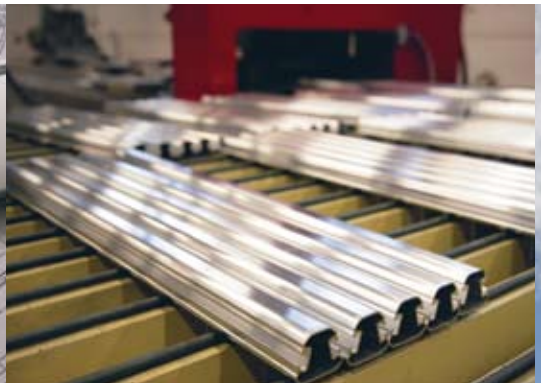
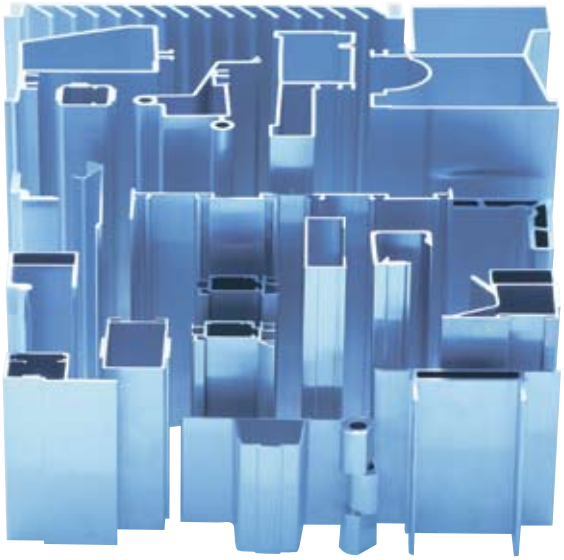
sapa:

Enclosures

Sapa Thermal Management has been manufacturing components and sub-assemblies for indoor and outdoor aluminium enclosures for nearly 30 years.
The **enclosures** are used for applications such as base stations, and most of our customers are multinational companies within the Telecom and Power sectors.
Working with us is simple. We provide manufacturing resources and **competent personnel** throughout the product life cycle – from idea to delivery. We are a stable partner with long-standing experience.

The principal advantages offered by aluminium include low weight, high strength and corrosion resistance. It's also easy to process. Our designs, and those of our customers, are hallmarked by considerable **built-in functionality,** thus simplifying the process and reducing overall costs.

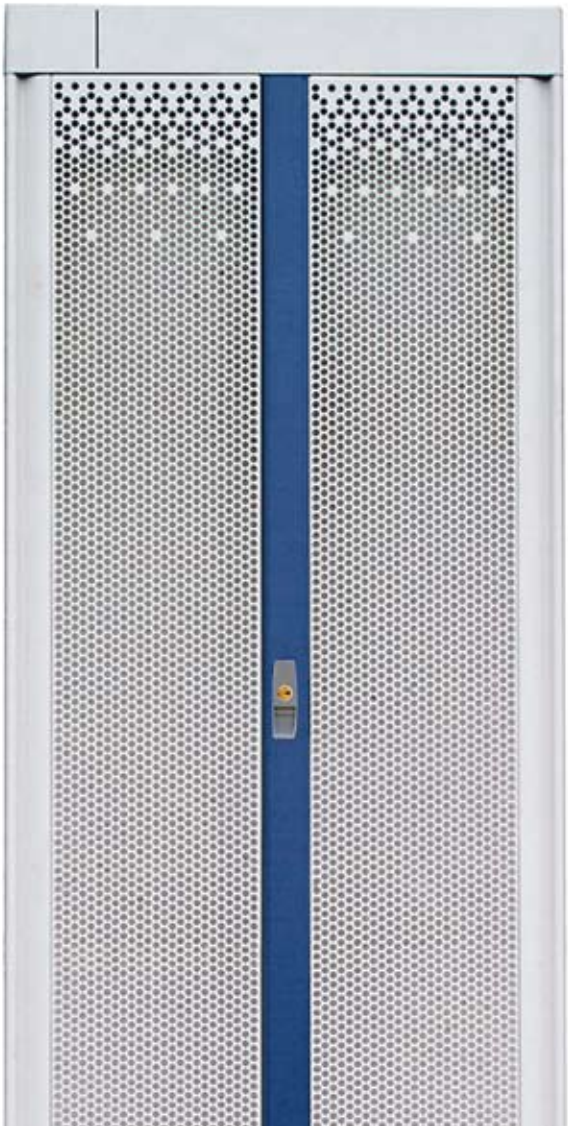



Increasing numbers of people are discovering the **advantages** of **aluminium enclosures** for indoor and outdoor use

Many enclosures for base stations are still manufactured of metal sheet, but people are now increasingly discovering the advantages of aluminium profiles. Aluminium profiles are more efficient, require less processing and offers considerable built-in functionality.

The design of the enclosure is determined by whether it will be used for indoors or outdoors. Enclosures for indoor use can be designed so that both production and assembly can take place as quickly as possible. In contrast, enclosures for outdoor use must meet more stringent demands. In addition to requiring air conditioning, heat exchangers and protection from break-ins, these enclosures must also be fire-proof and have sufficient weather protection to withstand considerable strain, such as earthquakes. Although outdoor enclosures are robust and significantly more technically advanced, they are as flexible and easy to assemble as indoor boxes – assuming we have had the opportunity to be involved in their design from the beginning.

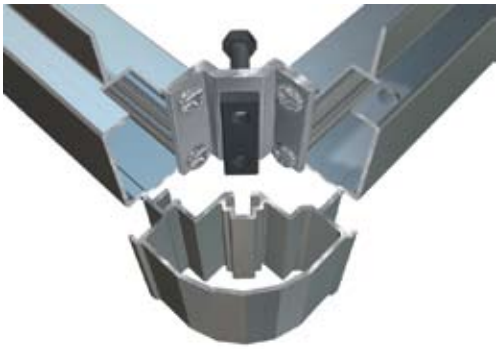


We **help** you all the way

It is a well-known fact that aluminium structures can be made strong and light, but few people know the best and easiest way to design an aluminium profile. That's where Sapa Thermal Management comes into the picture.
Our long-standing experience and considerable production knowhow enable us to help you manufacture enclosures that are adapted to your particular needs.

Innovation Centre Vetlanda is a high-tech development centre with skilled personnel who help customers make the best of their products. You can lease space at the centre, bringing you close to production and our prototype workshop, thus facilitating more efficient project work.

Smart solutions on our customers' behalf



Since functionality is an important aspect of development work, our technicians work intensively to find smart solutions based on the unique properties of aluminium profiles.
The constant goal of minimising the number of loose components has resulted in such solutions as built-in hinge functions, screw recesses and mountings. In short: we create functional, cost-effective solutions.

The properties of aluminium profiles also help speed up and simplify assembly. Utilising the possibility to add functions in the profile itself the joining of parts can be very simple and quick. With extruded aluminium, we can also produce the parts required for installation, such as fasteners and consoles.

Another advantage is that it is possible to construct modular enclosures in varying sizes. Different markets require different formats, and there is no problem if you suddenly need enclosures with different measurements.

Extrusion

The extrusion principle is based on a preheated aluminium billet that is subjected to high pressure through a die. The completed profile is extruded through the die. The shape of the profile matches the hole in the die, and is usually 25 to 45 metres long. Cooling with air or water begins as soon as the profile leaves the die.

The cooled profiles are then stretched to achieve the correct straightness and relieve stress. At the same time, all functionally important dimensions and the surface quality are checked. Then the profiles are cut to the correct length. The material receives its final strength through natural or artificial aging.

Cost-effective and flexible

Sapa has production resources throughout the world and many of our plants are in low-cost countries. This means we can manufacture large volumes of high-quality enclosure components at a low overall cost. We cut, drill, mill, punch and coat components, and can also assemble them. Naturally, we can also deliver our products to any location in the world. Our logistics solutions work for all kinds of customers, and we can package, store and distribute the items according to your needs..

50% of total production is based on **recycling**

About 8% of the earth's crust is comprised of aluminium, making aluminium one of the few metals to which we have essentially unlimited access. It can also be reused over and over again without losing its unique properties. Another advantage is that recycling only requires 5% of the original energy input. Sapa has remelting plants in eight countries to ensure that it can benefit from this energy-efficient recycling process.
About 50% of Sapa's total production is based on recycled aluminium.

Sapa is an international industrial group and one of the world's leading manufacturers of high value-added aluminium products.
With around **12,500 employees** in companies throughout Europe and in the US and China, the Group has a turnover of approximately SEK 30 billion.
The core businesses are Profiles, Building System and Heat Transfer.

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Shaping the future