John Crane Deep Dive – Optimising customer delivery – Transcript

Rob Sharman, VP Customer Operations, John Crane

30 November 2023

Slide 1: Cover slide - Optimising customer delivery

Slide 2: Rob Sharman, VP Customer Operations, John Crane

Hello everyone, I'm Rob Sharman vice president of customer operations. My focus and responsibility at John Crane is the successful execution through the entire life of a seal, right from first order through to OE delivery and aftermarket service. Execution at John Crane is very much about engineering and manufacturing our solutions in an efficient and agile way, so we can serve our customers' critical and often bespoke requirements. So, we drive efficiencies through innovation and improvement and enhancing our strong global capabilities so that we continue to be a go to, trusted partner for our customers today and tomorrow.

My background, both at John Crane and prior to this is very much in engineering and operational roles, having worked previously for GKN Aerospace and in the British Government on advanced manufacturing and industry 4.0. This allowed me to see what good looks like and how manufacturing is advancing, and to be able to take best practice and apply it to John Crane.

I've been at Smiths in John Crane in global operational roles for five years now. It is an exciting time to be at John Crane given the strong demand we're seeing and the opportunities we have to drive further efficiencies across our supply chain, whilst meeting this growing demand.

Slide 3: Executive summary

You've already heard from my colleagues about the strengths of the John Crane model, and you've heard how we deliver for our customers and the significant growth opportunities ahead of us. Successful execution has been key to maintaining our close customer relationships and retaining our market position, and delivering consistently high returns.

I'm going to explain to you how we continue to improve our execution to meet the strong growth in demand we've enjoyed over the last few years, and expect to see in the future. How our technical expertise translates into a unique, difficult to replicate, engineered to order - product. How the breadth of our service capability enables us to respond quickly and efficiently – deepening our bond with our customers. How we're using automation and the principles of SES, the Smiths Excellence System, to further improve our operations and customer delivery. And, how all this helps us deliver continued growth, and positions us well to respond to ever-evolving requirements. So, let's look in more detail on how we execute in a growing market.

Slide 4: Rapid scaling to meet strong and sustained demand

We are successfully managing our strong growth. Demand for our products is very high, and we've enjoyed double-digit order intake growth over the last two years. To maximise this opportunity and accelerate revenue growth we needed to execute well to deliver against this strong demand.

We achieved this through targeted actions focused on efficiently scaling our production and supply chain. Firstly, we looked at our external supply chain, and our internal processes to address the immediate term bottlenecks. These actions also put us in a good position to meet the continued strong demand, and mitigate future challenges as the market evolves.

Another lever to help in the shorter term, and support longer term execution efficiency, is technology. And I'll explain how we're investing in technology to deliver operational efficiencies which help reduce time, and ultimately cost, to both us and our customers.

We embedded SES as the way we work to foster a continuous improvement culture, helping to drive even more efficiencies, and deployed through our global manufacturing and service network. This targeted approach has delivered fantastic results, contributing to our record 15 percent organic revenue growth and 440 basis points ROCE expansion in FY23. John Crane deploys standardised manufacturing processes and practices, whilst continuing to deliver the tailored elements our customers require and expect.

With our technical expertise and global capabilities, John Crane has a proven track record of executing well in this made to order business, delivering a strong operating leverage of 1.7x. I'll talk in more detail about some of the actions we've taken, and how they are improving execution this year, in the coming slides.

Slide 5: Maximising our technical capabilities in an engineered to order process

We have a special capability at John Crane. We not only make highly engineered seals, but we can customise the majority of the parts quickly and efficiently. And this makes us the obvious first choice for our customers, who all have very different bespoke requirements, as Sook Won detailed earlier.

We've developed this capability over many decades of continuous improvement, and have further optimised our operations within this engineered to order process. While it's a difficult market to penetrate, it's a very attractive market and one we excel in, and we've proven our ability to succeed through consistently high operating margins, ahead of 20% for the past several years.

Our proven track record, and ability to quickly respond to our customers changing needs, gives us a sustainable competitive advantage, and underpins our very long-term relationships with our customer base.

Slide 6: Global footprint enables unparalleled customer intimacy

Our ability to execute is further strengthened by our global footprint and local capabilities. Today, we have a leading global network of just under 200 locations as already highlighted by Bernard. The benefits of this global presence are extensive. For manufacturing we operate out of our regional hubs which maximises efficiency, and I'll talk about how automation is accelerating this.With our 163 sales and service centres, this enables us to be close to our customers, making us agile and quick to respond to their requirements and getting to know them well.

And our R&D centres of excellence help drive innovation efficiently, while our global engineering bases are focussed on our expertise in design and drafting. In this way we can deliver deep portfolio knowledge, and the best engineering minds in one location, but retain the responsiveness which our customers expect from John Crane.

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Slide 7: Manufacturing automation is improving operations

We have driven productivity and agility through automation. This is a significant achievement in a business like ours given our engineered to order business model. It's relatively straight forward to automate the production of simple products, but for highly engineered made to order John Crane seals, automation requires far greater expertise.

Fortunately, this is an area we excel in. We have automated to deliver significant efficiencies and improve productivity, and that has given us the agility to scale. We continue to innovate to apply automation right through the value stream, from engineering, through manufacturing and assembly.

At the enquiry stage, we focus on reducing lead times and better utilising our global network. Handling enquiries and creating drawings used to be a local manual process. Now through use of digital enquiry submission and investment in computer aided design – CAD programming tools, we've automated this process with the drawings populated from the specification requirements. We share these drawings globally to help improve standardisation if similar specification requests are received. This drawing and data creation automation has reduced the process time by 10-16 hours. These digital drawings are then used to generate programs for the manufacture of the product. This also has the added benefit of standardising how our CNC machines cut, and using standardised machine tooling setups means we make the same part the same way at any of our global manufacturing locations, recovering on average an extra 92hrs per machinist per year.

We use 3D printing and robots to enhance the manufacturing process and provide rapid flexibility in capacity.

And at the point of assembly, we use cobots, collaborative robots working alongside humans, to speed up assembly while improving safety and quality. And finally, warehouse automation reduced our footprint requirements by up to 79% as we now use the full height of the facility in a safe manner, thereby driving further efficiencies. In addition, through process standardization, we can rapidly transfer work across our sites globally, increasing resilience and agility, and maximising the benefit.

So, as you can see automation has a key role to play across all elements of the value stream, which helps not only with improving customer delivery, but driving time and cost improvements, within our own operations and allowing us to scale rapidly in line with the market.

Let's look at some of this execution in action around the world, in our engineering, service and manufacturing centres.

[Video]

Slide 8: SES is embedded in the way we work at John Crane

Another lever we're using to drive efficiencies is SES. As Paul mentioned, this is now fully embedded throughout Smiths and has become the way we work in John Crane. As with the other Smiths' businesses, we have one master black belt who drives SES in John Crane, and 7 black belts focussed on executing against our targeted efficiency and improvement projects.

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The SES focus for John Crane has been addressing increasing inventory levels, which in part was required to support the growth, building resilience into our supply chain, which was disrupted post COVID, and standardising back-office functions. SES has had real benefits in both profit and cash in FY23, contributing proportionally to the Groups overall benefit, with more to come in FY24 and beyond.

Slide 9: SES is delivering results

One of our suppliers that supports our engineered to order products faced a number of challenges during and post covid, and as a result wasn't delivering to our requirements. Given the bespoke nature of the tooling required to make the parts we set to work supporting our supplier in the best way we could. We helped them get back on track and improve their output by drawing on our SES expertise.

We embedded one of our highly qualified black belts and by sharing our best practices we helped them improve scheduling, maximise output, and minimise failure rates.

We also eased pressure by rapidly onboarding and sourcing alternative suppliers for higher volume, less specialised parts. Furthermore, we're exploring a 3D printing solution, providing another potential alternative source of supply for the low volume, more customised applications, as 3D printing is a toolless manufacturing technique.

Taking these three actions together, we halved the backlog in supply and significantly improved the supplier's delivery performance, enabling us to improve ours in turn and ensured our supply chain is more resilient going forwards.

Slide 10: Closing remarks

So to summarise, successful execution is key to maintaining our close customer relationships, and retaining our market position. Our technical capabilities mean we excel within our engineering to order model, making us a first-choice supplier for our customers broad bespoke requirements. We've proven our ability to deliver through consistently high returns, and we've reinforced this in FY23 as we rapidly scaled capacity to meet strong demand and deliver for our customers. And through continued innovation and improvement we're driving further efficiencies, and enhancing our strong global capabilities, to be a trusted partner for our customers today, and for the future. Thank you.