

were all manufacturers in their own right, but now we don't have that level of UK manufacturing presence. The importers of these products take on the legal responsibilities of a manufacturer supplying their distribution channels in the UK. With the recent changes, it has become more important for purchasers to understand the legal responsibilities of manufacturer's distributors and suppliers or products especially where the CE mark or UKCA mark is concerned, as this has a direct impact on the liability for product safety."

The customer comes first

As the name of the company suggests, Custom Fittings Ltd produces many customised special parts - including bespoke adaptors, connectors, hose fittings and pipe fittings. "We work closely with our customers to design and produce whatever's required," says Crowther. "However, these bespoke parts are not always ordered in large quantities. Our stock parts are regularly produced in 100s, sometimes 1000s, but customised parts are only made in the numbers that are required, and this may only amount to 20 or 30 individual items. But at the end of the day, we are here to serve our customers regardless of what their requirements are."

Crowther explains that over the past couple of decades, things have changed in terms of the products Custom Fittings Ltd provides. "Back in the 1980s, our main product line was high-pressure NPT (BS3799) and low-pressure BSP (BS1740) pipe fittings," he says. "However, after the Far East started to produce similar fittings and export them to Europe, we found it difficult to compete on price even though the quality and precision of our products was substantially greater. The hydraulics market was a natural progression, and we now manufacture and stock one of the largest ranges of Stainless Steel 316 hydraulic hose couplings and adaptors currently available today. This business continues to grow as does the competition, but the market has also grown exponentially and seems to keep everyone busy."

Consistent values

Cole reflects that while certain things have changed at Tom Parker Ltd over the past couple of decades, the company's traditional core values very much remain the same. "We still aim to be the first-choice supplier for our customers requiring high quality quick connect couplings and related components," he says. "The emphasis here really is on the quality, as Tom Parker Ltd positions itself and its products at the top end of those available and never drops below the mid-



*Phil Keep, managing director,
MP Filtri UK.*

range point."

Tom Parker Ltd has expanded greatly in terms of employees over the 25 years, quadrupling in size since 1996. "Our key focus is always on providing our customers with unrivalled levels of service, through product knowledge, delivery and after sales service," says Cole. "Nowadays, we consider this to be our major strength, particularly product knowledge."

Global supply and distribution network

Cole has seen a great deal of change across all areas of the fluid power industry including the supply market. "The growth of Asia and China has been huge since 1996," he says. "Back in 1996, we imported from manufacturers (who we are still proud to work closely with) in the USA, EU & Sweden but now we have developed a complete global network of trusted and reliable high quality product suppliers, with many different specialisms across pneumatics, hydraulics, industrial and process and exclusive products available. Over the last 25 years, we have added many products to our now comprehensive range. Our new two-year catalogue due out in January contains no less than 36,000 lines. Some brand additions include EMC Pneumatics, CDC push in fittings, Fastest leak test connectors, Sicomat aluminium ring main systems and Aignep to the brands the company was found on in the 70s & 80s - CEJN quick connect couplers, CPC quick connect couplers, Master Pneumatic air preparation units, Werther Compressors and Rotoflux rotary unions.

Cole comments that in 1996 the only catalogue company in the fluid power sector that was notably successful was RS Components, who mainly targeted the end user/OEM market. "Then, several companies, including Tom Parker Ltd, started catalogues aimed at both distribution and OEM/EU," he says. "Back then, the distribution catalogues were Tom Parker Ltd catalogues, badged

for local distributors only. Now we have a wide network of distributors right across the entire UK who have the same internal catalogue pages, priced or unpriced and can have a completely bespoke cover and internal section promoting their own strengths, unique selling points and individual products and services. Over 25 years, the 'catalogue' distribution market grew from 0 to 6 companies and now there are only 2 independent distributors left in the UK fluid power network. We are enormously proud to be one of these pair and in fact the most established as 2022 is Tom Parker Ltd.'s 50th anniversary."

More control and ancillary options

Elaine Slater, managing director, Hydraulic Projects Ltd, comments: "I'm not sure how much has changed in the basic design of control valves in the last 25 years. We are essentially supplying the same basic valves but with more control and ancillary options. Electronic remote control is probably one of the biggest changes in many industries where operators want to stand well clear of machinery."

Slater adds that she has seen huge advances in machine technology, which have enabled Hydraulic Projects Ltd to keep its products competitive. "Most of our machines now run un-manned at night as well as during the day, and many are essentially robot/pallet loading," she explains. "Massive arrays of tooling in each machine have reduced long and expensive set-up times to zero in many cases."

Variable speed drive revolution

In terms of technological advancements of note over the past quarter of a century, Ranger comments it is interesting to reflect that it was only a couple of years prior to the launch of this magazine that variable speed drives (VSDs) were just being brought to market as a way to reduce the energy wastage of compressors. "I would say the introduction and quick uptake of VSDs was the single biggest and most important change our industry has seen over this period," he says. "VSDs have changed the landscape in terms of the way products are sold to customers. The potential energy savings were quickly made demonstrable and the popularity of compressors with integrated VSD technology increased.

Also, around the time VSDs were originally launched to market, Ranger explains that the industry also saw the launch of building management systems that were independent from compressor control. "More users started to use a SCADA system with a building management system," he explains.

“Today, just about every compressor manufacturer offers its own on-board remote monitoring system package – whether via a phone line or Sim card. This type of convenient, on-board monitoring is now perceived to be the norm from a preventative maintenance perspective.”

Asset management

Gunter considers that over the past few years there has certainly been a drive towards more asset management to better optimise the testing of hydraulic hoses and fittings. “With the right software, companies can have better visibility of not just the testing but also of the age of hoses, their use patterns, maintenance history, when they are due to be re-tested and when they are due to be replaced,” he explains. “In this way, users and OEMs can more effectively avoid expensive, unnecessary unplanned downtime of plant and equipment.”

Gunter points out that the basic standards and procedures related to the testing of hoses are largely unchanged from several years ago, although there has been a move towards companies wanting their test certificates available online within a short timeline following tests. “Now, the greater traceability of data from test rigs means hose test certificates can be produced easily, stored in the cloud on an asset management system and made easily available when required,” he says.

Countering the contamination issue

MP Filtri UK’s managing director, Phil Keep, observes that during the 25-year lifespan of Hydraulics & Pneumatics magazine, our industry has seen a remarkable period of changes, opportunities and growth. “At the time of the magazine’s launch, MP Filtri UK acted as the distribution arm of its Italian parent company concentrating solely on retail – steadily building market share in the hydraulic filtration sector,” explains Keep. “The arrival of a new generation of increasingly complex hydraulic systems brought with it greater risks for system builders and machine manufacturers, with up to 80% of hydraulic failures being caused by particle contamination.”

Keep and his team sensed a tremendous new opportunity – seeing the need for an accurate and portable particle counter that could bring the key functions of the laboratory out into the field. Work began in 2000 to develop a twin laser particle counter, leading to the creation of the LPA2, what MP Filtri considers to be the most advanced mainstream device of its kind. “The device weighed in at less than 8kg and delivered a comprehensive hydraulic health check – offering

accurate, repeatable contamination results reported in a variety of international standards,” explains Keep. “The time between sampling and analysis took as little as six minutes – overcoming the delays with lab testing which could see results take days.”

As a result, Keep maintains that the LPA2 has revolutionised the way customers dealt with contamination in hydraulic systems and paved the way for the company’s highly successful ICM inline contamination monitors which are mounted within systems for constant real-time monitoring of cleanliness levels. Keep points out that the LPA2 has recently been succeeded by the release of the new LPA3 LED particle analyser, which offers a suite of new features including a 10.1 inch display (256mm), 100ml sample sizes, and full 8-channel measurement. “Originally, the market for such devices was seen as being largely limited to the mobile and construction industries,” says Keep, “but their simplicity, affordability and accuracy saw a growing demand from such diverse sectors as maritime, construction, industrial, aviation and agriculture.”

Ultimately, Keep saw there was a market for portable, accurate products that would pay for themselves many times over by safeguarding performance and protecting machines working in applications where downtime is incredibly costly and where maintenance costs are expensive. “The key to the company’s long-term expansion has been our ability to combine a trusted, traditional core product range of high-performance hydraulic filters with state-of-the-art contamination monitors,” says Keep. “This enhances machine and system lifespans, extends service intervals, and reduces costs and consumption.”

Keep adds that the increasing drive within the industry to use precision components has increased the need for improved filtration and more efficient hydraulic systems. “Mobile and industrial applications are now using 3um and 6um absolute filter rating units and new standards for contamination monitoring such as ISO 11171 have had to be introduced,” he explains. “The growing demand for accurate, real-time information on the cleanliness of systems, accessible anywhere in the world from a computer or mobile device has seen the success of the ICM 4.0 wifi-enabled contamination monitor – designed to meet the needs of Industry 4.0.”

Exploring new markets

In terms of new target markets, a few years ago Jubilee Clips started to focus on the sewage water treatment space. “This was largely new to us but is becoming an



Meltem Middleton-Duff, UK director, Hertz Kompressoren UK.

increasingly important sector for the application of hose clips and clamping products,” says Löffler. “Within this sector, we have been enjoying a growing customer base in northern Europe and the UK where people are renovating sewage systems. Hose clips are also used a great deal for both underground sewage systems and in buildings for renovation. We’ve seen considerable growth in this market over the past 10 years globally. Additionally, we have seen increasing interest in places such as the Middle East within the construction and oil & gas sectors, and within the aftermarket vehicle and plumbing markets in Africa.”

Strategic market move

Custom Fittings Ltd recently made the decision to move into the aerospace industry. “We knew we had the capability to make top-quality products that would serve a demand,” says Crowther. “Now, alongside the vast range of hydraulic hose end fittings and adaptors we now hold a comprehensive stock range of aerospace-specific adaptors. Customers in the aerospace sector from the USA to the middle East know our products and that they are made from material of European origin and are manufactured in the UK – in our factory in West Yorkshire – to the highest quality. This proved to be a sound decision. In fact, we’ve just been awarded AS 9100D, the quality assurance standard for the aerospace industry. Achieving AS 9100D was a major investment for us and was two years in the making, but the move was more than justified to show to the industry that Custom Fittings’ manufacturing practices conform to the highest standards when providing adaptors and connectors for testing to OEM flight parts. Whether it be Beam Seal, flareless and flared connectors, we are able to provide a solution that conforms to all the relevant standards, including AS, ABS, AMS, DGS, DHS, MS and NAS.”

Education, training and employment

With regard to employment and the