



sarginsons

LEADERS IN LIGHTWEIGHTING

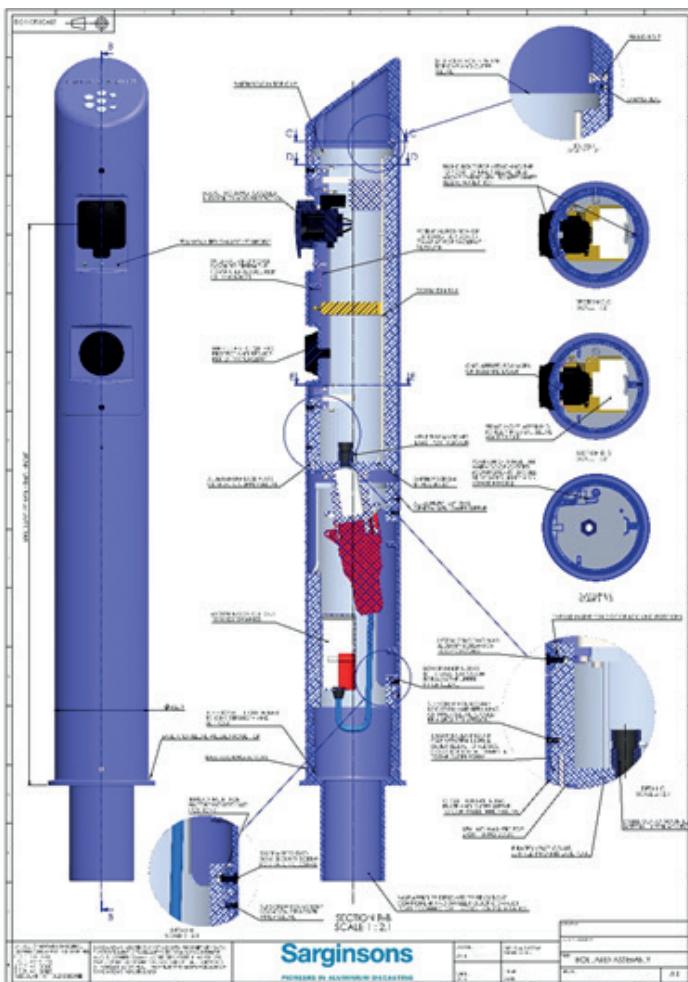
Sarginsons Technology Centre

Following extensive research and development collaborations with leading Universities, research centres and OEMs, Sarginsons Technology Centre was formed as a hub for casting expertise and to offer Design for Manufacture excellence.

EV Charging Bollard case study

Designed by Sarginsons Technology Manager, Gavin Shipley, as a complete turnkey project for Char.Gy this Charging Bollard offers an on-street solution for urban electric vehicle charging. Complimenting a lamp-post mounted die cast design, this flexible alternative incorporates many manufacturing elements, including:-

- Sand and die castings, fully machined and powder coated
- Bespoke aluminium extrusions offering a sealed internal electrical component capsule
- Hidden hinge mechanisms, uniquely designed to allow controlled access for service and maintenance.
- Robotically applied liquid foam seals, offering weather-tight IP ratings
- A fully rotational street level mounting solution offering short install and commissioning timescales
- 3D printed metal sintered bollard identification inserts.
- Vandal proof charging sockets with gravity cast aluminium replacing plastic.



From the conceptual sketches through design iterations to complete supply, this project has been considered with design for manufacture at the forefront. Each element of the assembly offers a solution that can be cast, extruded and machined in a practical and cost effective manner that maintains the desired aesthetic and fully captures the design brief. Die cast tooling, machining fixtures, and test equipment were also designed and manufactured as part of the project.

Once all elements have been manufactured and assembled in-house, a full testing procedure is completed by Sarginsons ensuring safety compliance, operational effectiveness, and allocation of each bollard into the Char.Gy control system.



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