

BETTER BAKEWARE

Bernie Joubert, Customer Relations Manager for Technical Systems, discusses how steel engineering expertise is driving performance, reliability and innovation in industrial bakeware



BERNIE JOUBERT
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PLEASE INTRODUCE YOURSELF AND YOUR ROLE

My name is Bernie Joubert, and I am the Customer Relations Manager at Technical Systems. My primary responsibility is to ensure that we deliver a high level of customer service and maintain strong relationships with all our clients.

At Technical Systems, our mission and vision focus on providing quick lead times, high-quality products, and a reliable after-sales support structure. We place great value on building long-term partnerships with our customers by consistently meeting their operational and technical needs.

In addition to managing customer relationships, I oversee the sales team to ensure they meet their annual targets while maintaining our company's standards of service excellence. Our sales executives focus on understanding market dynamics and the global challenges our customers face. This enables them to identify opportunities and provide solutions that support our customers' supply chain requirements,



technical needs, and overall satisfaction. Through this approach, we aim to build lasting partnerships based on trust, quality, and service.

TECHNICAL SYSTEMS HAS DEEP ROOTS IN POULTRY CONVEYING. WHICH ENGINEERING PRINCIPLES FROM THAT SECTOR HAVE BEEN MOST VALUABLE WHEN DEVELOPING PRODUCTS FOR THE BAKEWARE INDUSTRY?

With more than 30 years as a global market leader in poultry feeding equipment, Technical Systems has developed strong expertise in steel engineering, precision manufacturing, and high-performance product design. These engineering principles have been highly valuable in the development of our bakeware solutions.

Our global infrastructure, including strategically located warehouses in the USA, Europe, and China, allows us to maintain stock on hand and provide customers with efficient supply and short lead times.

In addition, our team brings together more than 2,000 years of combined experience in steel manufacturing and innovation. This enables us to offer a wide range of bakeware wire solutions, including round and flat wire in various sizes, edging options, bent frames, welded frames, and reinforced frame designs.

Technical Systems also has dedicated

engineering teams, each specialising in different areas of product development. Their focus is on continuously improving working systems, manufacturing processes, and product durability to ensure optimal performance and longevity across our product ranges.

Our reputation in the poultry conveying industry forms the foundation of our capabilities, enabling us to deliver innovative solutions and support growth opportunities within the bakeware industry.

WHEN SPECIFYING STEEL FLAT WIRE FOR INDUSTRIAL BAKEWARE, WHICH FACTORS MOST INFLUENCE PERFORMANCE, DURABILITY AND BAKING CONSISTENCY?

Material Uniformity:

Consistent chemical composition of the steel ensures predictable and uniform heat transfer.

Tensile Strength and Elongation:

This is to ensure that the flat wire maintains its shape through heat cycles and prevents sagging or deformation.

HOW DO WIRE PROFILE, EDGE FINISHING AND COILING AFFECT HEAT TRANSFER AND PRODUCT RELEASE IN HIGH-VOLUME BAKING ENVIRONMENTS?

Wire Profile:

Flat wire provides a greater surface-area-

to-mass ratio than round wire, facilitating faster conductive heat transfer.

Edge finish:

Smooth deburred edges are essential in high-volume environments to prevent edge micro tears and ensure the safety and reliability of automated production in handling systems. Precision coiling of the flat wire ensures the safe and effective continuous production of the required frames.

WHAT ROLE DOES CUSTOMISED WIRE AND FRAME DESIGN PLAY IN IMPROVING OVEN EFFICIENCY AND REDUCING DOWNTIME FOR INDUSTRIAL BAKERS?

As a market leader in steel innovation, Technical Systems provides agile and customised solutions tailored to the specific needs of our customers. This includes specialised packaging, customised wire sizes, cut-to-length specifications, and unique profile designs.

By working closely with customers to define these requirements, we ensure that the bakeware wire and frames are optimised for their production processes. Supporting documentation can also be provided to meet customer requirements and assist with import licensing where necessary.

Our manufacturing processes are specifically designed to produce high-performance bakeware wire that contributes to improve unnecessary weight that optimise the thermal mass of a frame which means the oven spends less energy heating the equipment and more time on baking products.

While certain aspects of our production process form part of our confidential intellectual property, we are confident in the quality and reliability of our products and provide a 10-year guarantee across our range.

HOW SHOULD INDUSTRIAL BAKERS DECIDE BETWEEN CARBON STEEL AND STAINLESS-STEEL BAKEWARE FOR DIFFERENT PRODUCTION NEEDS?

The decision should be based on the specific operational requirements of the bakery, as both materials offer distinct advantages and disadvantages. Carbon steel provides superior thermal conductivity and is more cost-effective; however, it is

"Even small variations in wire specification can impact heat transfer and baking uniformity at scale"



susceptible to corrosion. Stainless steel, on the other hand, offers greater durability and resistance when working with acidic ingredients and under intensive cleaning protocols, but it is significantly more expensive. Therefore, factors such as cost, cleaning procedures, and the types of ingredients used should be carefully considered to make an informed decision.

CONSISTENCY IS CRITICAL AT SCALE. HOW DOES TECHNICAL SYSTEMS ENSURE RELIABLE QUALITY ACROSS LARGE PRODUCTION RUNS OF BAKEWARE COMPONENTS?

Over the years, Technical Systems has developed a robust quality control system with well-defined procedures and protocols to ensure consistent product specifications across all production runs.

During production, all products are inspected against the required specifications. If a product falls outside the specified tolerances, it is immediately documented as a non-conformance and transferred to the relevant department for further evaluation. A corrective inspection process is then implemented to ensure that the correct wire specifications are applied to the specific job card before production continues. Once production is completed, finished goods undergo a final quality inspection. Only products that meet all specification requirements are cleared and transferred to the finished goods warehouse for dispatch.

Quality remains a top priority for Technical Systems. Our customer complaint database shows that over the past 10 years, only 0.05% of our total products have been reported as non-conforming where Technical Systems was responsible for the claim. This reflects our strong commitment to maintaining

high-quality standards and consistent product performance.

WITH GLOBAL WAREHOUSES IN MULTIPLE REGIONS, HOW DO YOU HELP CUSTOMERS MANAGE SUPPLY RELIABILITY AND LEAD TIMES?

Technical System ensures supply reliability and efficient lead times through a strategically designed global supply chain network. The company's supply management policy focuses on maintaining adequate stock levels of all products across its global warehouses. This approach ensures that products are readily available for customers in different regions, enabling faster order fulfillment and reliable after-sales service.

By distributing inventory across multiple warehouses worldwide, Technical System reduces delivery times and improves responsiveness to customer demand. A well-structured supply chain network connects suppliers, manufacturing facilities, distribution centres, and customers, allowing companies to move goods efficiently across global markets. Supply Chain Network Such networks help coordinate inventory flows and improve the reliability of product availability.

In addition to its warehouse strategy, Technical System is expanding its



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manufacturing infrastructure to strengthen supply reliability. The company is establishing additional global production facilities, with its second manufacturing plant planned for China. This expansion allows the company to produce high-demand products simultaneously in different regions, reducing transportation time and ensuring that products can be delivered quickly to customers worldwide.

Regionalised production and sourcing strategies also help organisations reduce supply risks and shorten lead times by positioning manufacturing closer to key markets. Multi-sourcing Strategy and regional manufacturing improve supply stability and enable faster response to market demand.

Furthermore, Technical System continues to expand its global footprint by planning additional warehouses in strategic locations. Increasing the number of distribution centres improves supply chain agility and provides greater

flexibility in managing inventory and responding to customer orders.

Overall, through global warehouse distribution, regional manufacturing expansion, and a scalable logistics infrastructure, Technical System ensures consistent product availability, shorter lead times, and high levels of customer service across international markets.

WHAT KEY BAKEWARE INNOVATIONS DO YOU EXPECT TO SHAPE THE FUTURE OF INDUSTRIAL BAKING OVER THE NEXT FEW YEARS?

Technical Systems is a very innovative company that over the years developed new techniques in its processes to ensure high quality steel products that can sustain various temperatures with durable performance. Technical Systems invested on new software to trace all products to its original form back date up to over 30 years. Our own data reflects its own reputation to enhance new technical improvements that we can improve products requirements not yet in been made.

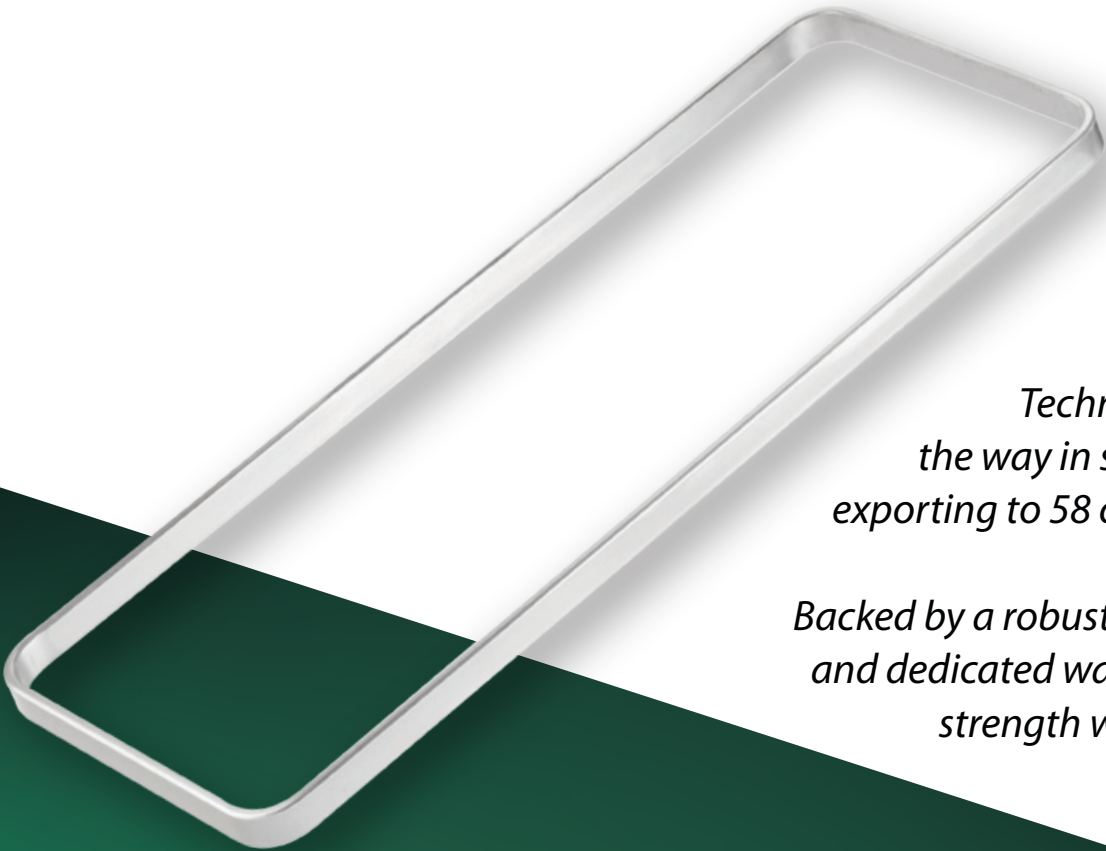
VISION AND MISSION

Expanding our global reputation and experiences in the bakeware industry to pride ourselves on innovation, with dedicated teams focused on research and development to expand our product offerings, create employment opportunities, and contribute to the sustainable growth of our local community.

These developments mark as an exciting chapter in our journey as we continue to diversify our portfolio and strengthen our position as a global leader in engineered solutions. **IB**

Technical Systems

BAKEWARE FRAMES



For over 30 years, Technical Systems has led the way in steel manufacturing, exporting to 58 countries worldwide.

Backed by a robust global supply chain and dedicated warehouses, we deliver strength without compromise.

Product offerings:

- Steel Flat Wire *(Material, edge profile and coiling to customers specifications)*
- Straight wire lengths
- Bended frames
- Bent and Welded Frames
- Stainless Steel Flat Wire

Consumer offerings:

- 10 Year warrantee on all products
- Flexible Payment Terms: T&C's apply
- Limited stock available at all warehouses



Available from warehouses in South Africa, USA, The Netherlands and China

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