

2016 / 2017

MANUFACTURING & SERVICES

The Parliamentary Review

A YEAR IN PERSPECTIVE

■ FOREWORDS

The Rt Hon Theresa May MP
Stephen Elliot
Philip Law

■ CHEMICALS, PLASTICS & COSMETICS REPRESENTATIVES

DS Smith Plastics	Applied Coating Technologies
Farrel	RJG Technologies
Amaray	Scientific Management International
Abril Industrial Waxes	Chamcotec
Union Colours	Essential Earth
Stort Chemicals	Scent Perfique
SI Protech	Trent Oil Lubricants
Radici Group Performance Plastics	

■ FEATURES

Review of the Year
Review of Parliament



The Rt Hon Theresa May MP

Prime Minister

This year's *Parliamentary Review* follows a significant year in British politics. It was a year in which our economy continued to grow, as the Government followed its balanced plan to keep the public finances under control while investing to build a stronger economy. It was a year in which we began to deliver on the result of the EU referendum by triggering Article 50 and publishing the Repeal Bill, which will allow for a smooth and orderly transition as the UK leaves the EU, maximising certainty for individuals and businesses.

And, of course, it was a year in which the General Election showed that parts of our country remain divided and laid a fresh challenge to all of us involved in politics to resolve our differences, deal with injustices and take, not shirk, the big decisions.

That is why our programme for government for the coming year is about recognising and grasping the opportunities that lie ahead for the United Kingdom as we leave the EU. The referendum vote last year was not just a vote to leave the EU – it was a profound and justified expression that our country often does not work the way it should for millions of ordinary working families. So we need to deliver a Brexit deal that works for all parts of the UK, while continuing to build a stronger, fairer country by strengthening our economy, tackling injustice and promoting opportunity and aspiration.

In the year ahead we will continue to bring down the deficit so that young people do not spend most of their working lives paying for our failure to live within our means. We will take action to build a stronger economy so that we can improve people's living standards and fund the public services on which we all depend. We will continue with our modern Industrial Strategy,

deliver the next phase of high-speed rail, improve our energy infrastructure and support the development of automated vehicles and satellite technology, building a modern economy which creates the high-skill jobs of the future.

At the same time, work needs to be done to build a fairer society – where people can go as far as their talents will take them and no one is held back because of their background. So we will continue to work to ensure every child has the opportunity to attend a good school. We will continue to invest in the NHS and reform mental health legislation, making this a priority. And we will work to address the challenges of social care for our ageing population, bringing forward proposals for consultation to build widespread support.

So this is a Government determined to deliver the best Brexit deal, intent on building a stronger economy and a fairer society, committed to keeping our country safe, enhancing our standing in the wider world, and bringing our United Kingdom closer together. We will continue to put ourselves at the service of millions of ordinary working people for whom we will work every day in the national interest.

“This year's *Parliamentary Review* follows a significant year in British politics”

Farrel



Banbury® Technolab® Internal Mixer



Assembly Shop

“Farrel is a global player that sells to all of the top 100 tyre manufacturers”

Farrel Limited is the leading designer, developer and producer of mixing and compounding machinery for the polymer processing industry. Our company focuses on the production of the Banbury® Mixer, which celebrated its centennial anniversary in 2016. Highly innovative and beneficial to the tyre industry, the Banbury® mixer produces the compound from which tyres and other products are made. It remains the first choice for a diverse range of applications.

FACTS ABOUT FARREL

- » Located in Castleton, Rochdale, Lancashire
- » Founded in 1900
- » Employs 165 people
- » Groundbreaking Banbury® mixer invented in 1916, with production and sales starting in 1918
- » Leading designer, developer and producer of mixing and compounding machinery for the polymer processing industry
- » Numerous design patents
- » Winner of Rochdale business Award 2015
- » Sales turnover of £42.0 million in 2016

Our History

Farrel's origins can be traced back to 1900. It began as David Bridge & Sons, a company that made machines for the rubber industry in Castleton, Rochdale. We continue to produce our current range of mixers in the same building.

In 2008, Farrel became a part of the HF Group of companies. In turn, this led to the formation of the HF Mixing Group, created in 2010 together with two of our former competitors.

Growth & Success

In recent years Farrel has seen substantial growth placing us as the leading manufacturer of tangential mixing systems for processing tyre compounds. We have seen progress in the notoriously difficult Asian market and a general increase in sales worldwide; as a result Farrel is a global player that sells to all of the top 100 tyre manufacturers.

There are a number of factors that have contributed to our success, including a fall in production times, increased order intake, enhanced machine reliability and the addition of the Banbury BM700N mixer to our portfolio; currently the largest tangential mixer on the market.

We have managed to achieve this growth in a number of ways including:

1. Investment in infrastructure

Investment, development and the careful optimisation of the factory have been integral. In 2014 we were granted funding from the Regional Growth Fund. With this backing we've been able to invest in state-of-the-art machinery and robotics technology. Concentrating on our core competences of hard surface application and machining, the investment has given a leaner manufacturing process which has drastically reduced production and lead times. We have continually invested 25% of the company's overall profit into capital expenditure each year.

2. Research & Development (R&D)

R&D is an essential part of our business. We have developed a new series of Tangential mixer, patented cutting edge Rotor Technology, cemented our hard welding competence and overall process know-how in general.

3. Investing in people

Our growth and success is in direct correlation with the investment into our workforce. The Regional Grant has enabled us to create and safeguard engineering jobs in Rochdale. In turn, this has enabled us to really hone our craft by investing in extensive training for our staff including iMechE membership and CEng accreditation for our engineers.

In 2015 we were presented with a Rochdale Business Award for skills and workforce development in recognition of our Apprentice scheme. This is at the core of our success and makes sure our expertise and know how stay within the business.

4. Continuous Improvement Programme

Alongside capital investment and training, a continuous improvement programme has helped us to simplify a number of processes, effectively reducing assembly times and manufacturing costs.

Exploring Future Growth Channels

The outlook for the rubber mixing industry is very strong and it's evolving; this applies to the industrial sector as a whole. Farrel has already taken a number of steps to ensure it stays ahead of the curve:

1. A Fourth Industrial Revolution

We are in a Fourth Industrial Revolution; an age of smart manufacturing and digital factories with the intention of improving productivity, shortening product development cycles as efficiently and cost effectively as possible (Industry 4.0 Summit, 2017). Farrel has taken an active approach and championed a move towards this way of working with a number of initiatives such as:

- » Remote service concepts
- » Online condition monitoring
- » Digitised measuring devices

Whilst 83% of UK manufacturers are planning to invest in automation and control systems in the future, only 48% of manufacturers across Europe

» KNOWLEDGE TRANSFER PARTNERSHIP (KTP) DUST STOP PROJECT

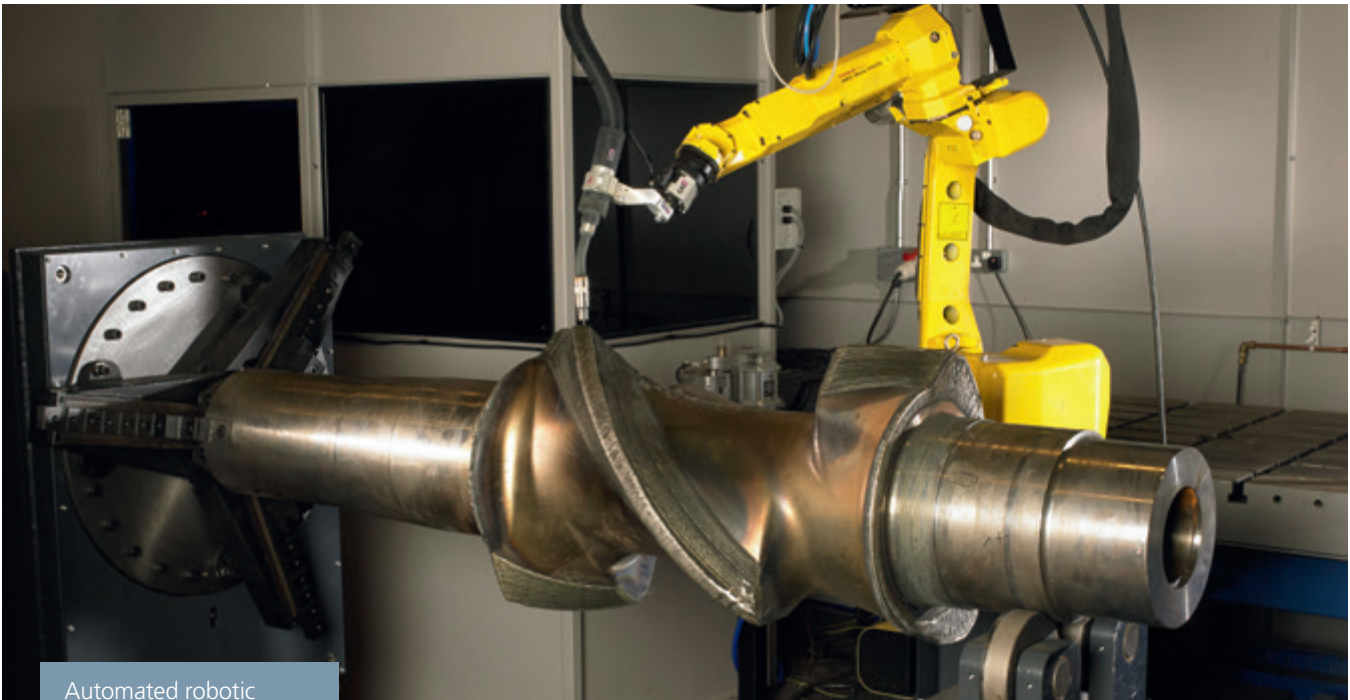
A notable R&D undertaking, was the two-year KTP Dust Stop Project, and was supported and part-funded by the Engineering & Physical Sciences Research Council and Innovate UK. During this time Farrel worked with Loughborough University's School of Mechanical, Electrical and Manufacturing Engineering to design a contact mechanics model which predicts tribological conditions (friction, wear and lubrication) of rotating sealing surfaces within the mixing chamber.

By determining more precisely the lubrication requirements, mixer performance has been improved while reducing the carbon footprint. Aside from increased sales, the project allowed access to technology of strategic importance and once again proved our commitment to pushing boundaries and developing new technologies.



Banbury® N-series production size mixer

“In 2015 we were presented with a Rochdale Business Award for skills and workforce development in recognition of our Apprentice scheme”



Automated robotic welding of rotors

“Mixer performance has been improved while reducing the carbon footprint”

consider themselves ready for the future – we like to think we are ahead of the curve and this will contribute to our continued future growth (Industry 4.0 Summit, 2017).

2. Automation Solutions

In keeping with Industry 4.0 we have seen a significant increase in the sales of Automation Solutions. To capitalise on this ever growing market, the HF Mixing Group set up a dedicated Systems Business Unit at our headquarters in Freudenberg, Germany. Automated Solutions offer big rewards to our customers; such as a high level of standardisation with low investment

costs, to the consistent documentation of processes and material flows.

3. Commitment to Innovation

Innovation is at the heart of what we do; and this shows no sign of slowing down in the future. Farrel is committed to pushing new technologies and the UK government tax incentive Patent Box, has enabled us to take full advantage. This initiative has helped UK manufacturers like Farrel remain competitive and stay in the UK.

Conclusion

In addition to continuing to develop new innovations, Farrel will also look to consolidate its product line and build high volume standard products that will reduce cost and boost competitiveness. Our growth over the last five years has been substantial, and our head count has also increased. Over the next five years our goal is to increase the number of mixers produced annually. Additionally there is also huge potential in maintenance work on existing machines. To support this continued growth Farrel will continue to invest in our manufacturing processes and people.

Finished pair of NST™ patented tangential rotors



Acknowledgements

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