

# Sustainability Executive Summary



WE ALL HAVE AN  
**ETHICAL DUTY**  
**TO REFURBISH**  
OUR MEDICAL INSTRUMENTS



Proud to be  
a family-run  
British company

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# Committed to supporting Green Theatres

Surgical Holdings are committed to supporting the NHS achieve the goal of reaching net zero by 2045. We have published our **Carbon Reduction Plan** with our own commitment and this is updated annually for the previous year. We will commit to ensuring our facilities, products and services which support the Circular Economy and more resilient health care sector for all stakeholders.

# Products and services

We can support the NHS through the products we manufacture and supply, including our reusable instrument and rigid endoscopes. These reusable products, can be repaired and refurbished, to ensure they can be continually used for the benefit of the environment and the patient.

# Sustainability through superior quality



## Sustainability

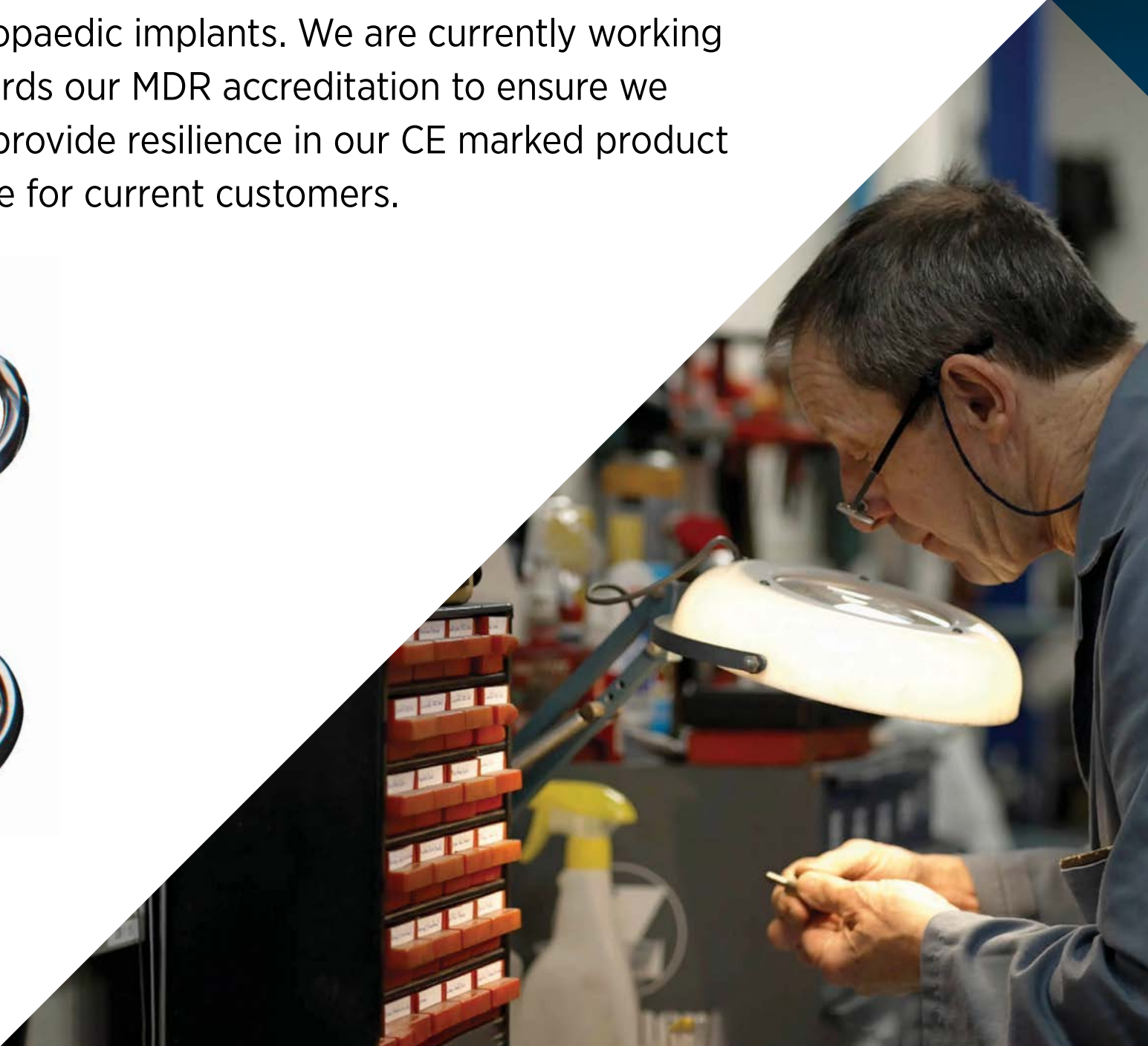
Surgical Holdings are pioneers of full surgical instrument tray sets refurbishment. Previous projects have seen us save hospitals over £100k and nearly 5,000kg CO<sub>2</sub> (1.5 domestic houses annual usage of CO<sub>2</sub>).

The refurbishment of surgical instruments can save up to 95% CO<sub>2</sub> vs manufacturing new, according to recent data<sup>1</sup>. Between January 2024 and July 2024, we repaired around 16,000 devices, saving 9,900kg CO<sub>2</sub>.



## Quality

ISO 13485 accreditation is held through medical device notified body SGS, in addition to MDD approval for reusable instruments and orthopaedic implants. We are currently working towards our MDR accreditation to ensure we can provide resilience in our CE marked product range for current customers.



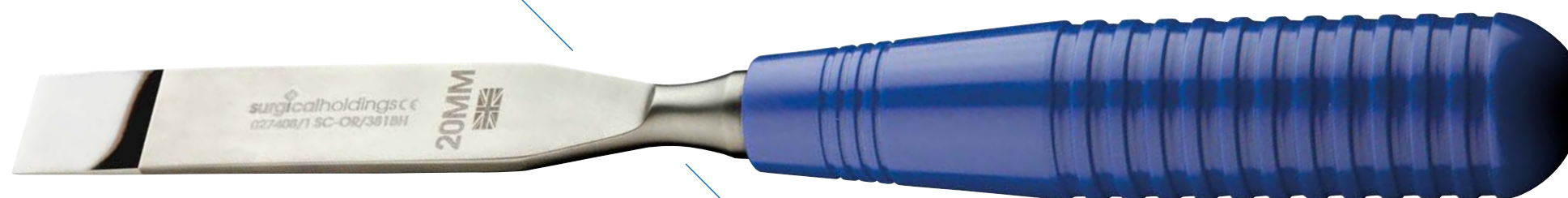
1. Rizan et al 2022

# Investment in repair departments

Since 2020 we have doubled our building's footprint, with our latest storage facility opening for use in 2024. Prior to this we added a new facility for orthopaedic power tool repair, extended our rigid scope repair department and developed a state-of-the-art ultrasonic cleaning line.

## We repair:

- General reusable instruments
- Orthopaedic specialised instruments
- Electrosurgical instruments
- Micro and ophthalmic (stainless steel and titanium)
- Laparoscopic
- Rigid endoscope and semi rigid scopes
- Battery power tools
- Pneumatic hand pieces
- Ultrasound probes



# Our ad hoc instrument repair service



When your instruments need some TLC, our ad hoc instrument repair service is there to help. Our technicians perform high quality, comprehensive repairs which help extend the lifespan of instruments, whilst ensuring they maintain optimal performance.



## Our repair services include:

- Sharpening and re-setting scissors
- Welding/laser welding
- Fixing broken or damaged ends
- Refinishing
- Replacing tungsten carbide jaws on needle holders using induction brazing
- Re-plating of gold bows
- Riveting
- Re-soldering
- Re-setting racks
- Diamond coating
- Diamond knife repairs
- Re-coating
- Polishing and finishing
- Polishing of all joints, racks and jaws
- Passivation
- Cleaning
- Laser marking
- Testing to British Standards
- Fit for reprocessing

# Additional repair services

## Endoscopes

All common brands are repaired including Storz, Olympus, Smith and Nephew, Dyonics, Henke Sass and Stryker. We also repair many more less common German brands.

Scope types covered include arthroscopes, cystoscopes, laparoscopes, hysteroscopes (including semi rigid Gimmi type/alphascope), ureteroscope.

## Orthopaedic power tools

We repair all common brands of pneumatic surgical power tools and battery hand pieces, including Stryker, Synthes, Hall, Microaire and De Soutter. All dental tools can be repaired, including bearings and rotor replacement. We also repair phaco and ultrasound handpieces.



## Full tray refurbishment

This service is recommended for ongoing maintenance of your various surgical instrument trays. Financially this saves up to 80% vs buying new.

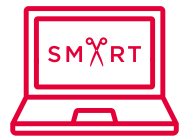
This service not only focusses on the repair of any issues and breakages, it also includes surface finish refurbishment, re-polishing and finishing the stainless steel surface to 0.5 micros RA. This is essential to ensure long term corrosion resistance and also includes laser marking for traceability and re-passivation (this is a process to remove any free iron on the surface of the steel).





# The SMART and sustainable repair choice

Our service is the SMART choice - rather than incurring spikes in cost as instruments reach the end of their life, Surgical Holdings will identify those and replace them for the same price as the repair. Customers always know what they're paying and never get unexpected bills.



## ONLINE PORTAL

Book, manage and monitor repairs online. Direct access to communicate with the repair team keeps customers up-to-date with the progress of their repairs.



## REPAIRED

High quality materials are used, providing full traceability as every part is recorded. Replacing instruments is avoided wherever possible.



## TESTED

Independent testing helps benchmark repairs against industry standards.



## UPCYCLED

If an instrument is not to our high standards or we can't repair it, we will replace it with a brand new one for the cost of a repair\*. This ensures continual upcycling of instrument trays.



## MARKED

Instruments can be laser marked, encoded and GS1 2D matrix marked at the same time as a repair.



## ACCREDITED

Repairs are ISO13485 accredited.



## GUARANTEED

Customers receive an industry leading 18 months warranty as standard on all instrument repairs.



## INSURED

We carry full product, professional liability and transit insurance.



## DELIVERED

Standard turnaround times are 1 week, an express 2 day service is available.

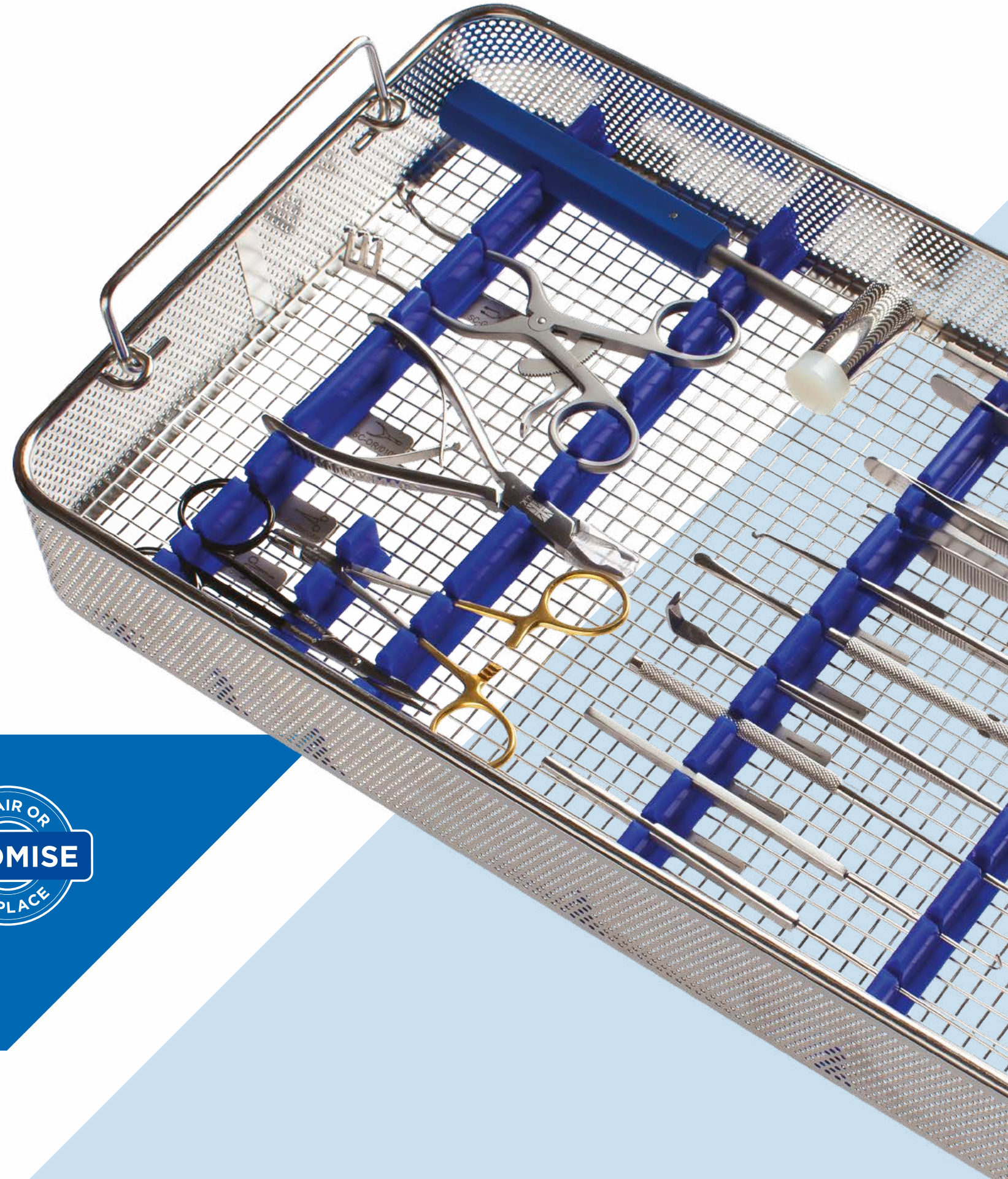


## LIFE COST SAVINGS

Instruments are covered for life and will be repaired as many times as needed. This gives exceptional value for money over the lifetime of instruments.

# Quality means longevity

Instrument repairs elsewhere may be cheaper, however, the quality of SMART Repair is second to none. Our technicians are trained to manufacture instruments rather than simply repair them. This gives them a greater knowledge of the products, improving the repair quality.



We repair instruments to 'as new' condition as many times as we can. When we can't repair an instrument, we will replace it for the price of a repair. This not only saves money, as instruments aren't bought as often, but it also means instrument trays can be repeatedly upcycled.

Our Repair or Replace Promise covers most common top sellers, please contact your rep for a full list.



# Surgifix online repair portal

Customers also benefit from access to Surgifix, our online portal which makes managing repairs easy and quick with no additional environmental impact.



An easy to use system with up to date information on all repairs



View pricing, create quotes, and view the progress of repairs. These can be printed or saved.



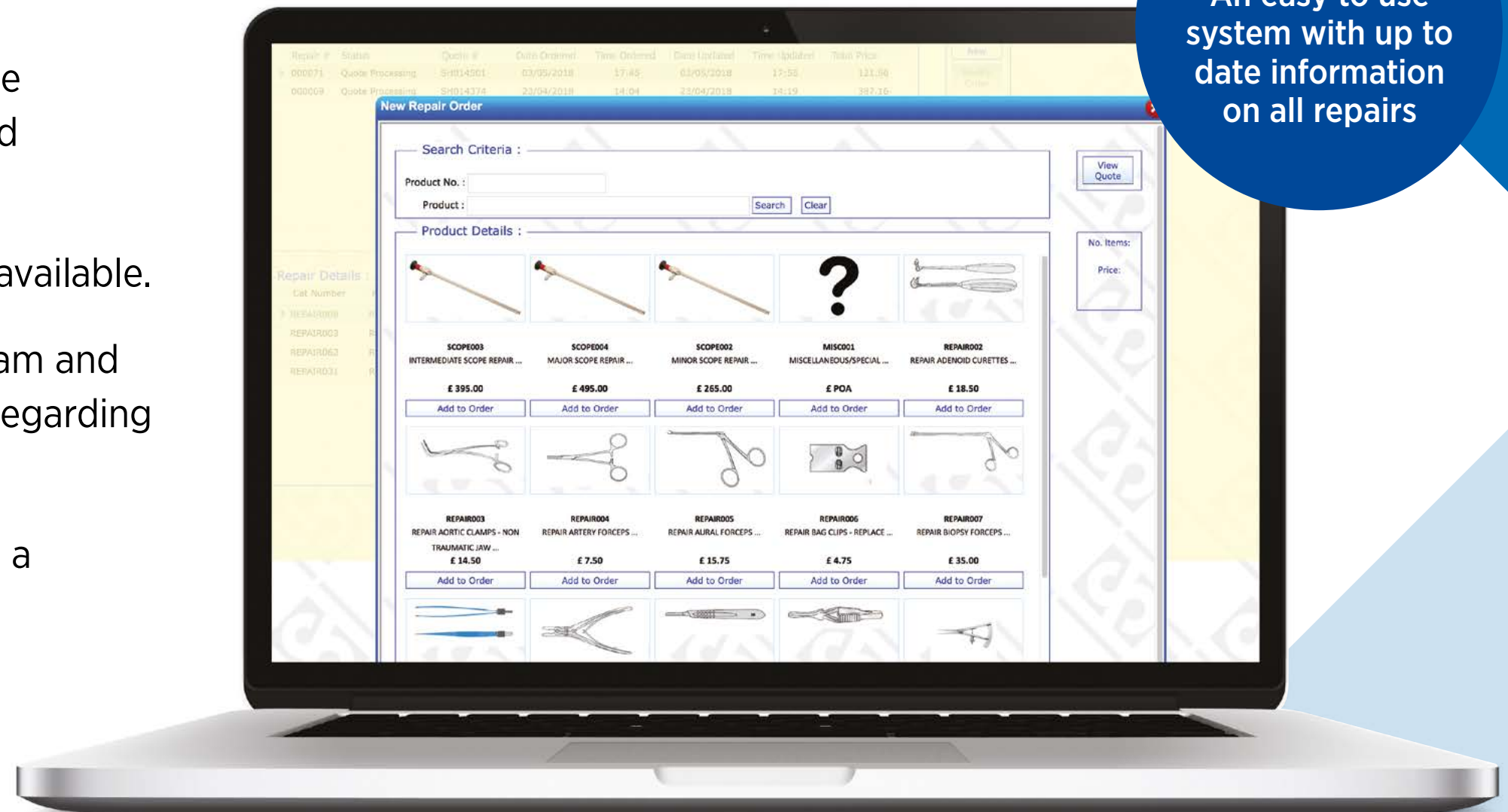
Historical endoscope repair reports are available.



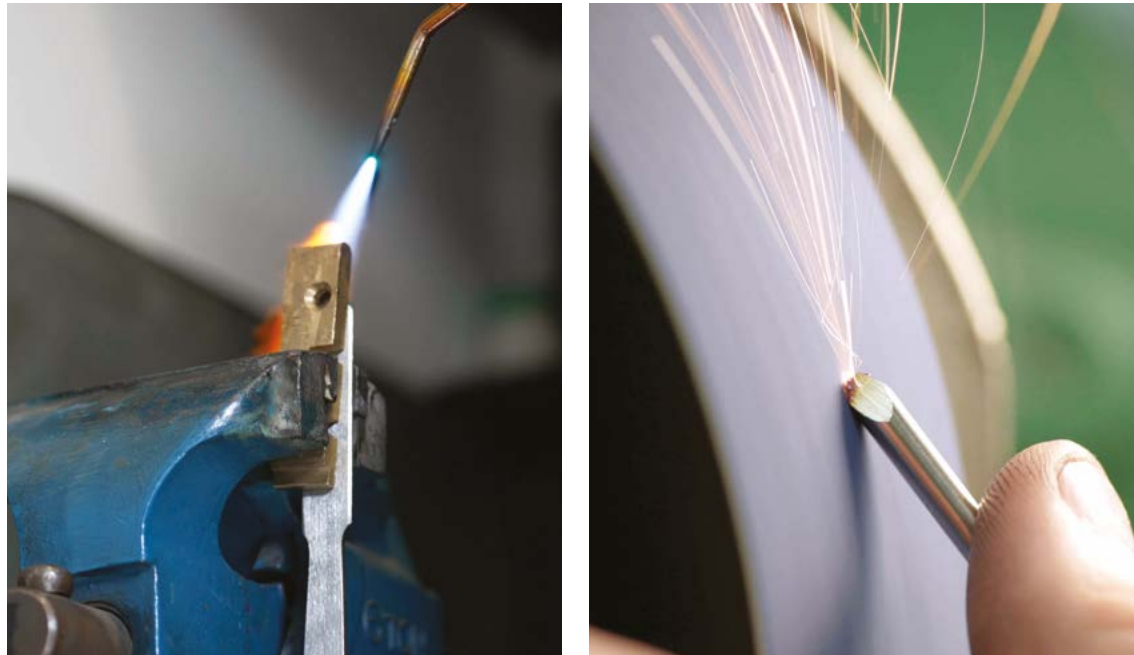
Instant notifications allow the repairs team and customers to communicate seamlessly regarding what needs a repair or refurbishment.



Training is available and can be done on a video call if required.



# An award-winning British surgical instrument manufacturer



## A focus on superior reusable instruments

We're acutely aware that the instruments we manufacture are responsible for saving lives. That's why we maintain the highest possible standards in materials, craftsmanship and quality control.

A hallmark of quality instruments is also their durability and longevity, meaning they need repairing and replacing less often. The instruments we manufacture can be used for 30 years if they are serviced regularly.



## UK based means reduced transport distances

Our vast in-house manufactured range includes our hip surgery instrumentation which we are proud to produce in Southend. Our most recent project is the production of our own endoscope, manufactured in our workshop. This will be the only UK manufactured endoscope on the market.

Being based in the UK ensures that your instruments, scopes, and power tools are repaired locally, avoiding the delays and logistical issues associated with overseas shipping.



Estimated repairs and instruments  
(based on sales from January 2024 to July 2024)



Take a look around  
our workshop on our  
[Factory Tour Video](#)

# Ensuring our consumables are resilient

Product resilience and availability has been an issue since COVID in many areas. This has caused availability issues, cost escalation and transit challenges from the East. We would always encourage the use of reusable products, however, there are many medical devices which are unable to be reusable, for hygiene or safety reasons.

NHS Supply Chain established their resilience team in 2022 and we saw this as a key opportunity to see how we could help out and support this.



We decided to work with Telic and VEC Medical as key partners, due to their manufacturing being in Barcelona and their resilience focussed, single-use consumables.

A reliable supply chain is ensured through availability and shorter delivery times due to the manufacturing location and the quick ease of transport from Spain, by road or sea.

This is a great fit for our in-house manufacture of Sterile Kirschner Wires, where we use European stainless steel.

You can read the full article on our website [here](#)



Read the full Green Surgery Report [here](#)



By sourcing supply from Barcelona instead of China, we have increased resilience and significantly decreased the carbon cost by reducing the travelling distance. Transiting goods from Spain instead of China can reduce the carbon cost by up to 30 times.

CO<sub>2</sub> costs per 1000km for transporting one tonne of medical products<sup>3</sup>

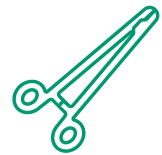
|            | 2,302kg CO <sub>2</sub> e  | 579kg CO <sub>2</sub> e   | 251kg CO <sub>2</sub> e   | 13kg CO <sub>2</sub> e  |
|------------|----------------------------|---------------------------|---------------------------|-------------------------|
| Spain → UK | 2,617kg CO <sub>2</sub> e  | 874kg CO <sub>2</sub> e   | 379kg CO <sub>2</sub> e   | 46kg CO <sub>2</sub> e  |
| China → UK | 21,052kg CO <sub>2</sub> e | 6,549kg CO <sub>2</sub> e | 2,839kg CO <sub>2</sub> e | 342kg CO <sub>2</sub> e |

Comparing transportation of 1 tonne of healthcare product 1,000 km, based on short-haul flight to and from UK, average diesel van, average battery electric van, average general cargo ship.<sup>4</sup> We recognise there are wider environmental impacts beyond greenhouse gases, for example shipping contributes towards local ocean acidification through emissions of sulfur and nitrogen oxides in heavily trafficked routes.<sup>5</sup>

1. Air and land distances are calculated with <https://www.distance.to> and are approximate  
 2. Shipping distances are calculated with <https://www.routescanner.com> and are approximate  
 3. CO<sub>2</sub>e cost source: Green Surgery Report <https://s41874.pcdn.co/wp-content/uploads/Green-Surgery-Report-v1.1.pdf>  
 4. Department for Environment, Food and Rural Affairs/Department for Business, Energy & Industrial Strategy (DEFRA/BEIS). UK Government GHG conversion factors for company reporting [Internet]. 2022 [cited 2023 Mar 23]. Available from: <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022>  
 5. Hassellöv I-M, Turner DR, Lauer A, Corbett JJ. Shipping contributes to ocean acidification. *Geophys Res Lett.* 2013;40(11):2731-6.

# Working towards net zero emissions

Surgical Holdings have been very proactive with ensuring we comply to the requirements of NHS England and NHS Supply Chain and have published our Carbon Reduction Plan on our website. This is regularly updated. We have also completed the Evergreen portal and achieved the required level.



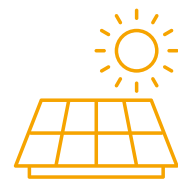
## Products

We supply reusable instrumentation and endoscopes that can last as long as 30 years.



## Services

Multiple repair services across a variety of product ranges ensures we are not having to manufacture new products and incur further CO<sub>2</sub> burden. We also therefore support our stakeholders with their CO<sub>2</sub> ambitions.



## Facilities

Solar panels were installed in May 2024, covering all Surgical Holdings manufacturing and repair facilities. This saves 60 MWh per annum on average.

We have replaced all lights with LED bulbs. We continue to upgrade legacy equipment and have benefitted from multiple Carbon Grants to replace inefficient manufacturing equipment.



## Vehicles

Our commercial fleet are either plug-in hybrid or full electric vehicles.



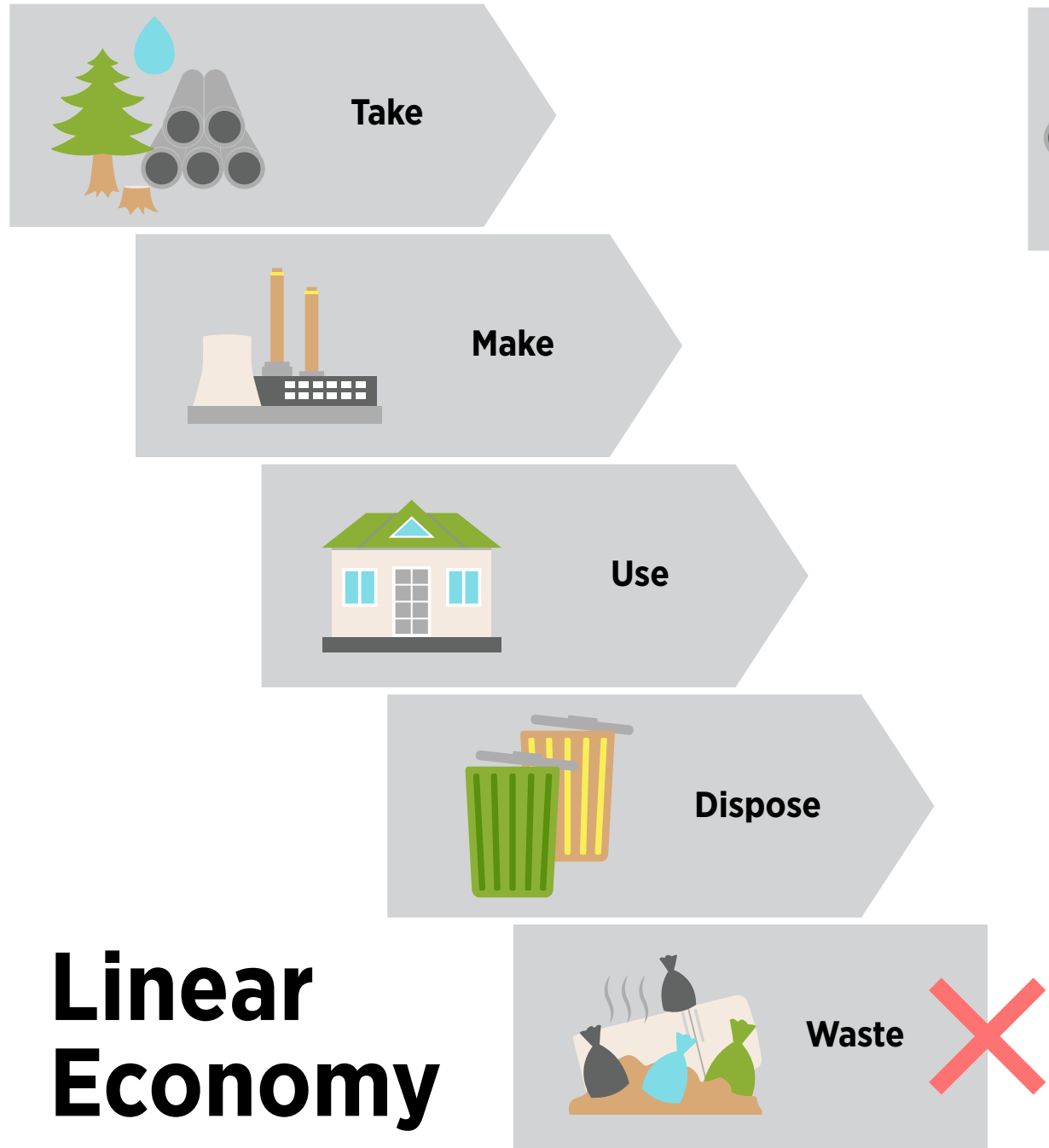
## Travelling to work

We actively encourage employees to utilise public transport and bike to work, provided [discounted local bus travel](#) through local bus company Arriva.

We have installed large bike racks across our building to utilise bike storage space.

# Circular economy

Helping the NHS create a circular economy through our focus on superior, reusable instruments and high quality repairs.



**Linear Economy**





# Elevating workplace standards



Surgical Holdings take our responsibility for our supply chain and stake holders extremely seriously. We commit to ensure their Labour Standards Assurance Scheme is compliant with ILO indicators of forced labour.

This includes on site audits at our premises but also audits of our partners, where relevant. Our LSAS scheme is annually audited by a third-party auditing company and we have proudly achieved level 3 and 4 across the requirements.



Surgical Holdings publish Modern Slavery and Labour Standards policies, which are regularly audited and reviewed.

# Workforce diversity

We proudly employ female technicians and provide new opportunities through our apprenticeship scheme.

30% of our workforce is female

25% of our senior management is female



Our apprenticeship scheme has been in place since 1996 and all senior management have progressed through the apprenticeship pathway.

# Social value

We're a growing company employing over 60 people. This makes us the largest independent manufacturer and repairer of surgical instruments in the UK.

We work with the local authority business partnership to assist in the development of our local area. This includes providing recruitment opportunities, apprenticeships and partnerships with local charities. We also engage with local schools through mentoring, careers guidance and interview practices.



We're proud to support a number of local charities, raising funds through Valentines Day events, cake baking, toy donation, a food bank and more recently our prize drawer.



Get to know us better by watching our [Company Overview Video](#)



## Training for our staff

Our training of new employees with technical skills is a key part of the success of our sustainability drive. To ensure we can grow and repair more equipment, it's essential we work with our local community to recruit and educate.

Our focus on repair and refurbishment ensures our skilled instrument technicians can train new staff members on instrument manufacture and then utilise those skills for repair and refurbishment



We hold regular company BBQ events where our team can enjoy relaxing and socialising together



## Training for our stakeholders

We offer training for all stakeholders, which is CPD accredited covering webinars, presentations and 1-2-1. The CPD Certification Service provide a certificate for all these webinars, which we organise quarterly.

### [Details on our courses](#)

Training is key for stakeholders, to ensure they learn how best to preserve their kit and prevent damage. This will help to ensure circular economy principles can be applied.

 See what our webinars can offer you by watching our [Rigid Scopes Video](#)

# Conclusion

Surgical Holdings has a clear and increasing level of focus on sustainability, the circular economy and carbon reduction. We work in accordance with NHS sustainability goals, including our Carbon Reduction Plan, Evergreen assessment and commitment to net zero emissions within NHS targets. In addition to environmental factors, we take ethical and commercial considerations into account as well.

Our company ethos has clear advantages for both the environment and to provide long-term cost savings for customers:

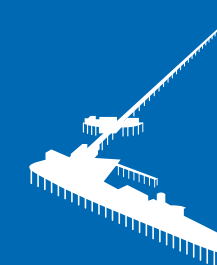
- Quality manufacture means longer life and better instrument performance
- Quality repair means the same
- Our UK location means there's a reduced carbon footprint for both multiple patient use and single patient use



**Questions about sustainability in surgery?**  
Contact your Surgical Holdings representative



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Based in  
the City of  
**Southend**