

Case Study

Technical Plastic Moulders
Your trusted plastics partner

Client:	Johnston Sweepers
Industry Sector:	Automotive and Industrial
Project name:	Development and conversion of metal parts to plastic parts
Scope:	From prototype to full scale production

With a company moto: 'Sweeping the World', Johnston Sweepers is a world leader within street cleansing vehicle manufacturing.

To reap the benefits from the reduction of the vehicles' weight, Johnston reached out to Wilf Davis, Broanmain's Managing Director, to test the feasibility of replacing existing metal components of vehicles with plastic substitutes. This also had an additional benefit for Johnston, as it would also significantly speed up the manufacturing process.

The challenges for this project were to ensure the strength and durability of the new plastic components. Wilf worked alongside the purchasing and design team at Johnston Sweepers to develop an initial component change for the filler cap. After further discussions and data from the Quality Control team and material suppliers, Johnston Sweepers invested in the development of the tool for the filler cap, and production trials proved the strength and durability of the part. Following on from the success of the conversion to a plastic filler cap, Broanmain has provided a further 25-30 components to date.

Broanmain now provides a weekly line-side delivery to Johnston's Dorking site, negating the need for them to monitor stock levels, whilst ensuring they have the components they need at any given time.

Services included:

- Thermoplastic production consultancy
- Product design and prototyping
- Tool design
- Tool manufacture
- Thermoplastic injection moulding
- Line-side delivery

Testimonial:

"Traditionally, exterior components on our machines were cast from Aluminium, injection moulding was never an option due to low volumes and high tooling costs. Wilf and the team at Broanmain encouraged us to review this way of thinking, as they were able to offer a range of durable materials and sensible tooling prices. We started several years ago with one component and now have over twenty two components in series production. In addition to the component cost benefits we receive all parts on a JIT basis, which keeps stocks low and provides flexibility."

Steve Hurst, Johnston Sweepers

