

bion

your partner in perforating ●●●
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Introduction



Established in 1964, Bion and Company is privately owned and proud of our **continued investment** in new **technology** and **modern perforating equipment**

Our aim is to work in **partnership** with **you** so that together we **achieve** your **buying needs**

We produce **superior quality product** but offer **demonstrable value for money**

Bion - flexible enough to meet your needs whatever they may be.

In-house tooling facilities make it possible for us to **guarantee** product **quality**, ensuring continuity of supply and a quick response in an ever changing environment.

We manufacture product that can be:

- Flat sheets
- Coil to coil
- Coil to sheet
- Sheet to sheet
- Narrow or wide
- Perforated all over or interrupted patterns
- Plain Borders

Our investment has meant that not only can we offer a **wide variety** of **perforating options**, but are also able to supply **fully formed** and **finished components**. We welcome the opportunity to work in **partnership** with your design team, to come up with the **best possible solution** to meet your needs.

Bion - small enough to **CARE** but **LARGE** enough to **COPE**



There are hundreds of functional, economical and aesthetically satisfying uses for Bion's perforated materials in both internal and external construction work, and we are a leading supplier of perforated materials to the architectural industry.

Perforated construction materials

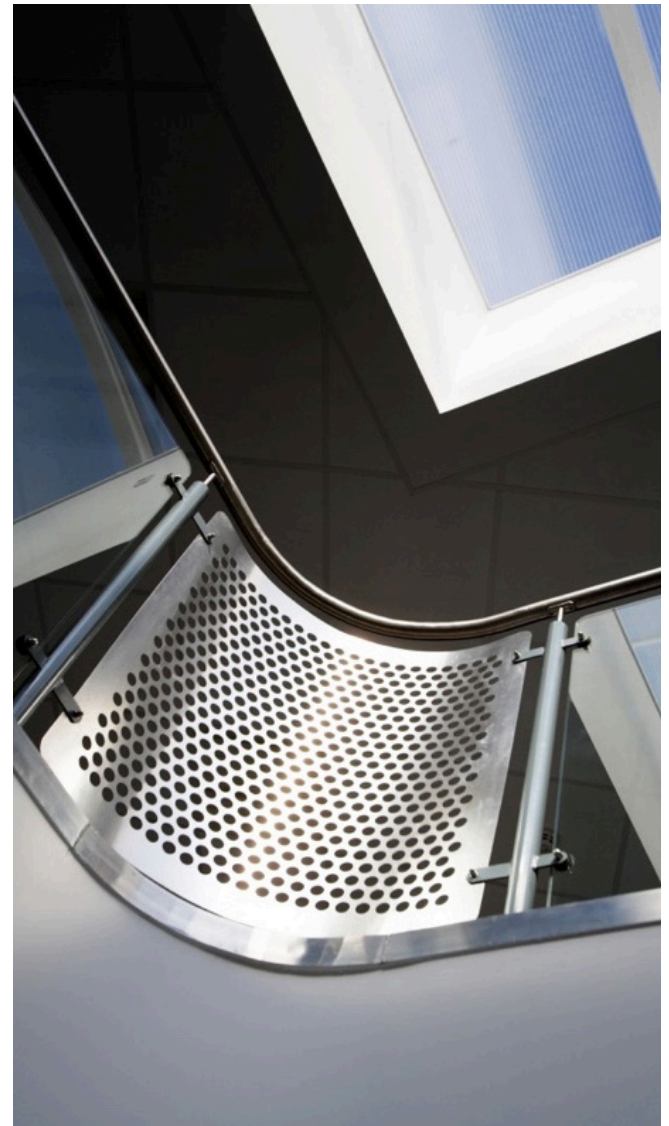
The use of perforated materials in the construction sector is always increasing. We work closely with our clients to develop new ideas and technologies. This partnership has helped us to introduce several new materials into the industrial, commercial and residential building marketplace.

Typical applications include: balustrading; radiator covers; street furniture; acoustic panelling; air conditioning systems, perforated sheet metal and decorative panelling & panels.

Perforated walls, panels and screens have been used for centuries as a way to control the level of light entering a building or to offer privacy to the occupants. The functions of perforations have remained largely the same, but the materials and methods of manufacture have altered considerably.

Perforated screens and shutters can help to add a distinctive personality to a building's exterior, as well as performing an important function. Perforated façades enable interior spaces to benefit from natural light, filtered in such a way that it reduces the glare of direct sunlight and resulting in an environment that is conducive to relaxation and working.

Whether used internally or externally, perforations create a dialogue between spaces: obscuring or inviting views as required and keeping temperature and brightness at a pleasant and practical level. With new technologies come new options for architects and designers interested in exploring the potential for perforations to tell stories and create statements. It is now possible to produce detailed patterned surfaces quickly and easily and on a scale large enough to wrap entire buildings. Shade and privacy will continue to be the key practical purposes of perforations, but the potential applications are greater than ever. Find out now how Bion can support your design process.

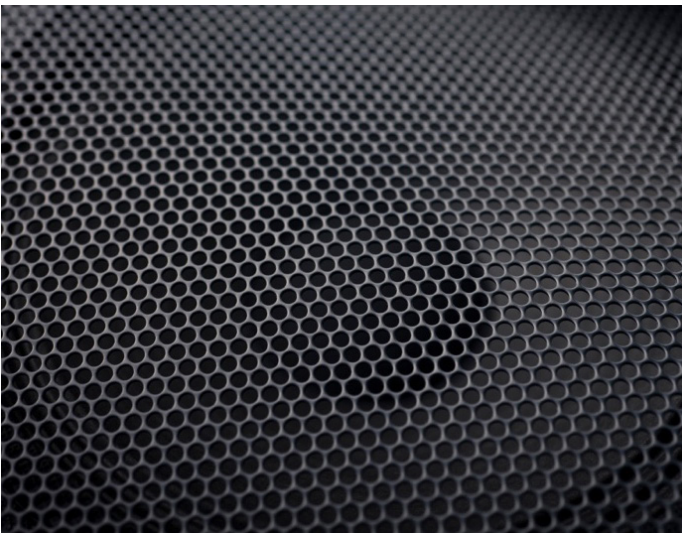


Audio



Bion works in partnership with leading sound-system manufacturers to produce unique customer specific designs for speaker applications.

We will supply the product fully formed and painted and if required adhere acoustic foam to improve the sound quality. We can perforate in a variety of gauges in both metal and plastic to customers' unique design and colour requirements.



Award winning sound systems

We work with leading manufacturers to design award-winning sound systems that integrate new technology with advanced acoustic and electronic engineering.

For more information about how Bion perforations can aide your audio products, please call +44 (0) 118 959 2700 or email websales@bion.co.uk



Notwithstanding the current uncertainty surrounding Brexit, the British Car Manufacturing Industry remains a success story and Bion are proud to be play their part in this by supplying perforated metal for both speaker and exhaust applications

Over the years we have been proud to have been associated with such names as Nissan and Unipart (exhaust blanks), Ford (Escort speaker grilles). Our current portfolio of supply sees us dealing with JLR, Aston Martin and Bentley.

We manufacture both coils and blanks, perforating to close tolerances with the required decorative finish for the speaker grille market and within tight tolerance and burr free for the automotive filtration market.

High quality just on time products are critical within this market sector and Bion's in house perforating, levelling and finishing ensure superior products are delivered on time, all the time.





Bion produces flat, oil and burr-free perforated baking trays that benefit our customers by removing costs encountered from de-burring or degreasing operations.

Often perforated from free issue aluminium, Bion's lean six sigma means our customer benefits from our waste reduction experience and thus achieves a higher than anticipated yield from the tonnage supplied.

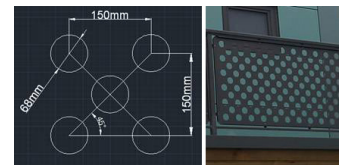
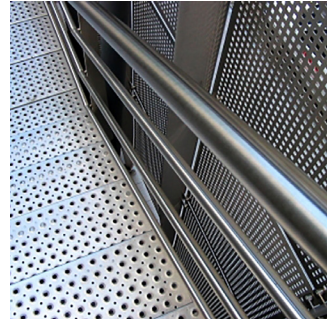
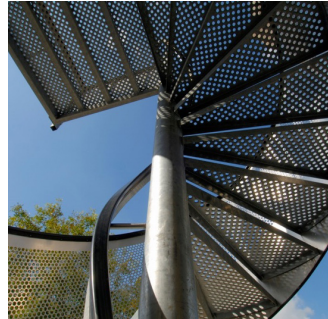


Perfect Perforations - Beautiful Balustrades



Perforated metal panels are increasing in popularity as a functional fit for balustrading

Many architects now choose perforated metal as they offer a safe and low maintenance solution for a façade. Perforated metal also enables you to give your building its own unique character. The question is which pattern should you choose - which pattern will enhance the building's style, satisfy the legislation and be cost effective?



The choice of patterns is literally infinite and Bion, as a bespoke perforator, will work with you to get the right pattern for you.

The key pattern choices are:

Hole Type:

With many standard patterns the choice is limitless. We will advise if the sheet thickness to hole size ratio is achievable using the perforation process.

Hole Size:

200mm, 100mm, 3mm diameter large feature holes to make a statement or tightly spaced small holes to create a semi-transparent window.

Pattern Layout:

How about a bespoke perforation which shows your own logo made from holes? Or a cost effective standard 60 degree pattern. Bion look to work in partnership, so please use us to work alongside your design team to create the perfect perforation for you.

What about cost:

What are the cost implications of your choice of pattern? Processing cost can be higher if the pitch of the pattern is small. We have a wide range of standard patterns which require no additional tooling costs. However up front tooling investment can drop processing times and make the overall project cost less. Bion's Technical brochure has a number of standard patterns which can help you make your choice.

Ceilings



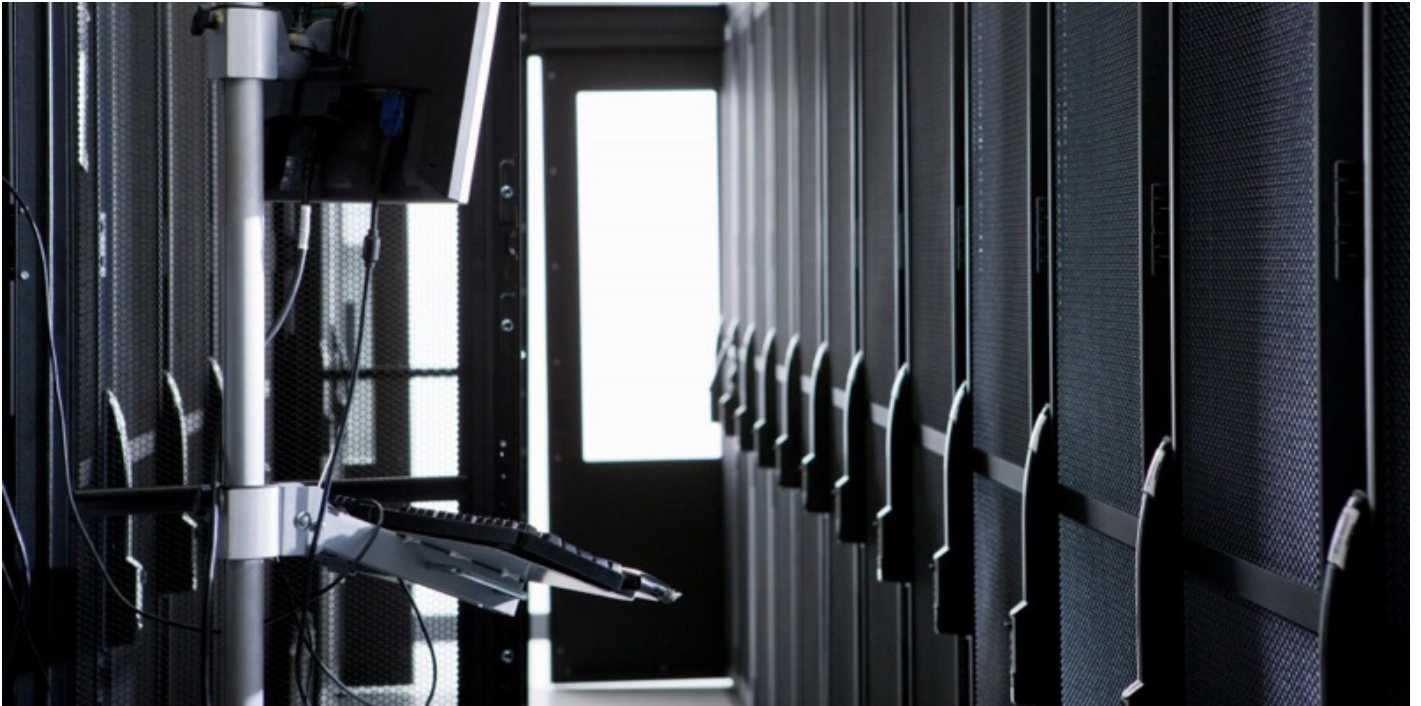
Used in many environments, from offices and showrooms to warehouses and hospitals, Bion can perforate suspended ceiling tiles which can then be backed with acoustic fabric and solve most thermo-acoustic issues in industrial and commercial applications.

Bion has a range of perforating patterns to provide design solutions that will both improve sound absorption and enhance the visual appearance of the ceiling. However, if you cannot find the exact pattern you are looking for we can manufacture tooling to meet your specific requirements.

Our in-house tooling facility enables us to provide bespoke high quality solutions in short lead times. Bion supplies only the finest perforated ceiling tiles in a flat sheet or a fully formed product, because delivering a uniformly flat product is the most important technical aspect for our clients.

The widest range of perforations available

At Bion, we've invested in the best CNC levelling facilities in the UK. We also boast the widest range of perforations available so we can always match new and replacement ceiling tiles with existing patterns.



Bion's perforated metal sheets are widely used in the electronics industry for their acoustic properties, superb ventilation and market-leading aesthetics and our knowledge and design expertise in this area is both innovative and globally acclaimed. Examples of these applications include server cabinet housing, shelving, and telecommunications components.

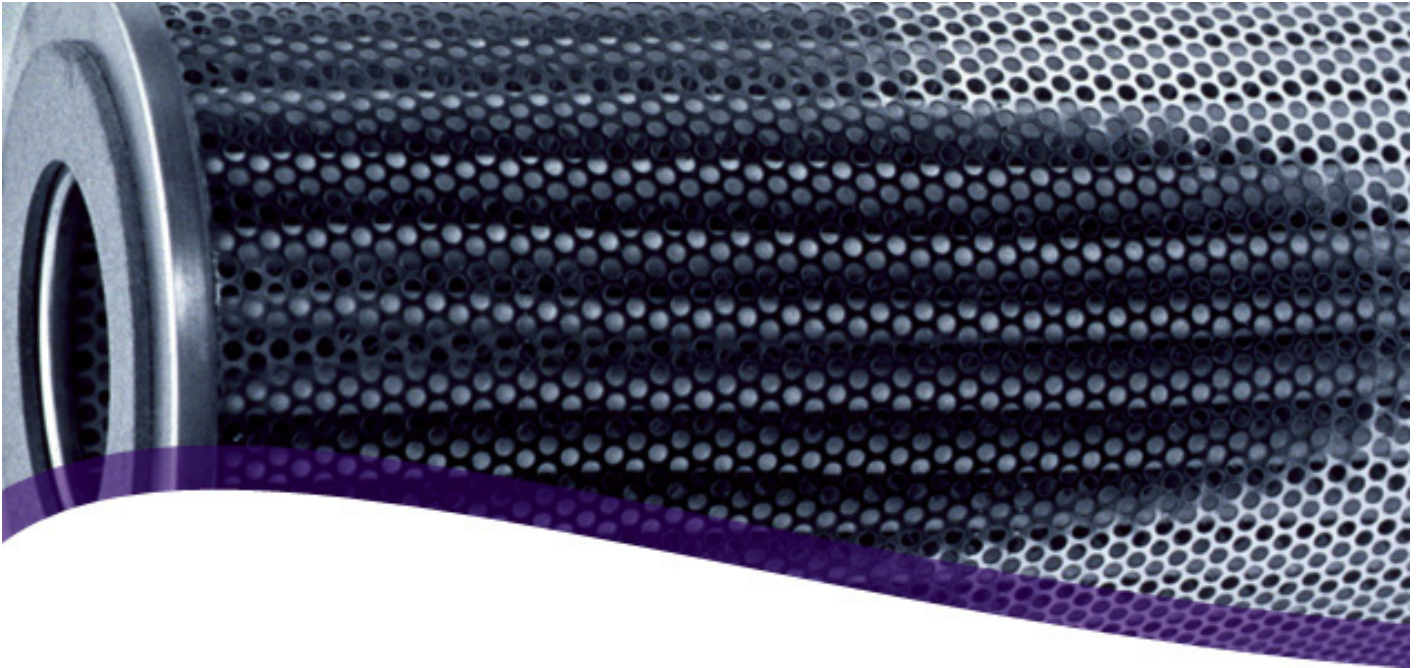


Superior perforated products

This ever-changing market demands technically challenging products. A high open area is required especially in data centres where ventilation is key. The higher the open area, the greater the need to keep it flat and ensure that the webbing between the perforated areas remains rigid. This is a very technically challenging aspect of perforating and Bion can design tooling and have the capability in the programming of their equipment, together with state of the art levelling to ensure that the quality parameters are maintained.

Bion leads the market in the production of these technically superior perforated products. We allow for un-perforated borders, door-locks and surrounds, and are equipped to carry out secondary operations like notching.

We've invested in the best CNC levelling facilities in the UK so the end product reaches the client with the highest degree of flatness and finish.



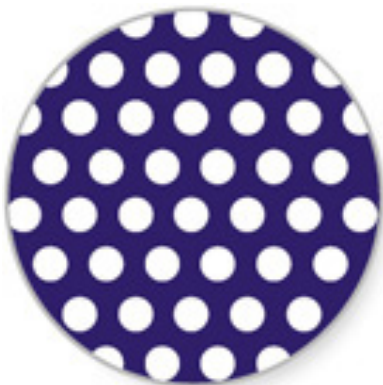
Bion supplies perforated materials for a variety of filtration applications. The perforation and open area can be specified exactly, making the perforated sheet ideal for filtering, separating or sorting. The open area can be varied in numerous ways to affect the flow rate. Filter elements made from perforated metal are of major benefit to the user.

Bion's tooling enables us to offer systems to help increase flow rates where necessary but to reduce pressure, vibration and structural properties. Our tooling quality means that many products that once used to be de-burred prior to forming by the customer are now longer subject to this operation. Saving our Customer internal processing costs.

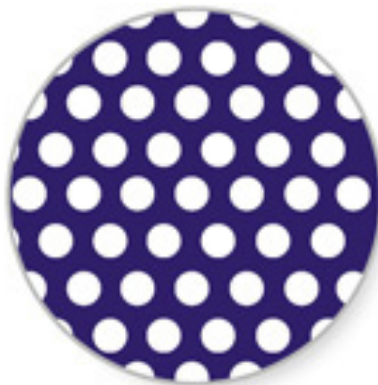
We can offer consignment stock agreements for regular running repeat products.

We can perforate up to 3mm stainless steel as well as other material types and gauges. We offer in house degreasing where an oil free product is required.

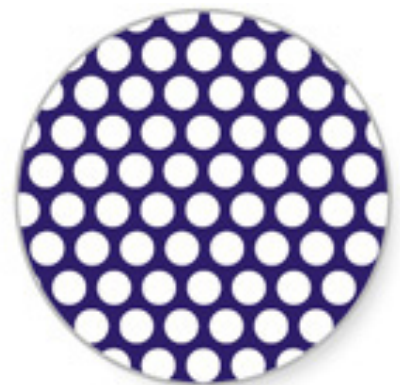
Typical patterns for filter products are RB3033 (R3 T5) RB3241 (R3.2 T4.76) and RB3051 (R3 T4) but many customers require customised tooling which Bion can provide.



RB3033



RB3241



RB3051



Bion is a leading supplier of perforated materials to the lighting sector. We allow our clients to choose from any number of innovative perforated metal designs that will run with increased efficiency and light diffusion.

Bion continually adapts to an ever-changing marketplace and greater demands from its loyal client base. We work alongside designers at the major lighting suppliers to ensure we meet new legislative constraints and deliver innovative lighting solutions for the most prestigious projects.



The leading perforated metal supplier to the lighting industry

Our reputation as the leading perforated metal supplier to the lighting industry continues to grow, and we now offer a range of high-quality perforated products either as a flat bank or fully formed to the client's specifications.

Our state-of-the-art manufacturing facility enables us to deliver the highest standards in the shortest lead times, because we see quality as a right, not a privilege.

Microwaves



As a leading product supplier since the early 1990s, Bion has been delivering high volumes of low-cost precision-levelled microwave door blanks, both anodised and notched, to clients within a matter of days responding to build demand fluctuations.



At one stage Bion were the sole supplier to Sanyo and manufactured over half a million microwave door blanks within a 12 month period.

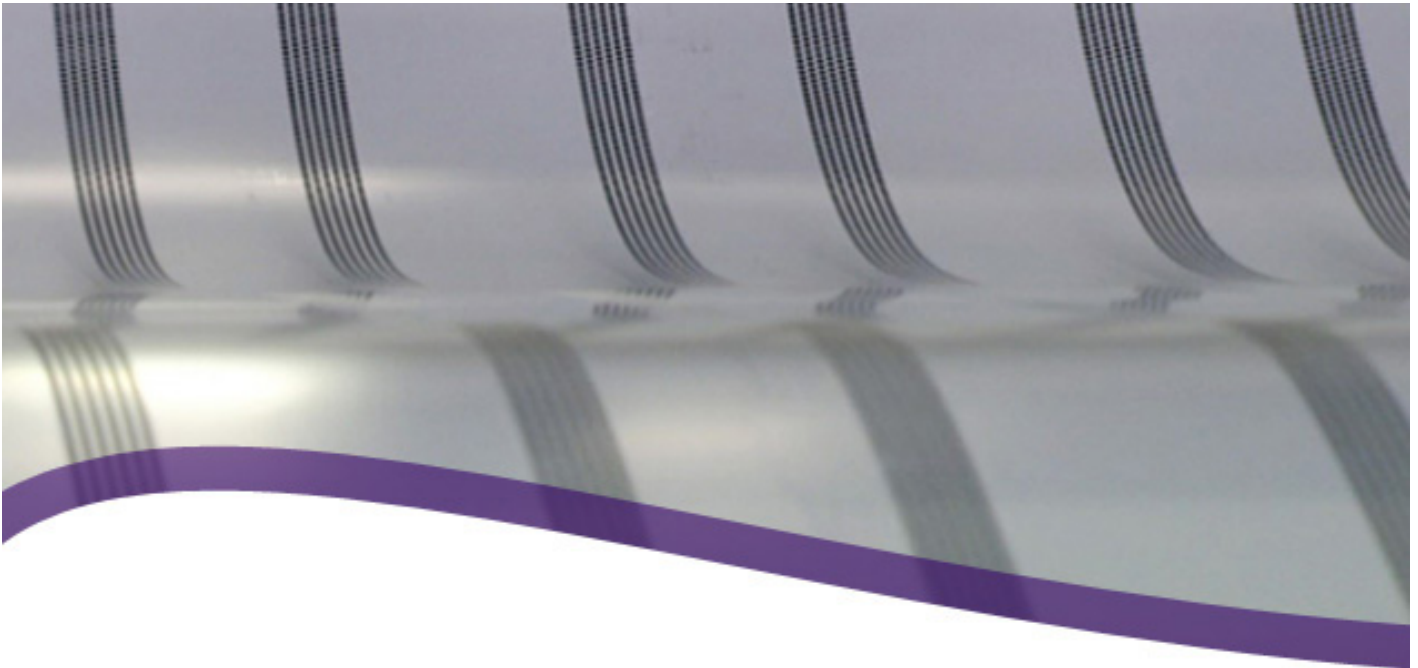
Our superior tooling and technical capabilities enable us to supply high-quality products, which help reduce both burr imperfections and costs.



There are numerous uses of perforated material within this sector including industry specific applications such as filtration and oil and gas exploration. The corrosive and dangerous nature of the applications in this sector makes Bion's market leading quality and manufacturing standards vital to the successful implementation of the products.

Predominately supplied in various grades of stainless steel, Bion's ability to provide the technical solutions required ensure they are the first choice for drilling systems, expandable sand screens and filtration elements to the Oil and Gas Industry.

Profilers



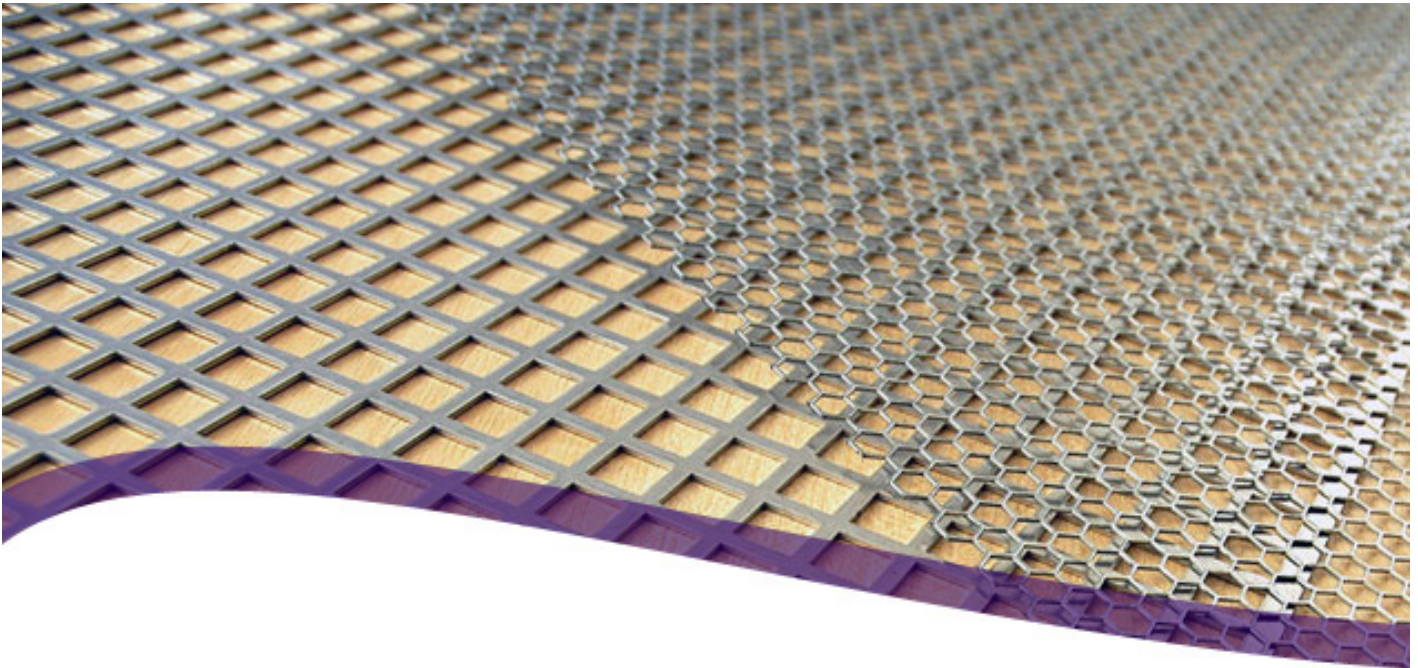
Bion's manufacturing versatility, experienced sales team and recoiling facilities enable us to supply architectural contractors with materials for the roofing and wall cladding markets. We specialise in the supply of recoiled perforated materials that give our clients continuous production runs. Our superior in-house tooling technology allows us to maintain the highest level of accuracy and consistency, so we know we're delivering the best products available in the market today.

Market leaders in the profiling industry

Bion is the acknowledged market leader in the profiling industry. We supply a multitude of perforated sheet materials in gauges and coil widths varying from 20mm to 1250mm

Bion: the number one choice for patterns and materials, lead times and staff experience, and a company that prides itself on maintaining the highest standards of customer care.

Stock Sheets



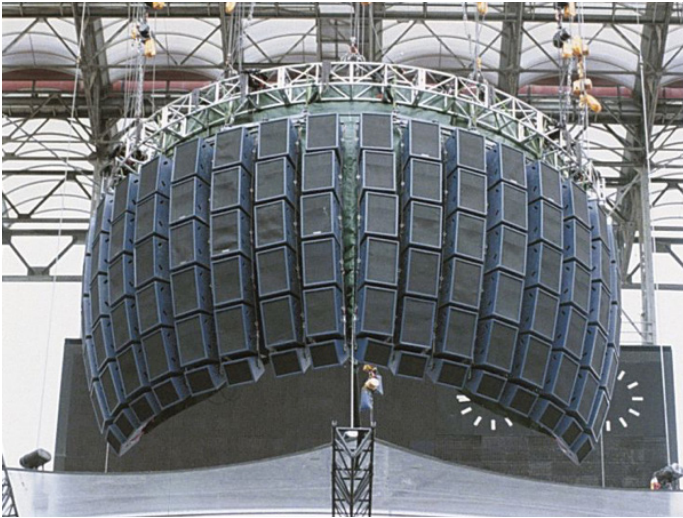
We are able to provide our clients with high-quality perforated stainless steel sheet, mild steel perforated sheet, perforated aluminium, galvanised steel sheet and a host of perforated plastic products on a next-day delivery nationwide.

Bion's quick response time means we are able to provide you with your stock requirements with a very quick lead time.

If you require off-the-shelf, standard perforated stock sheets, we work in partnership with RS components to fulfill orders very quickly. However, if your requirement is for a significant number of stock sheets, whether perforated stainless steel, aluminium or standard mild steel perforated sheet, it might be more economical to approach us direct.

As well as holding in stock a number of different perforating patterns, we offer different sheet sizes, gauges and material types; we are able to offer consignment stock holding for your own particular stock sheet need.

Specialist Tooling



Hexagon Holes

Our hexagonal hole provides an open area of up to 85%. Our ability to perforate to tight tolerances with this high open area is achieved thanks to the technical expertise of our tooling design as well as state of the art levelling facilities and a team of individuals with a passion for perforating.

Server Cabinets

To ensure that the IT experts and their servers keep their cool at all times, particular importance is attached to state-of-the-art cooling systems for the IT infrastructure.

A sheet with a hexagonal perforation provides a very large open area giving optimal ventilation, as well as being pleasing on the eye.

Automotive

A small hole is desirable because it is able to deflect a lot of small objects that might otherwise get into the engine compartment, and a high open area that allows for maximum engine cooling useful in hot countries.

The consistency of the web, means that when formed there are no weaker or stronger pieces of material

Audio

Speaker grilles, as found at music concerts, favour the uniqueness of the design of the hexagonal hole, as well as achieving the quality of sound required.

Plant and Machinery

Capabilities:

- Perforate coil to coil up to 5 tonnes and 1600mm wide
- Perforate coil to sheet
- Perforate sheet to sheet
- State of the art levelling equipment means superior flat products
- Notching and forming
- Degreasing
- Consignment stock agreements
- Able to perforate a wide range of patterns in a variety of materials, grades and gauges
- In house manufacture of tooling to your own specific design
- Continual investment