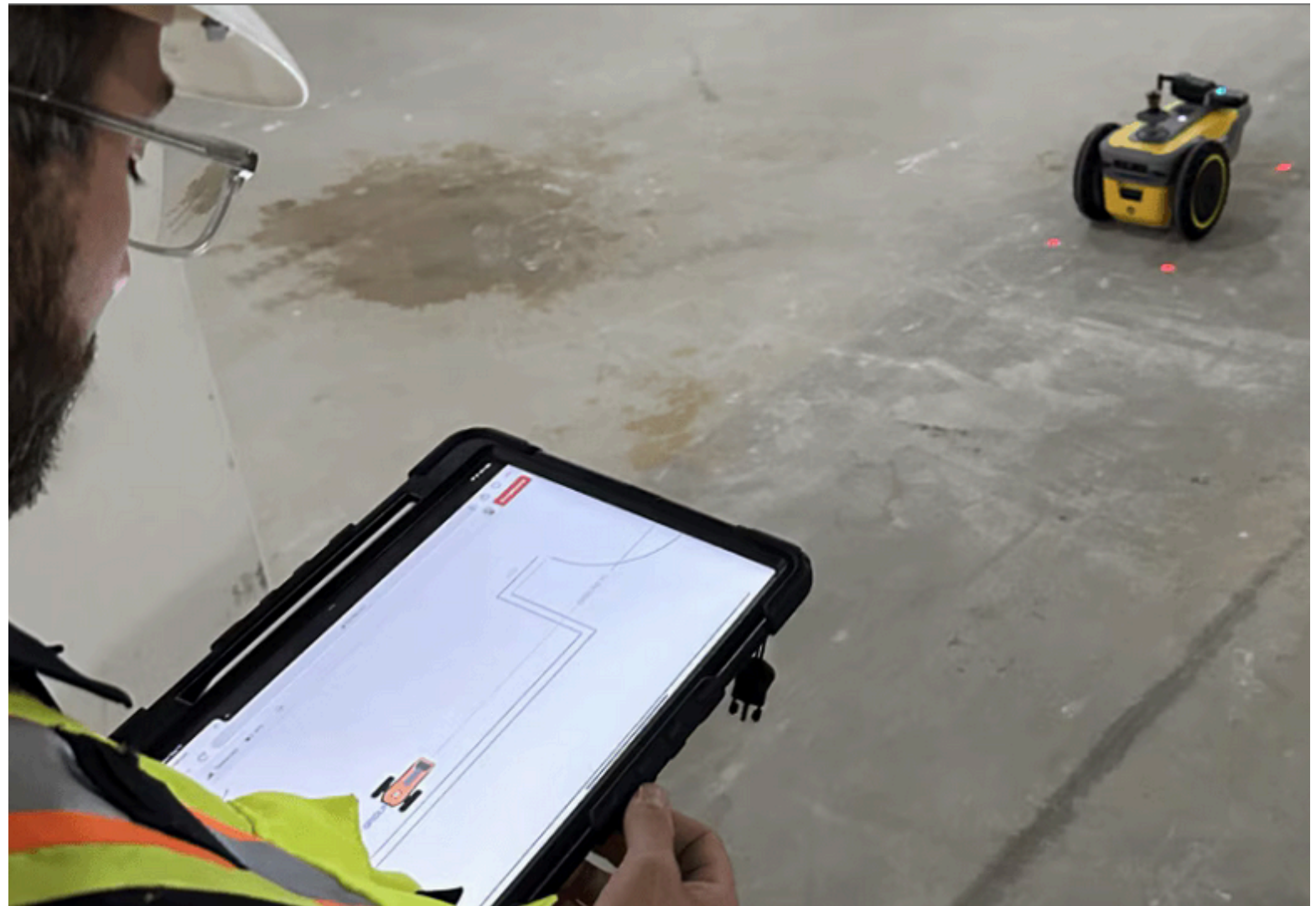


HP Site Print is an autonomous robotic solution that reads a fully coordinated 2D CAD file plan and prints it directly onto the floor of a constructed building.

It is an interior layout setting out application aimed at combatting the issue of clashes and defect prevention where there are multiple trades entering site at different times setting out internal works with inaccurate information. This includes all centre lines, door swings, MEP runs, sprinkler systems, pattrass locations, bathroom pods, walk ways, exclusion zones, the list is endless.



How HP Site Print works

For more information on HP Site Print please James Bayliss on james.bayliss@hp.com

HP SitePrint

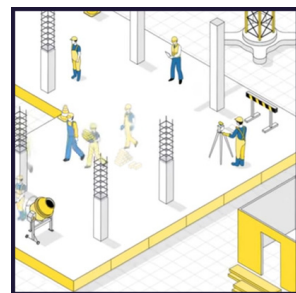


CAD preparation

The HP robot completes setting out projects accurately, allowing you to count on precise implementation of complex layouts printed directly onto the screed or any other floor finish.

The system algorithms assess the fastest way to print each plan. The robot is able to navigate uneven surfaces and LiDAR sensors scan for unknown obstacles that it needs to avoid. The robot is able to print within a dusty environment as it fires the ink into the base layer achieving considerably better results than spray painting or chalking.

The device is capable of printing not only lines, but other elements such as points, arcs and text, in a multitude of styles, colours and shading. This process not only offers workers with clear visual confirmation of project plans but also ensures unparalleled accuracy, effectively eliminating the potential for costly errors and revisions.



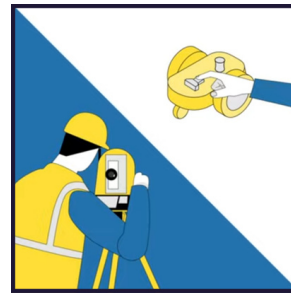
Site preparation

Typically HP Site Print enables setting out to be achieved 60% quicker than conventional methods.

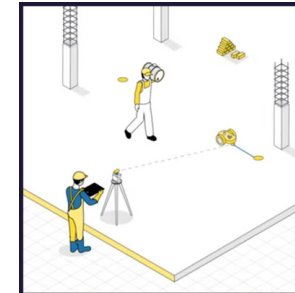
The HP site print system allows contractors to improve on site productivity. Reducing set out and labour costs with autonomous technology and saving time with printed text to enrich info on-site, and free up expertise to add value elsewhere.

The HP robot completes projects accurately. Allowing you to count on precise implementation of complex layouts printed directly onto the screed or any other floor finish. It can handle projects seamlessly with an all-in-one construction layout management solution, whilst being small and portable allowing it to be transported easily between sites.

The HP technology needs to integrate with total stations to ensure accuracy. They have integrated with three of the main brands, Leica, Trimble and Topcon in order to create a highly accurate and seamless setting out system.



Solution setup



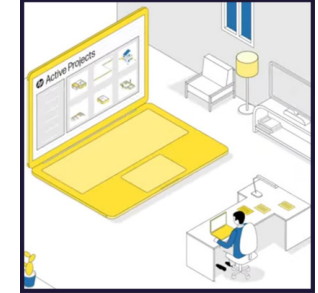
Job execution

Starting as an incubation tool within HP this technology was been officially launched into the UK and Ireland in July 2023 and is starting to revolutionise the internal setting out processes on large and complex developments. HP Site Print has been awarded, by the Innovative Product Awards, as one of the 2023 Expert's Choice for disruptive innovations.

With the end-to-end management via the cloud there is the ability to track and schedule works remotely allowing the robot to manage the setting out process autonomously.

At present the HP Site Print system is being used in a lot of large and complex buildings such as schools, hospitals, commercial office space as well as manufacturing and logistic plants and high-rise residential projects.

Contractors are able to purchase or rent this technology through a set of approved dealers. Full training support is provided as part of this arrangement.



End-to-end management

Contact us

If you have a project that provides outstanding benefits and demonstrates best practice to the standards of this case study please share your experience to the industry by contacting us at:

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