choice of qualified products currently available.

“
This means that we are able to supply the solution that is best suited to your application requirements and not the other way round.”

All Chemistries Solutions

The only partner you need

HumiSeal® produces conformal coatings from all chemistries, including acrylics, urethanes and silicones, both water based and UV curable.

This represents the widest product range and the largest choice of qualified products currently available.

We are always looking to further enhance our product range by being at the forefront of conformal coating innovation and product development.

This means HumiSeal can meet all your requirements with immediate effect while constantly striving to stay one step ahead of your needs as your business develops.

We have three factories at strategic locations around the world, capable of producing the entire HumiSeal range to the same high quality standards that

you have come to expect, and there are expansion plans in the pipeline.

We also offer a complete range of production aids, such as liquid masking materials, tapes and pre-formed dots and cleaning media, all of which are fully tested for process compatibility with our coating materials, thus saving you the time and effort of co-ordinating separate suppliers.

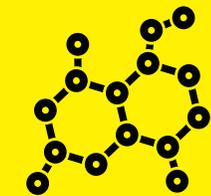
The HumiSeal® difference

A key point of difference in how HumiSeal operates is that we don't have a vested interest in selling you a particular product from our range. We'll only ever sell you a product that's exactly right for your needs.

Although other suppliers can have different chemistries in their range, they often end up pushing customers into buying from their core product range, regardless of their needs. This simply doesn't happen when you work with HumiSeal.

Our customers can feel confident that when we advise them on what they need, we are focussing on their individual requirements and not what we want them to buy.

Of course, 50 years of experience also comes in handy when it comes to product selection and recommendations.



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HumiSeal continues to invest in its R&D programmes to ensure that we can meet the demands of the future.

“
With extensive, well equipped laboratories, our chemists work hard to respond to customer and market drivers keeping HumiSeal at the forefront of conformal coating technology.”

Research and Development

HumiSeal's approach to research and development is multi-faceted. The largest part is market-driven, listening to what our customers want and delivering against their expectations.

At the same time, we are continually looking to the future and working to develop innovative new products.

We have always been proactive regarding environmental issues and corporate responsibility. For example, we've developed a full range of solvent-free products, and strive to stay ahead of legislation.

HumiSeal® aims for best practice at all times. Also, all of our product developments have to meet the most stringent performance criteria to which our military and aerospace formulations must be tested, and this is particularly pertinent in the long-term success of the products we develop.

A wider perspective on product performance

When we develop our material, we take a much broader view of product performance than others in the market. For example, we work closely with equipment suppliers when developing products to ensure that our materials work in harmony with their machinery.

This ensures that machines using our products operate trouble-free and achieve the finish required as well as remaining clean year after year. We also work with solder paste, flux and

cleaning chemistry manufacturers to make sure our products are all inter-compatible.

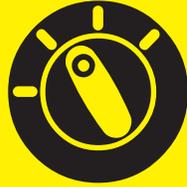
Not all suppliers think or care about details like this, but this level of forethought is an intrinsic part of our outward-looking philosophy.



HumiSeal



Military & Aerospace Electronics



Industrial Controls Electronics



Renewable Energy Electronics

Market Sectors

Protective coatings for electronic circuits

HumiSeal® conformal coatings are being deployed in ever increasing applications across a wide range of market sectors.

This increased demand for conformal coatings is often coupled with elevated expectations in diverse areas such as performance, ease of application, sustainability, quality, functionality, and environmental properties.

All of these expectations require special attention in order to ensure that our products meet expected standards.

Each market sector has a distinct set of requirements in terms of standards and operating environments as well as other factors.

Of course the needs of the production engineer differ from those of the quality manager or purchaser.

Additionally, if you would prefer to talk through your requirements with us or

one of our Global partners we would welcome the opportunity.

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Automotive Electronics



Consumer Electronics



White Goods Electronics



What's inside the machine?

We recognize that today's electronic products are increasingly being subjected to hostile operating environments as the global demand miniaturisation and functionality continues to drive evermore complex and smaller devices. We see electronics in everyday items from laptops, phones our cars and so on.

Keeping this equipment working in the field is crucial to protect the reputation of the brand as well as costly field

repairs. That is why more and more OEMs turn to HumiSeal to protect their products and improve reliability.

What's inside the machine?...

“
...HumiSeal is inside the machine reducing failures and improving reliability around the world.
 ”

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