



Uncompromised  
Precision

**HT Tooling  
Solutions**



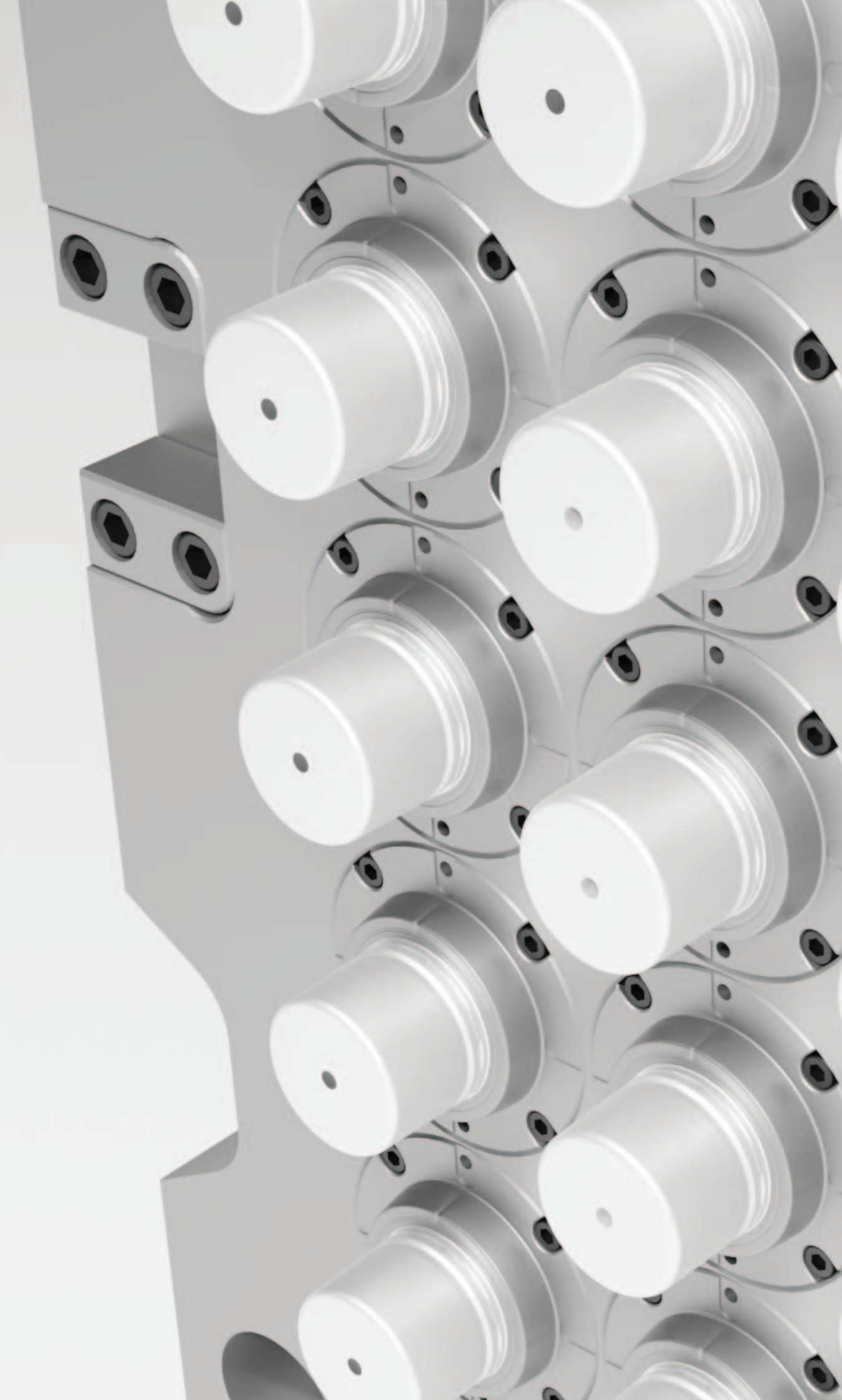
Understanding the intricacies of the injection moulding process is essential for producing tried-and-true production tools that empower our clients to excel in fiercely competitive markets.

Whether it's the provision of moulding tools for intricate product designs or simpler processes, HT Tooling's unwavering commitment to high precision quality guarantees exceptional and dependable outcomes.

The development of cutting edge injection moulding tools necessitates a multidisciplinary approach, uniting all facets of our company and collaborating closely with our clients to achieve a top tier result.

This commitment has earned us an esteemed reputation in the field, with leading high-tech companies worldwide selecting HT Tooling as their preferred partner for moulding technologies.

We take great pride in sharing our work with the global community, regularly presenting our technical expertise at prominent industry and science-based exhibitions and conferences.



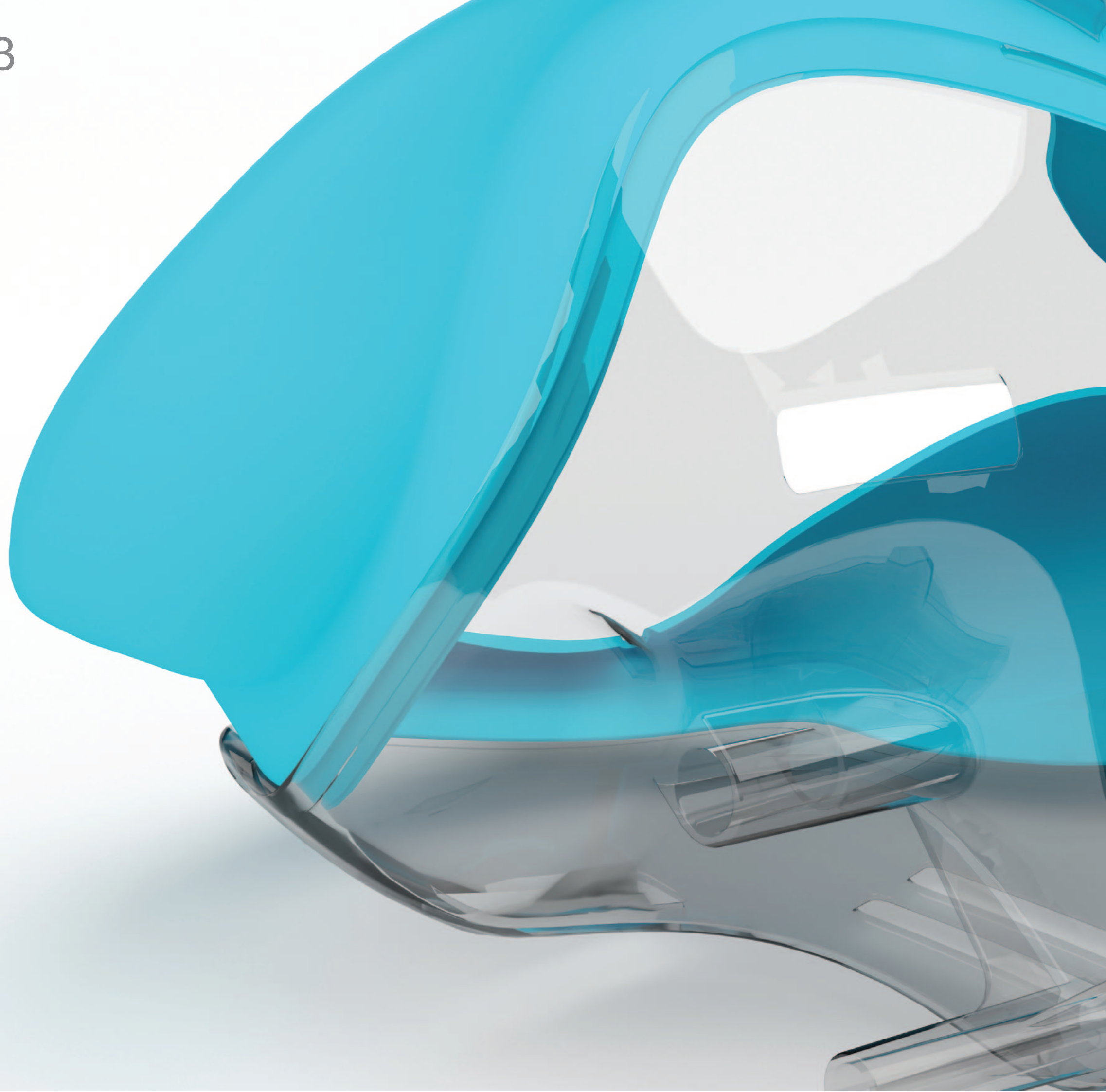


HT Tooling Solutions employs the very latest in mould technology and design to tailor solutions that cater to each customer's distinctive needs, whether it's a straightforward prototype tool or a sophisticated multi-cavity, multi-material high-volume production tool.

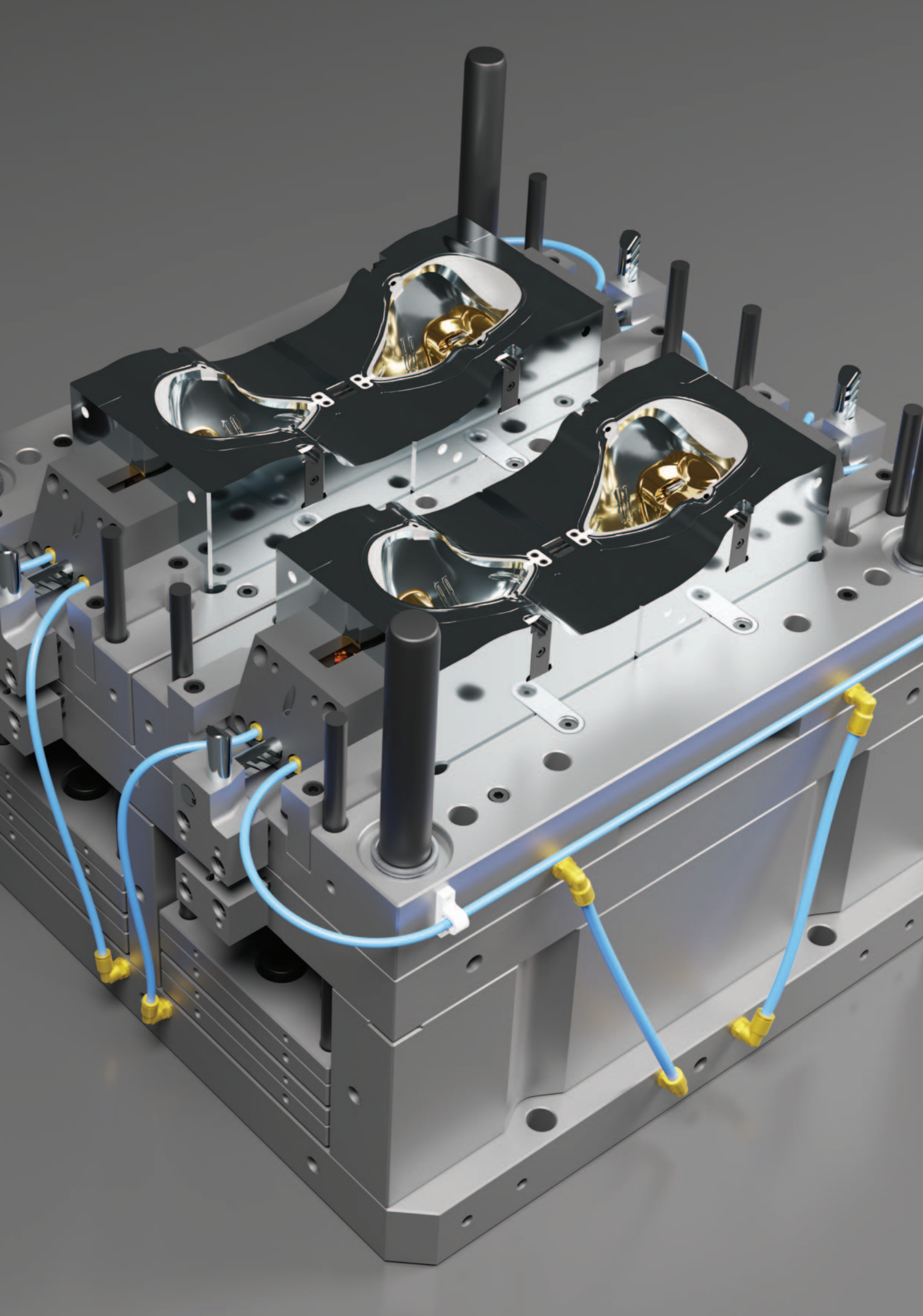
Our innovative mould solutions are meticulously crafted to align with customer requirements, emphasising robustness, ultra efficiency, rapid cycling, and the optimisation of process stability, production output, repeatability, and capability.

In the realm of complex plastic injection moulds, we excel as specialists in technologies such as multi-shot (2K & 3K), IML, IMA, Variotherm, conformal cooling, gas injection, cosmetic 'A' surface, visual lens, and more.

By fostering collaborative partnerships with our customers and delving deep into their unique requirements, coupled with our innovative design expertise and precision manufacturing processes, we ensure that each bespoke solution fulfils all the criteria sought by the customer.





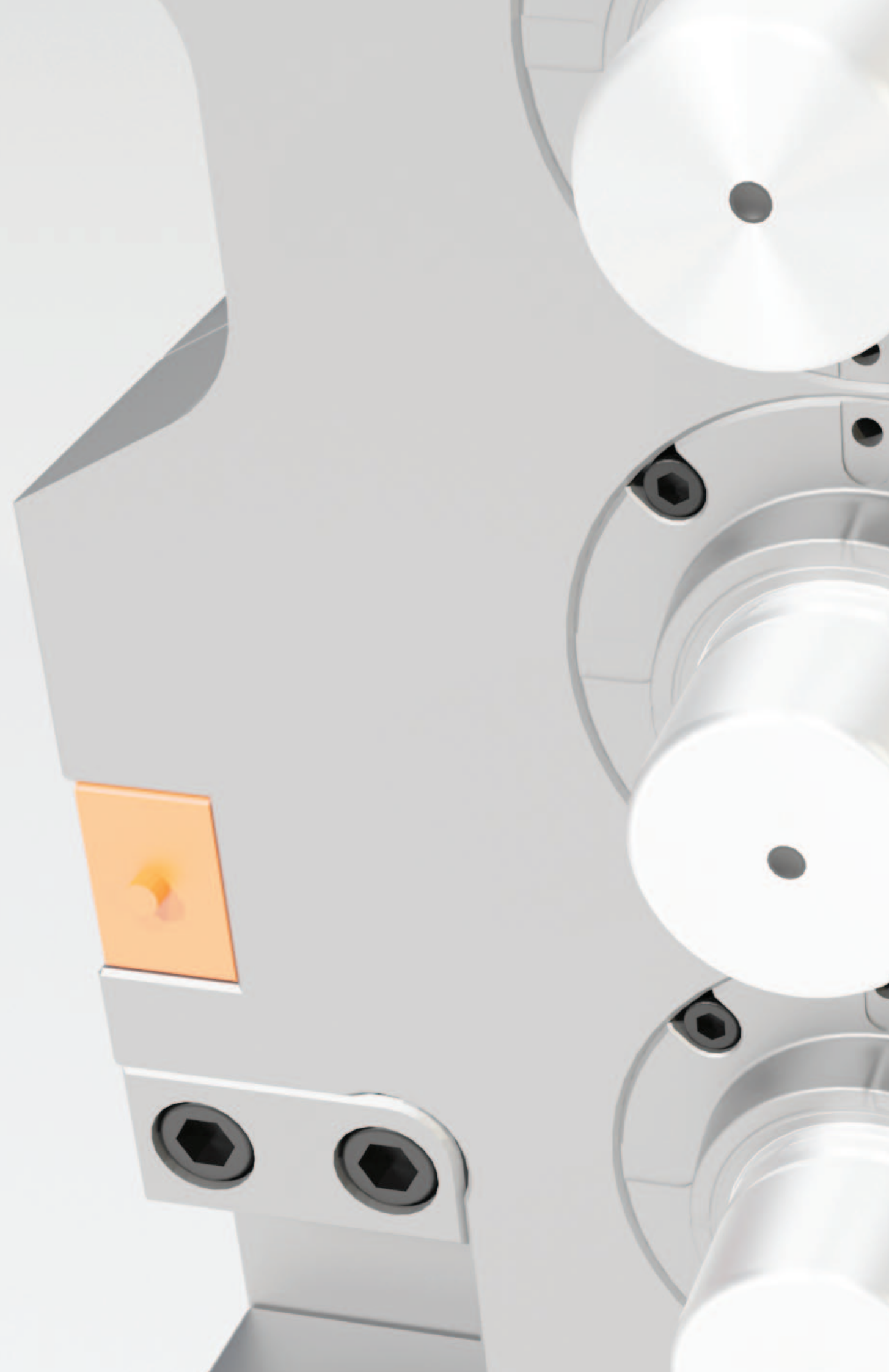
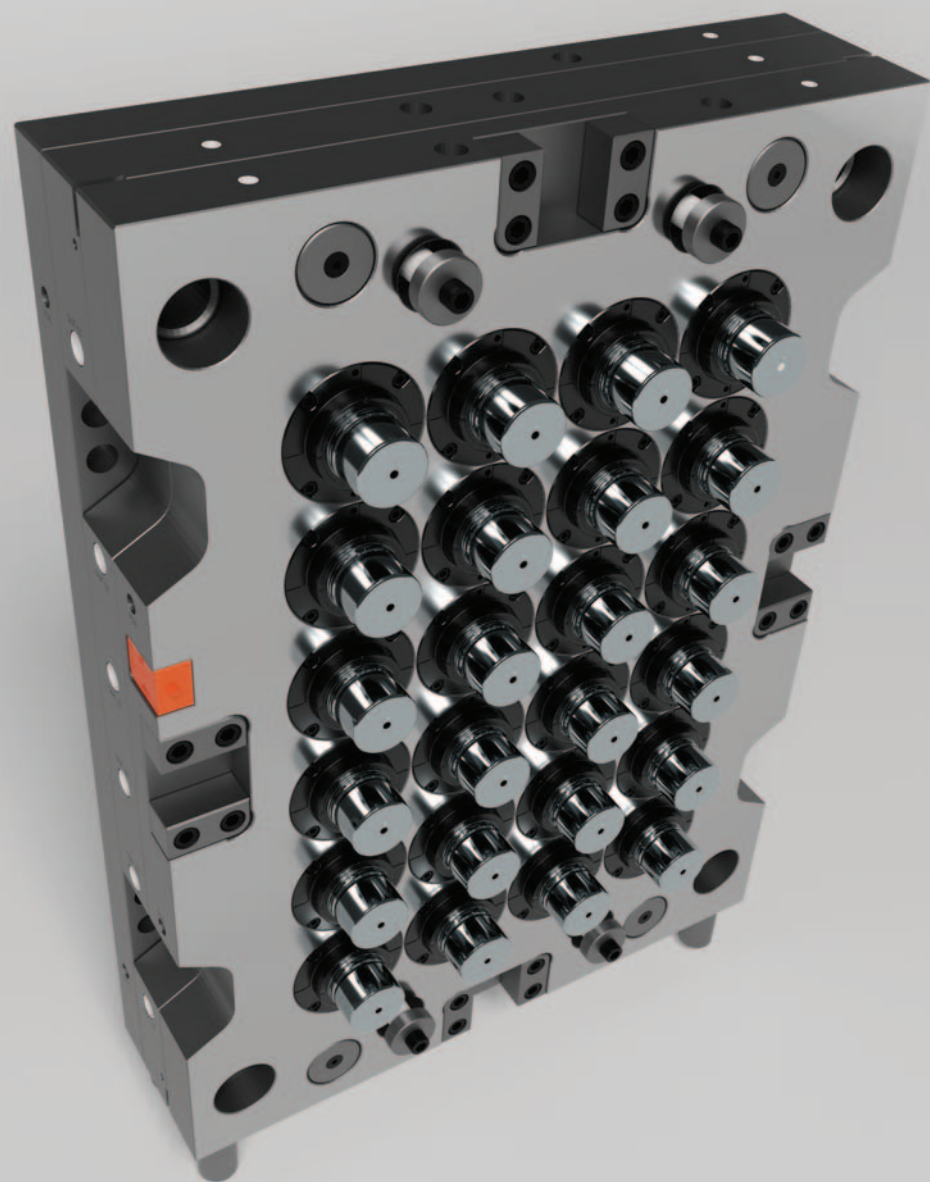


The process takes place within a rotating platen press, where it first molds a clear PP substrate, followed by the addition of a soft TPE gasket.





In the realm of caps and closures, even slight time differences can determine the line between profit and loss. Employing conformal cooling, this 24-impression cap tool not only met but exceeded our customer's expectations.



At HT Tooling, we are dedicated to enhancing our competitive edge by delivering design and manufacturing capabilities and solutions that surpass our customers' expectations. Our aim ultimately is to ensure the satisfaction and success of every client.

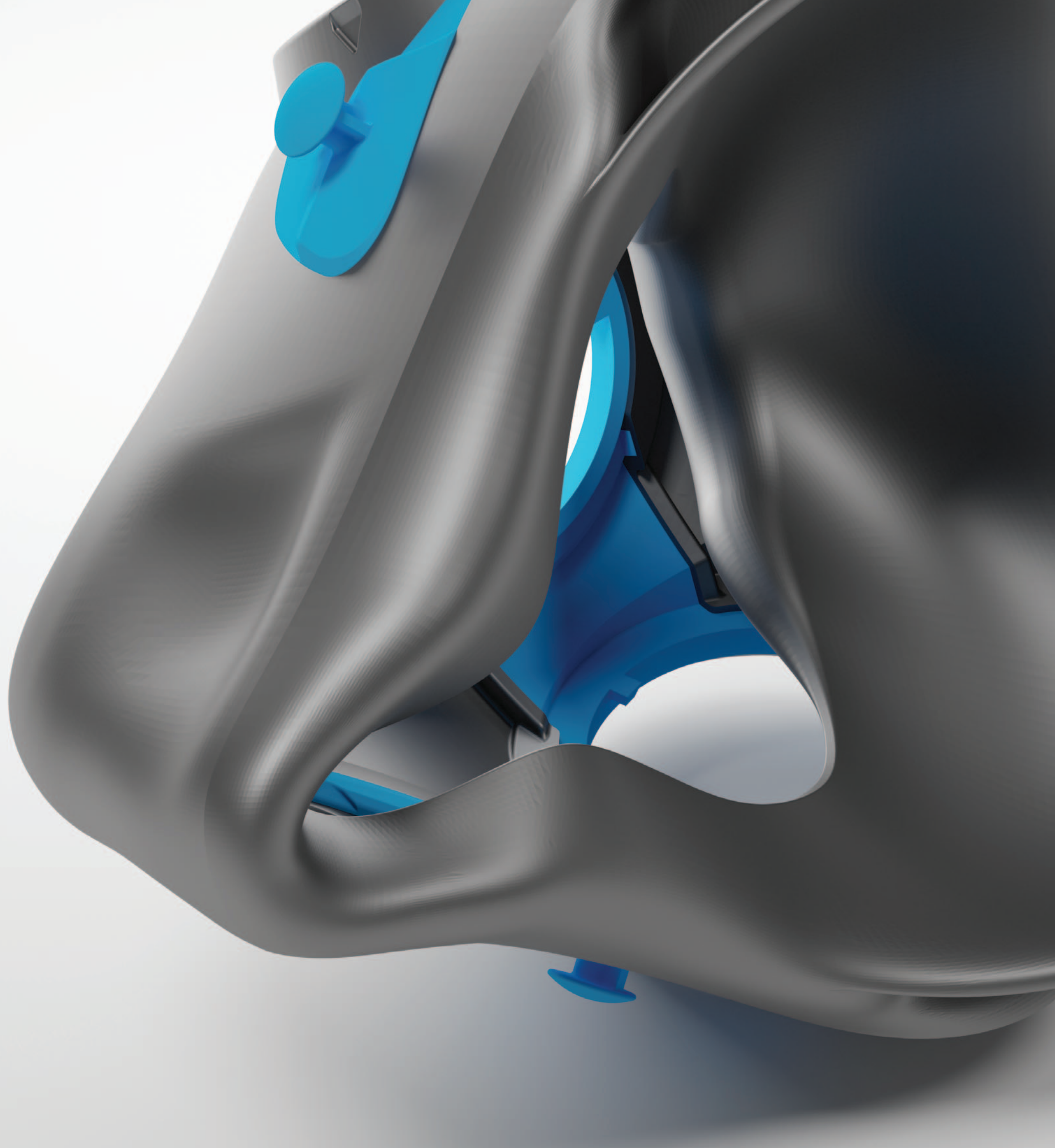
Our commitment at HT Tooling goes beyond business processes; we integrate ethical principles, honesty, and fairness into our operations.

We have always placed significant emphasis on continuous improvement and ongoing investments in our workforce, manufacturing facility, and cutting-edge machinery.

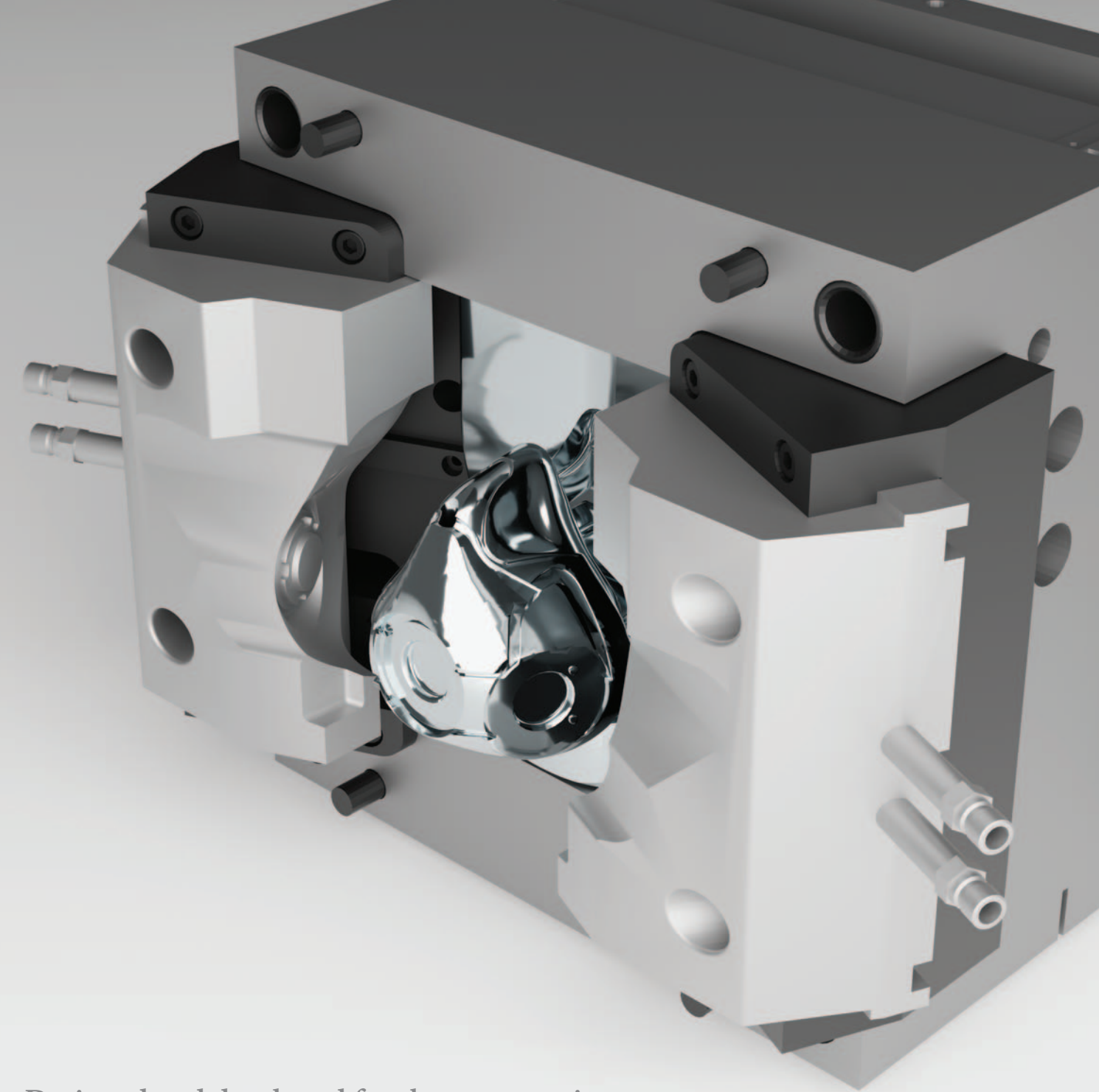
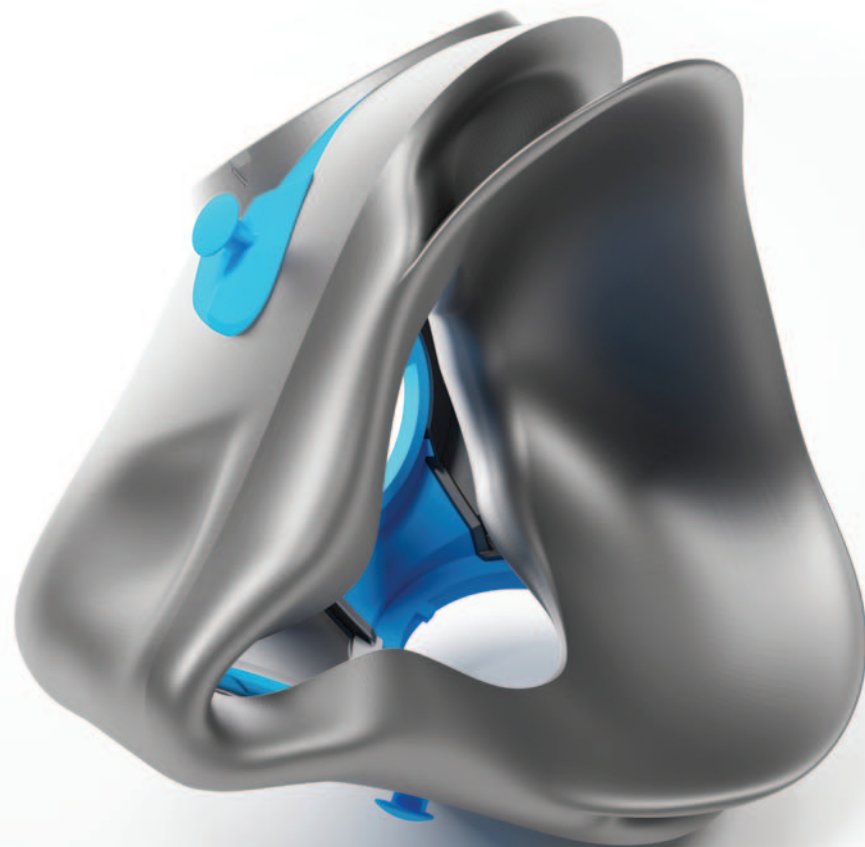
These principles have propelled HT Tooling to ongoing success and fostered an outstanding reputation. Our reputation for quality, reliability, flexibility, and unwavering integrity with our customers is a testament to our diligent efforts, both in achieving and sustaining it.

We are well aware that reputation hinges on the last piece of work delivered, which is why we are consistently motivated to provide world class, ultra-precise, highly efficient mould tools alongside exceptional customer service, without exception.

At HT Tooling, we proudly bear the label 'Made in the UK.'

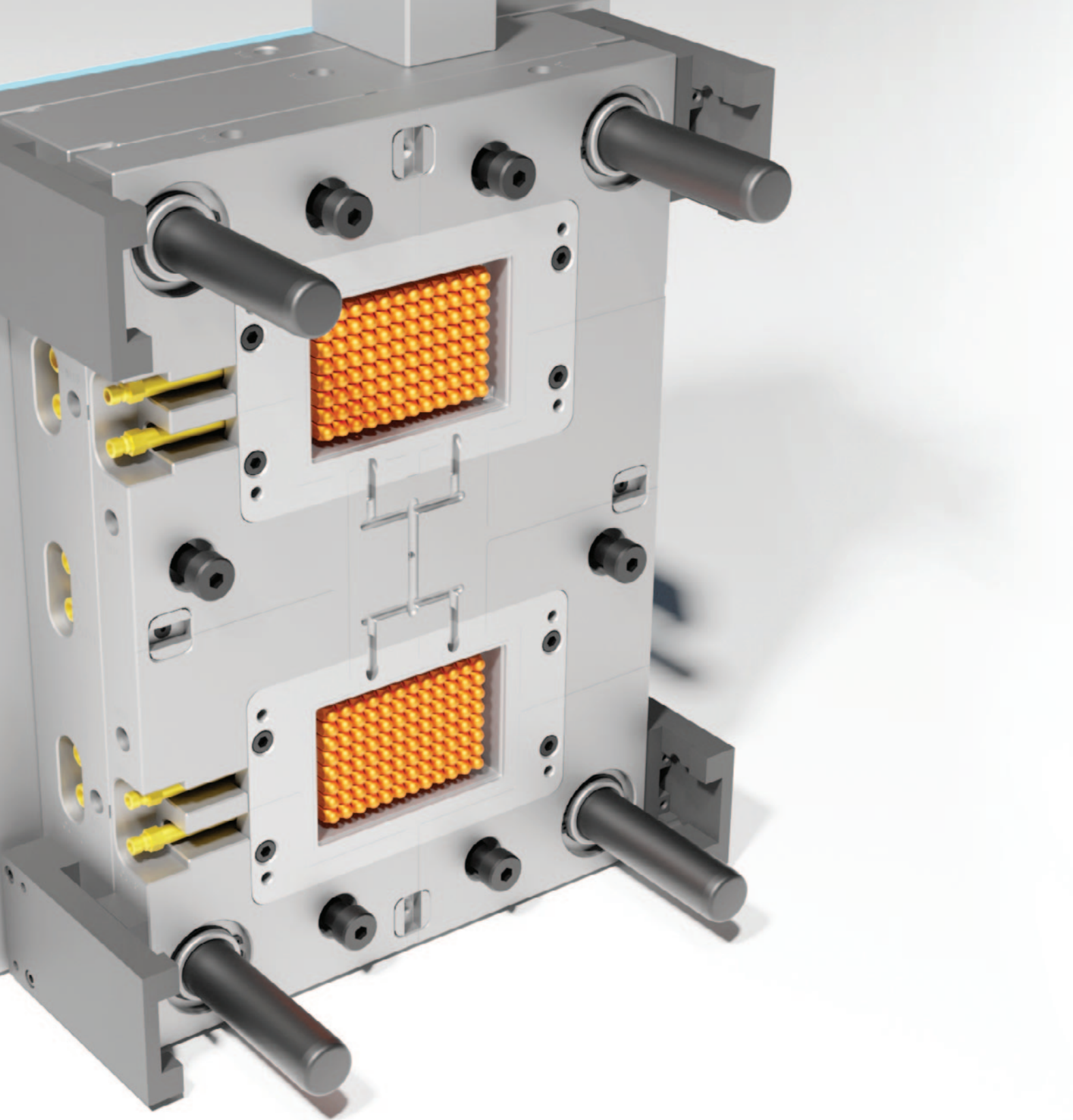






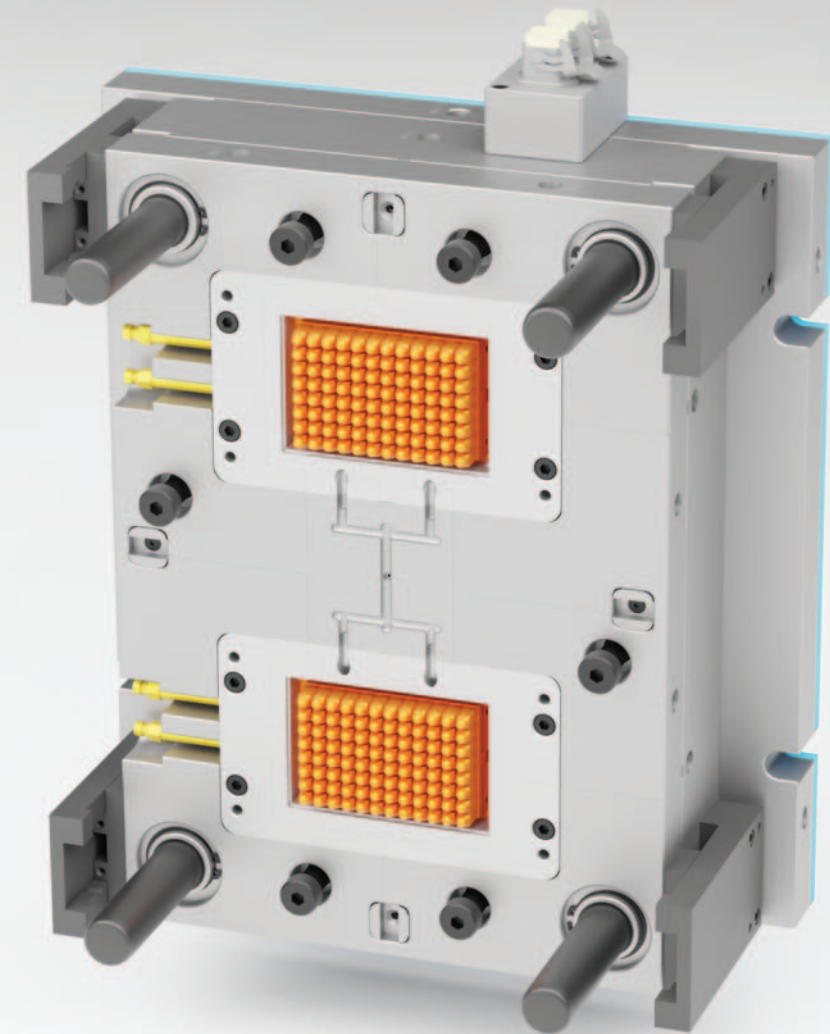
Designed and developed for the construction trade, this face mask tool employs TPE overmoulding on a previously moulded PP endoskeleton also crafted by HT Tooling.





This well-plate tool operates seam-lessly without requiring lubrication, and all steel components are crafted from stainless steel.

Precision in both dimensions and geometry was paramount for this component. As a result, Beryllium Copper cores were meticulously engineered with an intricate network of waterways beneath them, enabling the tool to produce flawlessly flat parts.



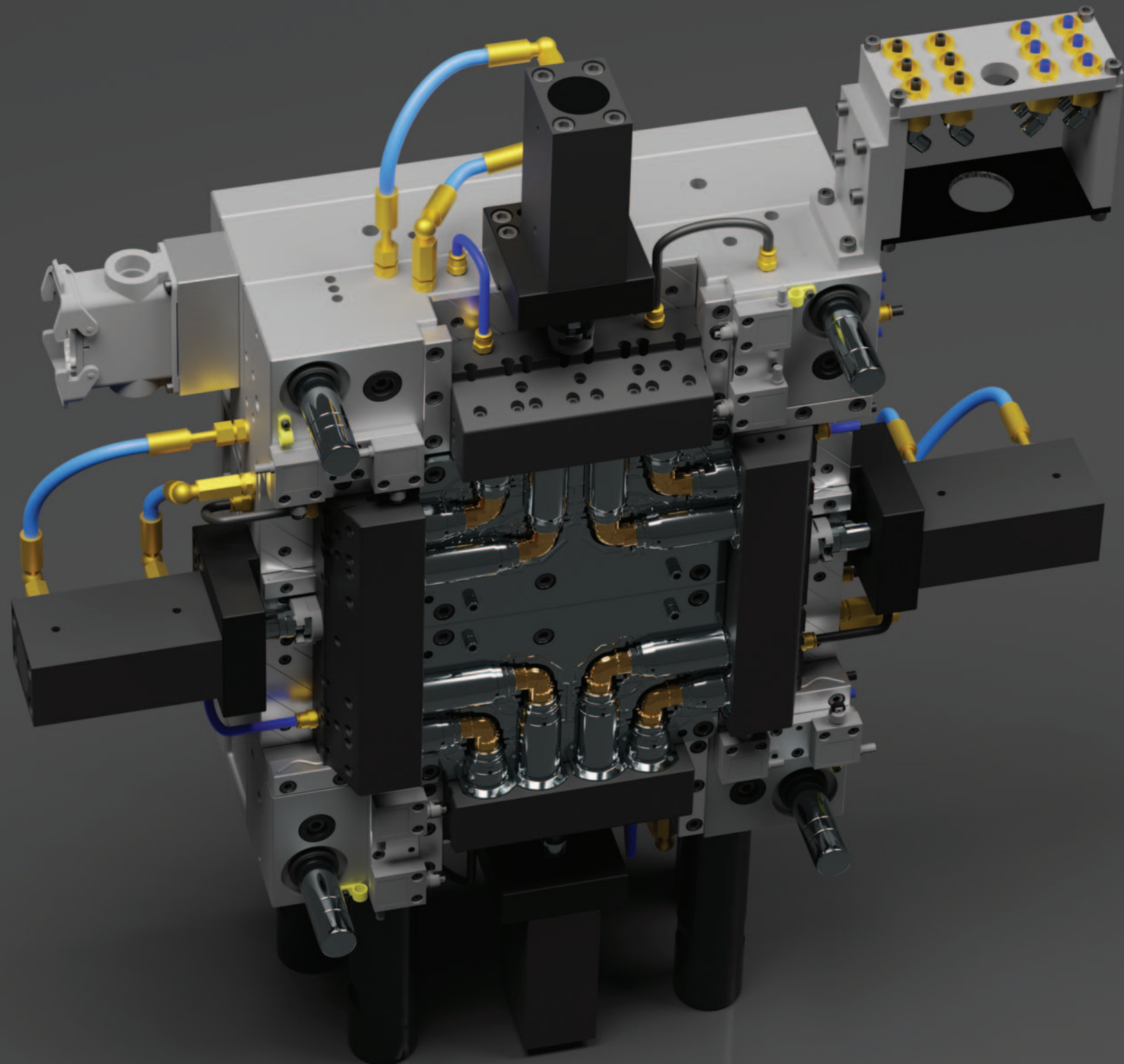
Every project commences with a thorough understanding of the client's needs what they aim to achieve, the desired timeline, and budget constraints. It's only after comprehending all these parameters that we embark on the project, initiating the journey with the design phase. Leveraging our in-house Markforged and 3D Systems machines, we can go a step further by 3D printing models of your parts before delving into tool design. This process includes a DFM analysis, ensuring the final part aligns with the client's vision and is feasible for manufacturing.

At HT Tooling Solutions, our in-house design department is a powerhouse of experience and expertise. We utilise top-tier software, including Cimatron from 3D Systems, specialised in injection mould tooling design. This software is optimised to facilitate the creation of the most efficient tooling design conceivable.

Our mould designs undergo additional refinement and optimisation through Finite Element Analysis software, Moldex 3D. This tool allows us to simulate the intricacies of the injection moulding process before the actual manufacturing phase. By doing so, we can thoroughly understand, assess, and optimise cooling designs, melt flows, packing, and warpage ensuring a flawless part before metal cutting.

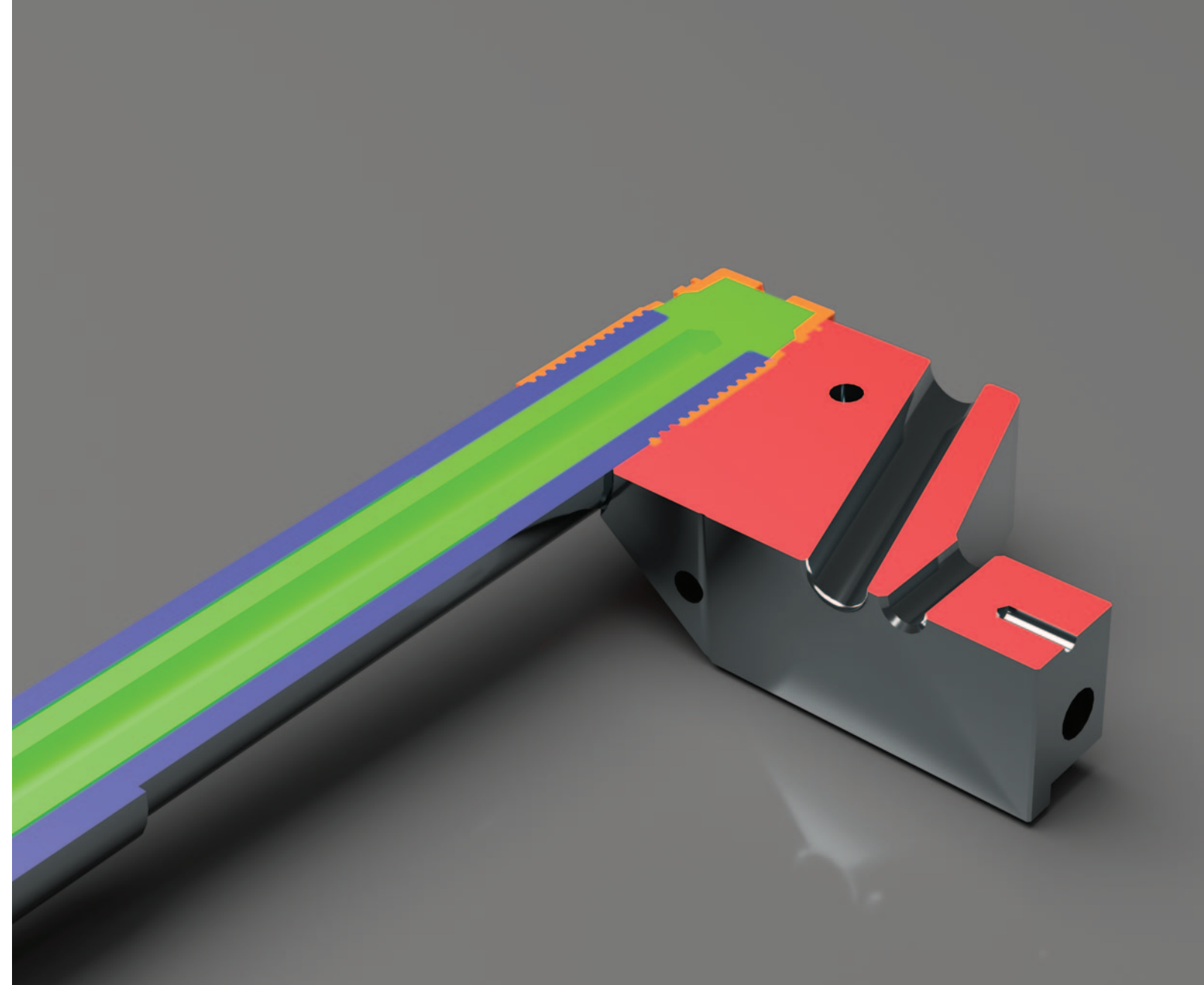
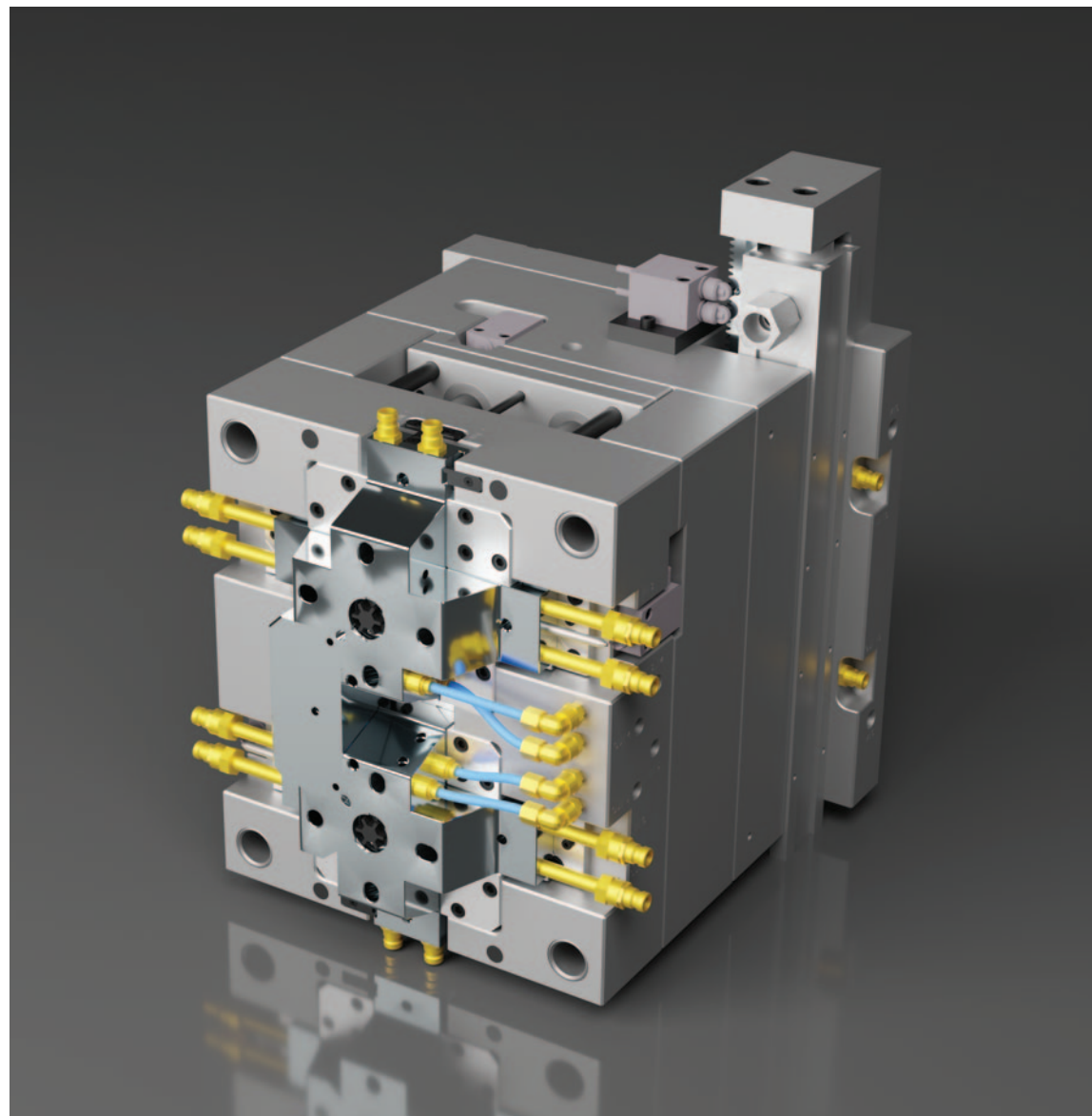
Once the tool design and mould flow have been approved by the client we can begin tool production.

By harnessing the capabilities of Moldex3D's cutting-edge cooling analysis technology and incorporating Beryllium Copper cores, this tool operates at a cycle time that was once considered unattainable.





To meet our customer's demand for a window in the side of an internally threaded part, we needed to devise an innovative approach to shut off the side core.

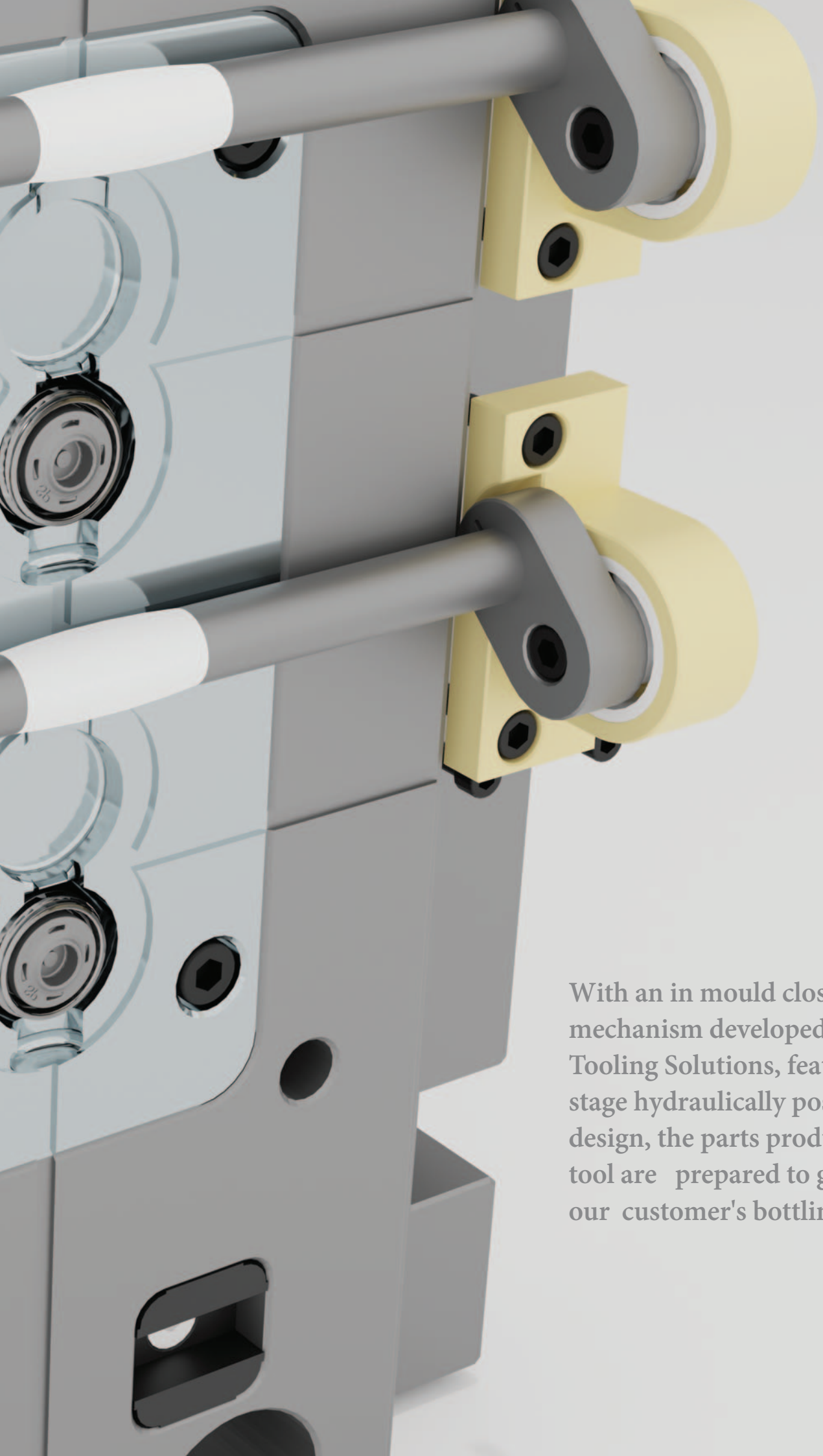


HT Tooling Solutions' state of the art manufacturing facility is home to a remarkable collection of high-end machine tools. Our commitment to staying ahead in the industry is evident through an ongoing investment program in the latest technologies sourced from leading machine manufacturers worldwide. We partner with the best Japanese, Swiss, and German suppliers to incorporate ultra-high precision machine tools into our diverse portfolio.

Our facility boasts the latest Mill/Turn technologies, featuring 3-axis and 5-axis simultaneous, high-speed milling machining centres. Additionally, we have EDM sink machines equipped with 24-station electrode tool changers, wire EDM capabilities, and more.

Within our dedicated graphite machining cell, three high-speed graphite milling machines produce ultra high accuracy electrodes. This capability is further enhanced by four state of the art multi-station EDM machines with full graphite capabilities.

The integration of this cutting-edge technology empowers us to deliver first class mould solutions with precision and punctuality. At HT Tooling Solutions, we pride ourselves on achieving excellence in mould production, ensuring timely and flawless results



With an in mould closing mechanism developed by HT Tooling Solutions, featuring a two-stage hydraulically positioned design, the parts produced by this tool are prepared to go directly to our customer's bottling plant.



Leveraging our extensive experience in the field of manufacturing technology, we have honed the ability to provide top notch, tailor made solutions for all applications and technologies within the industry.

Each solution we offer is meticulously customised to meet our customers' specific needs. We champion a two way, open communication approach, fostering a deep understanding of our customers' exact requirements. Our vision is to align precisely with our customers' desires. We tackle each unique solution as a distinct challenge, collaborating within our versatile, multidisciplinary technical team to conquer and achieve these goals.

Our highly skilled technical team excels at manufacturing to specific application demands, delivering comprehensive solutions. We are continually at the forefront of innovation, constantly developing fresh ideas, concepts, and harnessing emerging technologies to ensure the machined parts maintain the highest quality standards. They are ultra efficient, boasting dimensional accuracy, repeatability, and robust, stable processes throughout the entire product life cycle.

