

# What is rubber bonding?



Innovate | Engineer | Deliver

# Rubber Bonding at SRM

Here at SRM we've been producing rubber-bonded products for over 40 years and have an extensive knowledge of the process and its applications.

We hold a broad range of stock materials and can produce all tooling in-house. Due to this we have no minimum quantity requirement and can produce one-offs, high volume mass production or anything in between.

There are two main types of rubber bonding that we produce here at SRM: rubber-to-metal bonding and rubber-to-plastic bonding. Either can be hot-bonded or cold-bonded depending on the application.



# Rubber-to-metal Bonding

SRM designs, manufactures and supplies rubber and rubber-to-metal bonded anti-vibration mountings for all types of industrial applications. The primary objective is to eliminate harmful vibrations, noise and shock.

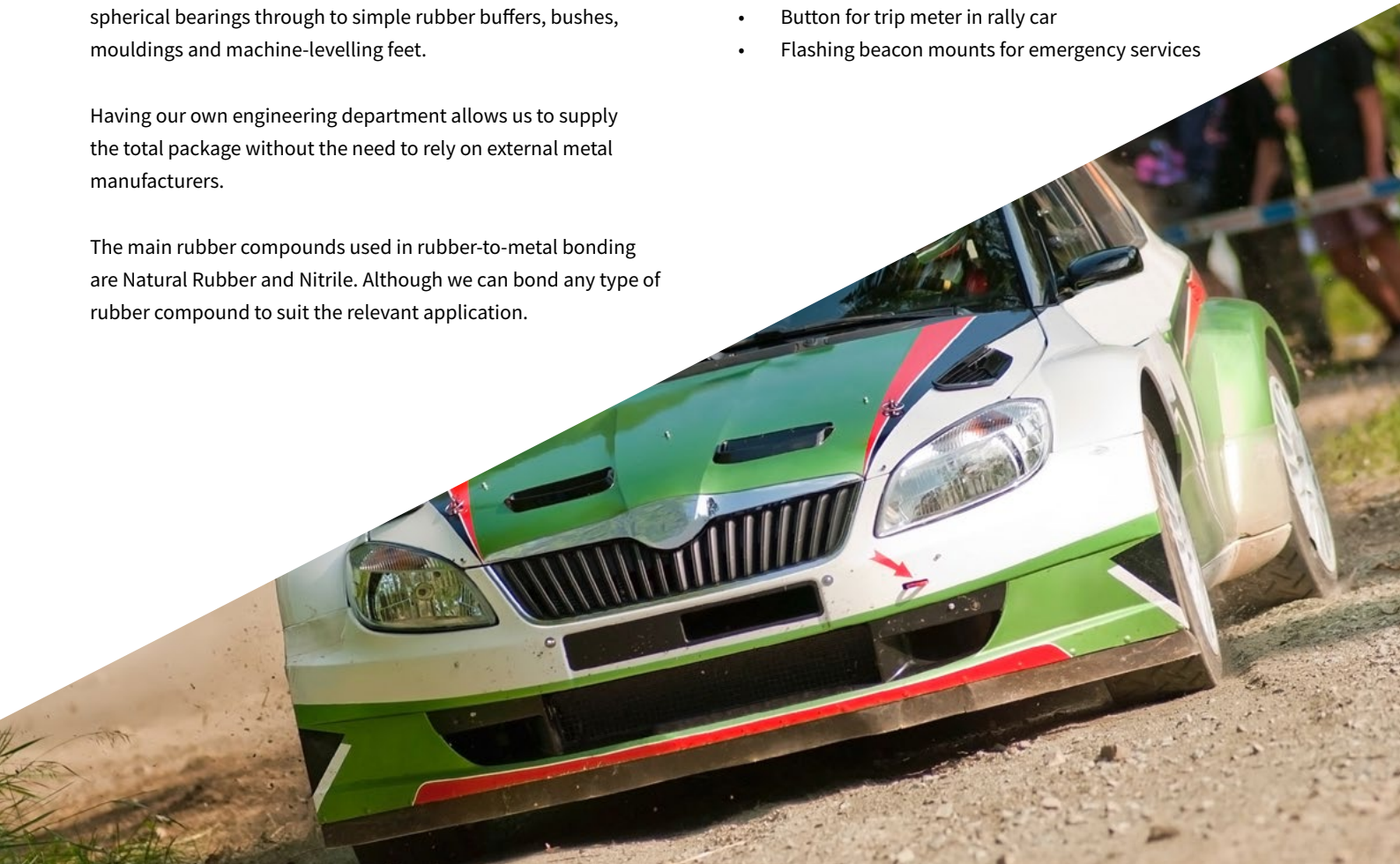
Our product range is extremely diverse, ranging from air suspensions, engine mounts, cab mounts, shock mounts and spherical bearings through to simple rubber buffers, bushes, mouldings and machine-levelling feet.

Having our own engineering department allows us to supply the total package without the need to rely on external metal manufacturers.

The main rubber compounds used in rubber-to-metal bonding are Natural Rubber and Nitrile. Although we can bond any type of rubber compound to suit the relevant application.

## EXAMPLES OF RUBBER-TO-METAL RUBBER BONDING APPLICATIONS WE'VE BEEN COMMISSIONED TO UNDERTAKE INCLUDE:

- Road signs
- Pumps/industrial equipment
- Shroud for fighter vehicle bearing housings
- Button for trip meter in rally car
- Flashing beacon mounts for emergency services



# Rubber-to-plastic Bonding

Rubber-to-plastic bonding or insert moulding is an intricate process, given that plastic cannot endure the same temperatures and pressures that metals can. However, plastic is favoured as a component as it is lightweight, less expensive and unbendable, which works well for certain applications.

SRM can oversee the sourcing of the plastic inserts if needed, as well as developing the elastomer and chemical bonding compound required for maximum performance of the part. Sometimes it is perceived that bonding is required; but we can often omit the bonding element in favour of overmoulding; a process that is significantly more competitively priced.

## TYPICAL APPLICATIONS WE HAVE WORKED ON INCLUDE:

- Fire service breathing equipment
- White goods (plunger buttons)
- Control keypads
- Sprinkler systems for sports venues; including football stadiums, racecourses and golf courses

We can bond any type of rubber compound to plastic to suit a broad range of applications.



# Hot Rubber Bonding vs Cold Rubber Bonding

In most cases a hot rubber bond is significantly stronger than a cold bond (self-adhesive) although there are advantages to both.

Even though a hot bond is stronger, it is more costly, as the process requires more set-up and labour which ultimately leads to a more expensive product.

The strength of the bond needed for a product or application will determine which process will best suit your requirements.

With extensive knowledge of the process and its applications, SRM will be able to advise the best bonding process for your product, to deliver optimal results and cost.

**For more information about how we can help, contact [sales@sr-industries.com](mailto:sales@sr-industries.com) today.**

