

Ceres Holographics



Automated Quality Control for Holographic Optical Element Manufacture

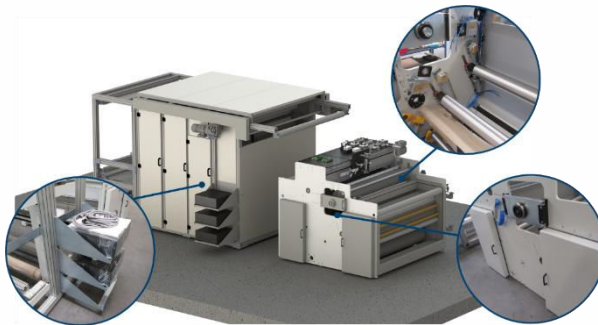
The Challenge - Delivering Next-Generation Heads-Up Displays

Ceres Holographics is a pioneer in the development of automotive heads-up displays (HUDs). Ceres collaborated with the team at Neon Innovation to secure a major European grant to commercialise a novel mass-manufacturing process for their unique Holographic Optical Elements (HOEs), which can be laminated into a widescreen to turn the whole screen into a HUD or transparent display. With interest from major automotive OEMs, there was an urgent need to remove a final barrier – inspecting the quality of millions of HOEs fast enough to meet production targets; a process currently done by hand.

The Solution - PixelCam and HoloCam

Ceres is developing two novel inspection tools that can analyse the 'pixels' within the master and copy holograms, identifying errors in a fraction of the time of manual inspection.

The unique and complex nature of the HOEs means significant technical risk for Ceres, and they approached Neon for help, securing grant funding for an R&D project to tackle these challenges.



The Funding

Neon's team secured a £358k grant from Innovate UK's SMART programme to help Ceres develop PixelCam and HoloCam. At the end of the project, they will be able to use the inspection technologies in tandem with their HOE production machine to meet the demand from customers.

The Impact

The impact of this project is enormous – with systems already on trial with several manufacturers, Ceres estimate they will achieve £76.8 million gross profit by 2028 and create 5,000 jobs across the supply chain.



18 months



£358,000 Grant



Ceres
Holographics Ltd
(UK)

neon
innovation