

# Aluminium Range



The lightweight aluminum construction and design of the GM90 range of gantries, cantilevers and T-Posts supports all types of equipment for road or rail applications - housing various types of ITS roadside equipment.

#### **ADVANTAGES**

- > Fast & easy to install
- > High resistance to corrosion
- > Easy to maintain
- > Visual appeal aesthetic
- > Fully recyclable

1

- > Optimum lifespan
- > Resistant to harsh climate conditions



#### **MODULAR STRUCTURES**

The GM90 portfolio allows modular construction of aluminium structures and includes a range of sections and shapes. Modifications can be made in the manufacturing process for slots or openings, and also at site, for cable conduits.

Made entirely from aluminium alloy, components are constructed with different welded elements (posts, beams and arms) and assembled by mounting plates (stainless steel bolting).

Five different sections are available (250, 360, 550, 650 and 750). The widths of the post and beams range from 300 to 1300 mm offering solutions for all aspects of:

- ➢ Height & span
- > Wind resistance relating to sign surface areas
- > Weight to be supported

Each structure is designed specifically for the project. Our team helps calculate optimal dimensions of the structures required (gantries, cantilevers, T-posts) to install permanent, temporary or variable sign equipment.

The different elements are fitted with precision, meaning the bolting is not subject to shearing stress, but only tensile stress. This process, which is unique in the sector, is the reason for the long-life of our joints. These joints are located on the exterior of the structure, leaving the bolting visible, thereby facilitating visual inspection and tightening torques.

Beams have grooves on all four edges, allowing easy and rapid flange installation of signs, without any need for drilling. The connecting systems are all identical, whatever the size of the structure. The structures can be painted.

#### **OPTIONS**

Depending on your requirements, we can install ladders, safety hoops, anti-intrusion protections, service platforms, guardrails and cabinets.



#### MANUFACTURING EXPERTISE

At our production facility in France, our sister company SES has manufactured over 8,500 structures since 1986, continuously developing expertise in the dimensioning and manufacturing of aluminium structures.

In order to provide a safe and high-quality product, all SES welders have a MIG or TIG welding certificate. Our commitment to quality is the welding robot, which enables to production of continuous welds of greater lengths. This reduces risks of cracking and gives a great degree of uniformity and higher resistance of large weld beads are obtained. Regular checks by X-ray and penetration tests control the welding quality.

GM90 range is compliant to XP P98-550-1 standard.

#### **INSTALLATION**

We handle shipping to site. Working with major clients such as SNCF (French State Railway Company), our experience and expertise in the installation of Gantries, Cantilevers and T-posts enables us to anticipate all aspects (traffic, safety, environment, local constraints, etc.) of the project.



#### **SECURITY & IDENTIFICATION**

An identification plate is welded on to each element containing the following information:

- > The drawing number
- > The year of manufacture
- > The geometrical characteristics of the element (length, width, etc.)
- > The commercial file references
- > The certification number
- > The production site

This information can be used if an identical structure must be rebuilt after an accident or damage.



highways

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## West Hallam Highways England Repair Centre

#### Our aluminium structure is installed on site at Highways England NTLC estate West Hallam, Derbyshire.

The structure was designed, supplied and installed by Colas Ltd and the latest Highways England specification of MS4 has now been installed on the structure.

The MS4 and the roadside controller are being communicated through Highways England NMCS 2 protocol plus NTCIP with integration with CHARM anticipated in the coming months.

The Colas signs currently being installed throughout the Highways England network are HE V3 specification compliant with built in full colour capability and compliance with all current Highways England specifications.

The structure is man access enabling maintenance of all equipment installed on the structure to be carried out with minimal disruption to traffic on the carriageway below.

The structure can also be designed to accommodate AMI's and all versions of MS3 signs for Motorway and Expressway installations.

SIGN

TEST

INVEST - DESIGN - MANUFACTURE CONSTRUCT - MAINTAIN - OPERATE

## Innovating for tomorrows highways

From our new traffic controller, M@estro, to our latest full colour V3 Variable Message Signs, Colas has invested in developing the next generation of traffic solutions. The amazing potential of our Wattway photo-voltaic road surface has already been recognised and Flowell, our intelligent road markings system looks set to transform the highway – delivering more efficient, safer journeys for road users.

#### Wattway

Providing solar energy, the Wattway autonomous generator is a turnkey solution designed to provide energy autonomy to roadside equipment. It consists of photovoltaic panels installed directly on the road which is connected to an energy storage system, making it possible to connect and power all your equipment.

#### M@estro

Bringing ground-breaking potential to traffic signal control in the UK - improving vehicle flow, enhancing control and offering futuristic capabilities. It has inbuilt remote monitoring and can be connected directly to the Imtrac for fault management.

#### V3 - Variable Message Sign

A step-change in highways signage to the UK this year, these intelligent signs, remotely gives operators total control to display full-colour messages to road users and can be used to display pictures, maps, photographs, traditional messages and even films on the full-matrix screens.

#### Flowell

A solution to better organise public spaces, Flowell can visually restructure city streets and urban, periurban and country roads, using integrated, dynamic, luminous signalling. The Flowell solution can include a range of control options, and the LEDs can be turned on to follow the movement of users, providing a dynamic and interactive road management system.

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