

# LAMBERT ENGINEERING

## CASE STUDY

Lambert Engineering Ltd are known for providing automated special purpose machinery of the highest quality and performance to markets globally, ensuring the very best solution for their customers' needs, often pioneering untried products.

Ian Hampton, Technical Director for Lambert Engineering Ltd, emphasises that, "Good design is the foundation of our business and careful investment in the latest 3D design software is helping us to maintain our well-earned reputation."

Lambert Engineering Ltd has always kept a business technology lead to provide technical and competitive benefits to their customers. For example, they were one of the first design and manufacturing companies to move from the drawing board to a 2D computer aided design programme. This was supplied by AutoCAD who later introduced them to 3D design with a package called Inventor.

"The advantages of 3D computer-aided design over 2D were tremendous, but we needed a system that was bullet-proof in order to maintain our tight delivery schedules and high standards of customer communication." SolidWorks 3D was recommended to them by a contractor who had previously used this system successfully. Hampton continues, "We purchased SolidWorks from NT CAD/CAM who also came highly recommended and from the outset we have found SolidWorks to be a stable, mature and comprehensive 3D computer design programme that we can really rely on."

With NT CAD/CAM's assistance, SolidWorks has provided many benefits to Lambert's business: from design concept to machining and assembly. "Discussions of the design with customers using 3D images allows viewing from any angle, or even internally, enabling common and accurate visualisation of proposals. This has generated improved customer feedback, helping us to provide the best solution and ensuring that the customer and Lambert Engineering Ltd have certainty in the design and each individual machine's performance."

Lambert Engineering Ltd's policy is to keep all their manufacturing in-house to ensure quality, flexibility and speed of delivery. "Manufacture from CAD models aids quality and productivity; drawing and machine set-up error is eliminated and components are always right first time, so expensive materials are not wasted". Tool cost savings are also possible with SolidWorks. For example, jig nests that locate awkwardly shaped products previously had to be cast - sometimes several times over - to gain the required accuracy, whereas now they are machined directly from the 3D model in one attempt and quickly.

Lambert's Design team have also improved the final machine assembly, too: using SolidWorks clash detection and routing programmes at the design concept stage. Assembly is simplified and cabling paths planned, quality is assured and build-time is kept to a minimum. "SolidWorks plays a critical role in all stages of Lambert's design and production, bringing improved quality, efficiency and savings, whilst ensuring punctual delivery and value-for-money to the end-user".

Lambert Engineering Ltd currently have ten seats of SolidWorks 3D Office and continue to expand their SolidWorks capabilities each year with the help of NT CAD/CAM's local office at Leeds.

Hampton finishes, "NT CAD/CAM's training has been excellent and allowed individual design engineers to quickly come up to speed with the superior 3D product. SolidWorks and NT CAD/CAM certainly live up to the reputation they, too, have earned".