High Shear Slurry Mixers
Premix GRC/GFRC Mixers
GRC/GFRC Spray Stations
GRC/GFRC Spray Heads and Accessories
Fibre Choppers and Dispensing Systems
Materials Batching Systems
Quality Control
Established in 1962, Power-Sprays Ltd. has been involved with the design, development and manufacture of specialist equipment for mixing, pumping and spraying cementitious composites for over 50 years.

Early products included equipment for the spray application of decorative textured coatings, veneer plasters and fire protection coatings. In the 1970’s the Company began to develop machinery for the production of Glass fibre Reinforced Concrete (GRC/GFRC); an industry which, at that time, was in its infancy. Today, Power-Sprays GRC/GFRC production technologies are used by GRC/GFRC manufacturers in over 100 countries.

Based in Bristol in the West of England, a city renowned for its connections with engineering, Power-Sprays employs a team of highly skilled professionals who take pride in ensuring that all equipment is built to the highest standards.
Glass Fibre Reinforced Concrete (GRC/GFRC) Production Equipment

POWER-SPRAYS OFFER A COMPREHENSIVE RANGE OF EQUIPMENT SPECIFICALLY DESIGNED FOR THE PRODUCTION OF HIGH QUALITY GRC/GFRC, FROM HIGH SHEAR AND PREMIX GRC/GFRC MIXERS TO SPRAY STATIONS FOR TRADITIONAL HAND SPRAY GRC/GFRC AND SPRAY PREMIX GRC/GFRC.

GRC/GFRC Mixers

Power-Sprays’ GRC/GFRC mixers are designed to produce high quality mixes in the minimum time. Power-Sprays offers fixed speed “High Shear” slurry mixers for preparing low water content slurries for Traditional Sprayed GRC/GFRC and variable speed “Combination” mixers for the production of both Traditional Spray and Premix GRC/GFRC, including Spray Premix GRC/GFRC. Formats range from 125 kg maximum capacity manually loaded machines through to 300 kg capacity fully automated bulk fed batching systems. A comprehensive range of accessories is also available which can provide semi or fully automated control of the addition of chemical admixtures, Acrylic Polymers and the Alkali Resistant glass fibres.
GRC/GFRC Spray Stations

Power-Sprays GRC/GFRC Spray Stations have been engineered from over 40 years experience gained from exposure to the challenging environments of GRC/GFRC factories in over 100 countries, from the Americas to the Middle East, from Europe to Australasia and Africa. Power-Sprays believes in the application of appropriate technologies according to the location.

The PS9000 and PS10000 series utilise the proven technology of durable rotor/stator progressive cavity pumps driven by tough 3-phase electric motors and reliable hydrostatic gearboxes. These have been developed for the Traditional Hand Spray and Auto-Spray processes where manufacturers need to produce at high outputs whilst maintaining consistency of quality.

The PS38 “Combination” series are constructed around the Power-Sprays’ robust “multi-roller” 38mm peristaltic pumps driven by powerful 3-phase electric motors and frequency inverter speed controllers. The advantage of the “peristaltic pump” is that there are no moving parts in contact with the materials. This enables these pumps to convey a wide range of mixes and hence the PS38 Combination Spray Stations can be used to manufacture Traditional Hand Spray and Spray Premix GRC/GFRC.

All Power-Sprays’ GRC/GFRC Spray Stations can be supplied with a choice of Spray Support Booms for machine, wall bracket and floor post mountings.
GRC/GFRC Spray Heads

Power-Sprays offers a comprehensive range of spray heads and accessories for GRC/GFRC production. The lightweight Concentric is acknowledged by producers worldwide as the preferred GRC/GFRC Spray head for the production of Traditional Hand Spray GRC/GFRC. Not only does the Concentric generate a tight spray pattern, ensuring that slurry and fibre are thoroughly mixed as they reach the mould surface, thus avoiding fibrous corners and edges, it also benefits from quick release fittings for fast, easy cleaning and maintenance.

For spraying Premix GRC/GFRC Power-Sprays recommends the MK5A Premix Spray head. This simple lightweight, hand held unit is designed to operate with the PS38 Combination Spray Stations and can handle Spray Premix GRC/GFRC with fibre contents in excess of 3%.

For the smooth application of the initial, “non-reinforced” surface layer, the LW Face Coat Spray head is used. And when special surface finishes are required, the hopper fed MK3 Powertex spray gun is recommended.
Fibre Choppers, Fibre Dispensers and Material Handling Systems

Premix GRC/GFRC is rapidly becoming the preferred process for the mass production of industrial GRC/GFRC products in addition to a wide range of building and architectural components. To meet the demand for more efficient and “safe” systems to add Alkali Resistant fibres to the mixes, Power-Sprays has developed a range of fibre choppers and fibre dispensers.

Power-Sprays also offers a wide range of materials handling systems from wall mounted volumetric dispensers to deliver water, chemical admixtures, Acrylic Polymers and other liquids to semi and fully automated dry materials batching systems which can operate from silos, 1 tonne bags and other bulk storage vessels.

Accessories and After Sales Service

Power-Sprays can supply all GRC/GFRC production accessories including Spring Compaction rollers, Skin thickness gauges, hand trowels etc. plus a full range of laboratory and GRC/GFRC testing equipment.

Power-Sprays constantly strives to develop new equipment and also improve the design of existing products for the benefit of all customers. Sand, Cement and Alkali Resistant Glass fibres are abrasive and regular maintenance is important. Hence, Power-Sprays understands that a fast and efficient after sales service is essential and aims to hold all main consumable parts and accessories in stock for immediate despatch.
Other Specialist Equipment

The process technologies developed for the production of GRC/GFRC are also relevant to many other applications. During 50 years Power-Sprays has developed a range of factory and site based equipment for related applications including:

- Glass fibre dispensers for Mobile Concrete Mixing plants and Volumetric Mixers
- Dispensers for polypropylene, acrylic and other synthetic fibres
- Mixers, pumps and spray machines for cementitious grouts, concrete repair and concrete protection materials, foamed concretes, spray applied fire protective coatings etc.

Please ask for more information.
Power-Sprays offers all new and existing customers a complete range of technical support services including assistance with factory planning, production training, establishing Quality Assurance and Quality Control systems, GRC/GFRC materials selection, development of mix designs etc. These services are offered in conjunction with our subsidiary, Fibre Technologies International Ltd, who are leading independent suppliers of specialist GRC/GFRC materials including High Zirconia Alkali Resistant Glassfibres, Acrylic Polymer Curing Agents, Super Plasticisers, Self Compacting Admixtures, Polyurethane rubber moulding materials and many more. To find out more please visit www.fibretech.org

1 GRC/GFRC Quality Control – Flexural Strength Testing
2 Automated Batching Plant Control Systems
3 Fleximould Polyurethane Liquid Rubbers for mould manufacture
4 GRC/GFRC Quality Control – Slump Tester and Skin Thickness Gauge
5 Bespoke Manual, Semi-Automatic and Fully Automatic control systems to suit customer requirements
6 Training in GRC/GFRC manufacture and Quality Control to the latest International Standards
7 High Output GRC/GFRC Batch Mixing plants