

# Integrated lab and extended reality solutions: the augmented future of lab asset management



CBRE pioneered the use of direct collaboration with original equipment manufacturers (OEMs) and on-site troubleshooting, driving forwards faster installation of systems, reducing downtime and delivering higher productivity for clients.

For our scientific clients, lab equipment downtime can not only destroy valuable samples and delay research; the cost of engineering site visits combined with replacement lab and technical equipment is a significant drain on scientific progress.

For one international pharma client, whose company comprises multiple large R&D and manufacturing sites throughout Europe and the USA, using CBRE's OEM-trained on-site engineers saved more than 112 days of system downtime, thereby saving 6 million samples over an 18-month period that would previously have been unrecoverable.

The service support program is unique to CBRE. CBRE on-site engineers are trained by OEMs in how to rapidly diagnose and repair the most common issues encountered by scientists using their equipment. Engineer training covers robotics, electrical, coding and software training is complemented with a suite of mixed reality tools. A HoloLens Mixed Reality headset allows engineers to diagnose and troubleshoot on their own devices and replace equipment parts where necessary, all while referring to virtual manuals that walk them through the procedures. The HoloLens headset is also integrated with Microsoft systems, enabling technicians to quickly engage with remote workers in any location, or calling in experts where needed without a site visit.

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Our collaboration with OEMs is enabling CBRE engineers to play a key part in system improvement initiatives. For one pharma client, CBRE delivered 18 system improvements over 18 months, 5 of which had been developed by CBRE specialists as a result of their unique holistic perspective in the support process.

The partnership program is not only delivering a more transparent service, the savings offer clients real value, as this example shows:

- Reducing wasted hours: For one pharma client, on-site CBRE engineers saved 112 site visits and the associated downtime over 18 months.
- Reducing carbon emissions: reducing OEM site visits not only reduced downtime but in addition led to a reduction of 403kg of CO<sup>2</sup> emissions based on standard vehicle calculations.
- Cost reduction: The company saved more than 7,000 consumables that would have been used in re-runs, secured more than 6 million samples and achieved a cost saving of approximately \$500,000.
- Further investment: For the OEM in question, the client perceived the service and system reliability to be of a high standard, which led to further capital investments and an improved brand reputation. This would not have been possible without having a trained CBRE engineer on-site.
- Higher output: In addition, the system uptime led to a higher productivity, resulting in higher scientific output for the department.

By drastically reducing the time between the systems being installed and ensuring they remain operational, CBRE is delivering the best possible outcomes for clients. Given the nature of these systems being designed in a way that allows for new equipment to be added and removed over time, this approach enables long term security moving into the future.

CBRE's partnership program with OEMs is providing a uniquely transparent and cost-effective service to the scientific industry that will reduce lab equipment downtime to an absolute minimum and provide more time for science to our clients.

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The three-way partnership where CBRE technicians work closely with both our in-house and OEM support has delivered real benefits to our High Throughput Screening (HTS) department.

Anonymous UK pharma client  
Associate Director, HTS

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