

# OUR MARKETS: WINNING SOLUTIONS IN HEALTHCARE

**We provide design and manufacturing solutions for a range of diagnostic, surgical and direct patient care devices critical to the identification, treatment and prevention of disease.**

Public health is vital to the smooth functioning of society. Efforts to improve healthcare infrastructure continue to intensify globally, with wellness and longevity a top priority for consumers. These forces serve to accelerate the pace of innovation within the healthcare ecosystem. Electronics play a central role in advancing progress of medical technology.

Our power, connectivity and sensor technologies span the modern surgical suite, from patient monitoring and therapeutic devices to surgical navigation, diagnostic equipment and life sciences. Our products also help deliver therapy directly to patients during minimally invasive procedures, through implantable devices, such as pacemakers and defibrillators. Implantables are now also competing with pharmaceutical solutions for issues like hypertension and sleep apnoea and support other external applications that require high-reliability power and sensor-enabled communication.

### Market trends and drivers

The global medical device manufacturing market is expected to have grown by around 5% in 2022. The healthcare market has a relatively inelastic demand profile, such that there will be an ongoing need for medical procedures and monitoring regardless of recession or pandemic. The medium- and long-term outlook for the global medical device manufacturing market is equally optimistic, with an expected CAGR of 6-8% to 2026.

Notable drivers include the growing importance of digitalisation, the rising disease burden of an ageing and growing population and increasing patient awareness. We are well placed to capitalise on increasing demand for high-complexity products driven by technological advancement such as

diagnostics, monitoring and surgical products. COVID placed a renewed emphasis on the importance of the biotech and pharma industries and we therefore continue to expect favourable shifts in product mix towards high-value, high-margin devices suited to our capabilities. These dynamics are supported by continued increases in life expectancy, with the world's population of over 60s expected to double by 2050.

### Our response

The pandemic created an opportunity to demonstrate to customers the extent of TT's agility by maintaining quality standards while rapidly and flexibly scaling production of urgently needed products. We continue to capitalise on that positive momentum. Our strategy has been tailored to bolster our technical expertise and capability in areas which OEMs find most complex to navigate, such as where significant engineering precision is required, or there are constraints due to regulatory compliance.

We are continuing to expand our involvement in life sciences and laboratory equipment, supporting new ultra-low temperature freezers and gaining momentum in automated sample storage systems as well as surgical devices, medical implants and diagnostics. In line with our purpose, we are energised by the tangible contributions we can make to health and quality of life in society. By supporting our life sciences partners, we are collectively improving laboratory automation systems and enabling samples to be collected and analysed with minimal human intervention, the benefits of which are improved data reliability and accuracy, less waste, and time-efficient results.

TT sensors attached to surgical instruments provide real-time positioning and orientation information and we are a market leader in the smallest EM micro-

## CONTRIBUTION TO GROUP

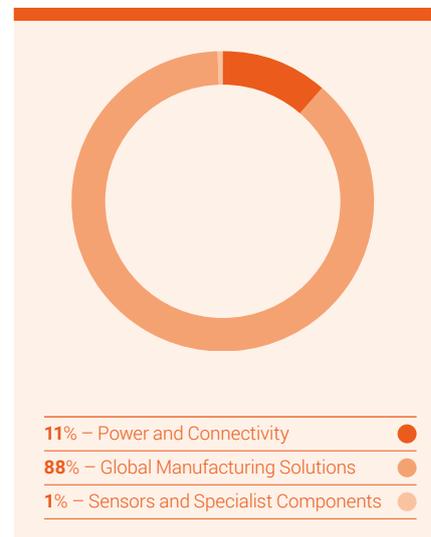
# 28%

of Group revenue

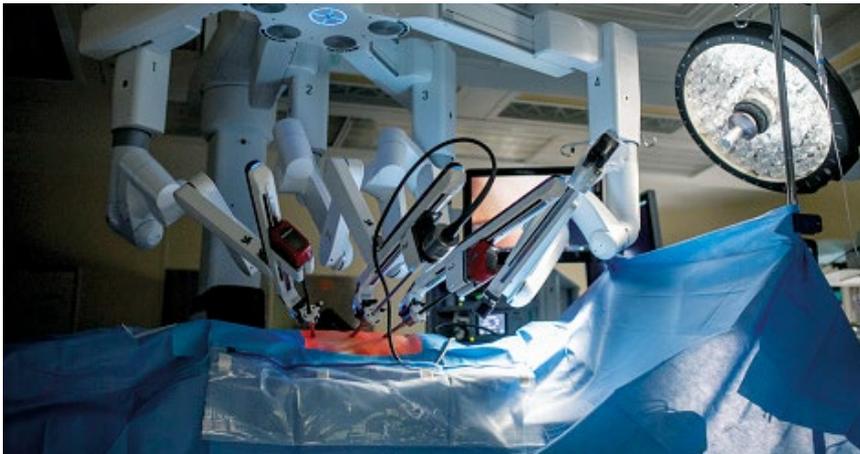
coil sensors for these applications. By supporting the development of smaller, lighter and more precise surgical devices, we are enabling reduced size of incisions, shortened recovery times, and improving overall patient outcomes. Our resistors team is working with major OEMs to provide non-contact Hall-effect sensors, optical switches and optical arrays that can detect the presence of objects, fluid levels and position sensing as well. Our sensors are incorporated in products that promote earlier detection of disease and better monitoring of cancer, cardiac, neurological and musculoskeletal disorders.

While there is emphasis on addressing supply chain challenges across the Group, the urgency of ensuring healthcare products are delivered in a timely manner is critical and we are proactively working with customers to mitigate global shortages and extend visibility into future demand. We are able to leverage our global manufacturing footprint to mitigate local issues and can innovate to provide quicker solutions. We believe that enhanced dialogue and continued performance under adversity has deepened our relationships with key healthcare and life science customers.

## MARKET REVENUE BY DIVISION



# TECHNOLOGY SHAPING THE FUTURE OF HEALTHCARE



## EXPECTED MARKET GROWTH

# 6-8%

Healthcare market 2022-26 CAGR

## WHAT WE DO

Our power, connectivity and sensor technologies span the modern surgical suite; from patient monitoring and therapeutic devices to surgical navigation, diagnostic equipment and life sciences.

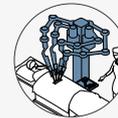
Our products help deliver therapy directly to patients during minimally invasive procedures, as well as in implantable devices and other external applications that require high-reliability power and sensor-enabled communication.

## TT ELECTRONICS IN ACTION



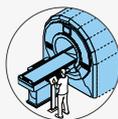
### Direct patient care and monitoring

- Patient monitoring equipment, including remote applications
- Anaesthesia machines
- Surgical lighting
- Cardiopulmonary perfusion equipment
- Ventilators and defibrillators
- Fluid monitoring
- Wearable technologies



### Advanced interventional and surgical devices

- Surgical navigation technology for ablation and resection procedures
- Implantable pacemakers and defibrillators
- Neuromodulators
- Implant programmers and chargers
- Ventricular assist systems
- Robotic assisted surgery



### Innovative diagnostic and imaging

- Ultrasound, X-ray and MRI machines
- Radiotherapy equipment for cancer treatment
- Sensor-enabled diagnostic devices



### Laboratory and life sciences

- Therapeutic drug monitoring
- Gene sequencing
- Immuno-assay
- Pill counting and dispensing
- Portable hemodialysis systems
- Scientific instrumentation