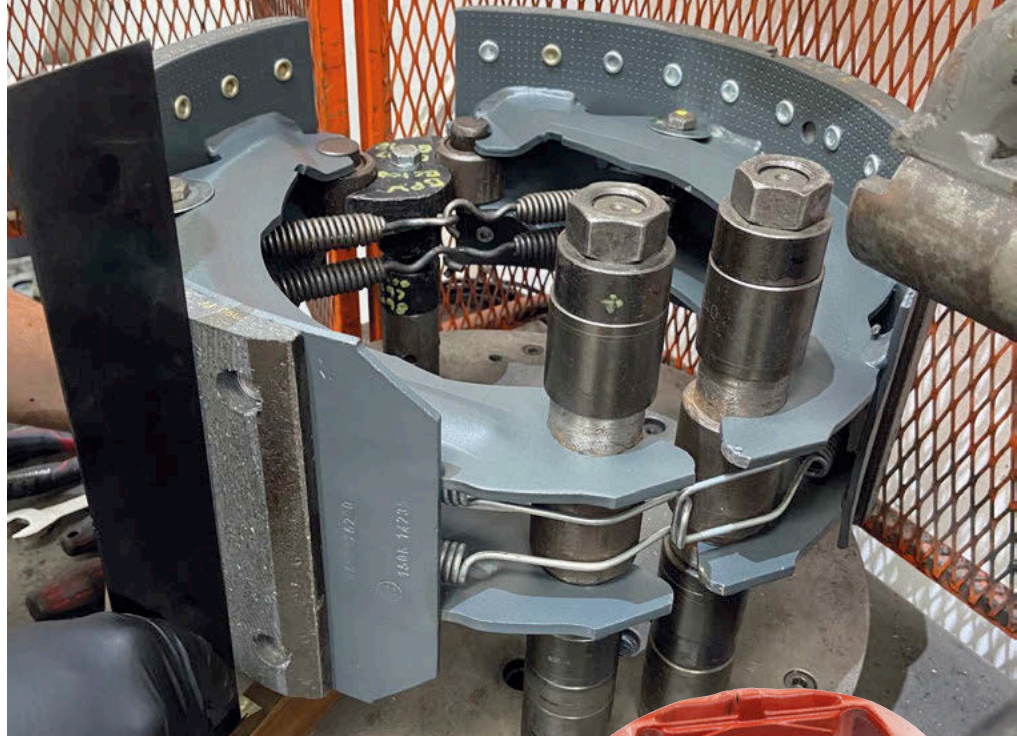


Remanufacturing of commercial vehicle brake components is a growing business, with both OE providers and independent manufacturers offering product ranges to suit all vehicles and trailers. By John Challen



A green brake

When faced with an opportunity to create a new line that remanufactured brake calipers, HB Commercial decided the time was right to take the plunge. Already specialists in brake-shoe profiling, the company believed the new product offering would complement its existing specialities and offered a number of other advantages. The 'green' objectives, more control over quality and faster turnaround times are three reasons given by Oliver Brunt, HB Commercial's operations director, for the creation of the new facility, based at its parts supply centre in Bury St Edmunds (pictured in sequence below).

"As a business, we were involved in remanufacturing brake calipers on a small scale, but we decided to ramp it up because it fits well with what we do," confirms Brunt. "The products for supply that we've purchased previously

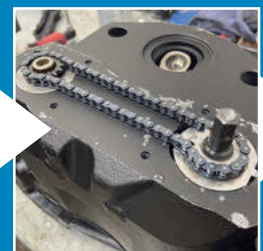
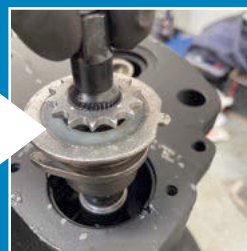
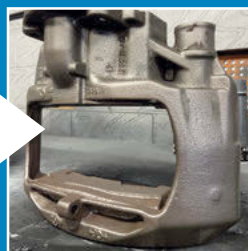
sometimes haven't been up to the standard that we've expected, so one of the ideas was to take control of it ourselves." In doing so, pre-made caliper housings are used where the components, such as bushes, pins and sensors and are subjected to thorough inspection before being assembled as a complete package.

FASTER FITS

The creation of the facility has allowed HB Commercial to open up a product range that improves product availability for customers and allows a same day delivery service to be established. The new direction taken by the company has also enabled more control over what calipers are being sourced and from where. "We were a middleman, but now we are the producer," states Brunt. "We offered remanufactured parts previously,

but it was all brought in before and now we are sourcing parts from various OE manufacturers in the UK and abroad. The parts depend on the components that we need and the standards that we expect. Some suppliers have better products in some ranges, but not all, which allows us to cherry pick what we can. This situation also maintains our levels of reliability, because we are not reliant on a specific source."

As well as brake caliper remanufacturing, HB Commercial has also invested in brake shoe profiling (pictured in main image above), described by Brunt as 'a bit of a lost science'. "Years ago, it was more prominent than it is now and there are now only a few people who do it," he explains. "It's purely a process of taking old brake shoes and then having them



“We were a middleman, but now we are the producer”

Oliver Brunt

stripped, shot blasted and relined for customers.” The casings of the brake shoes can have elements of distortion or warping, Brunt says, so profiling sets up the shoes on a rig and creates a perfectly circular radius meaning that, on fitment, the contact between the braking lining and the brake drum, is as close to 100% as possible.

THE GREEN DEBATE

“One of the big driving forces behind what we’ve done is the green element. It’s obviously not economical to produce a brake caliper and then just chuck it in the bin,” reasons Brunt. “Also, some of the manufacturers will send their products to other countries to be remanufactured and then get them shipped back. But we’re keeping things local to reduce the carbon footprint.

“It’s a very competitive market in the commercial vehicle sector, but it’s also a very safety-conscious one. If we can create a top-quality safety-critical component at an affordable price, with a green element, it’s a win-win situation.”

With the facility opening in January, Brunt is reluctant to talk about sales volumes or production numbers, but is very confident in what the company is doing. “Demand is coming from all over the market – if you supply a good product at a good price then people are going to keep coming back,” he says. “Also, keeping it local and being able to supply the same day is also a big advantage for us.”

The major suppliers in the market have also actively been looking to shift

to more remanufactured. In the case of braking systems supplier Knorr-Bremse, there are more than 500 products in the range that are remanufactured, all falling under the EconX brand. Data from 2018 suggests that CO₂ emissions from remanufactured parts, compared with new, are lower by as much as three-quarters, even allowing for the logistics involved in shipping the components between different sites.

“As a manufacturer and supplier of original equipment, we are familiar with the precise technical requirements for each individual component of a product,” explains Wolfgang Krinner, member of the management board of Knorr-Bremse Commercial Vehicle Systems. “Since 2015 we have bundled and continuously expanded our remanufacturing know-how at our plant in Liberec, Czech Republic. This way we can be sure to safeguard our high Knorr-Bremse quality standards along the complete value chain.”

COST-BENEFIT ANALYSIS

Coming at the subject from a total cost of ownership (TCO) point of view, vehicle brake specialist Roadlink International has long been a believer in the remanufacturing process. With ongoing investment in remanufacturing – and a commitment to reducing its carbon footprint – Roadlink says remanufacturing promotes quality while also offering a competitively priced, environmentally friendly alternative.

Roadlink remanufactures its brake calipers and shoes (pictured in red at

left) with the entire vehicle lifecycle in mind. Remanufactured calipers are tested and produced to at a production facility and distribution operation that are certified to ISO9001:2015 and ISO14001:2015 standards.

Like HB Commercial, Roadlink is also involved in shoe reline operations, where a 15-stage production process is strictly adhered to. The process involves rollers being checked where applicable and shoe platforms treated with an anti-corrosion long lasting water-based paint, unique to Roadlink.

Remanufacturing in the UK currently contributes approximately £4.3billion to the UK economy and this figure expected to grow dramatically thanks to further investment. Roadlink is at the forefront of a campaign reminding the industry how it can help reduce the countless tonnes of landfill waste accumulated a year, pointing out that there are not just environmental benefits through the reduction of CO₂ emissions, but the process also cuts down on raw material and energy consumption.

“Remanufacturing is a vitally important, growing aspect of our industry, not only does it help drive energy conservation and the reduction of raw materials usage, but also the elimination of landfill space,” says Keith Sedgley, Roadlink joint managing director. “Our brake shoe relining facility is currently enjoying a buoyant period and so we’re changing people’s attitudes through our commitment to quality and performance.” 

