

ArtLab Studios 10x more productive with HP SitePrint for tradeshow Layout



Project background

- The Requirements: Lighting, sound and electrical systems design, plus customer machinery installation for a large tradeshow.
- The Project: Tradeshow layout at Messe Düsseldorf in Germany (a venue where some of the largest international trade fairs are held).
- Main Focus: Mark stand locations and positions for lighting, electrical, sound systems and for the industrial machinery that the customer was presenting at the show.
- Project Size: Measure and mark all required elements for a tradeshow in an 8,000 sq meter hall.

Highlights



10x more productive

with only one layout profesional compared to manual



2x faster

with more information on the slab. Compared to manual



Layout accuracy of better than 3mm

ArtLab Studios is a Berlin-based company specializing in lighting design and layout and event technology. Their expertise extends to project management, including control and logistics for event productions. The company provides a wide range of services including planning, lighting, sound, and electrical system design for architecture and events.

Setup for large events requires accurate measurements and layout for stand setup, lighting, and sound. Completing the task manually requires a large team working long hours. Since multiple workers complete the job using measuring tapes, the process is also prone to errors. When tasked with event setup at Messe Düsseldorf, the ArtLab Studios team decided to try HP SitePrint for a fast and accurate solution.

The Challenge

Planning and organizing a large event like a tradeshow require accurate and detailed measuring and marking in a short period of time. Setup time for a temporary event is typically limited due to the building's regular use or other temporary events occurring in the venue. Workers must complete an intricate layout process for all necessary systems, including lighting, sound, electrical equipment, and stand construction.

Typically, lighting design and layout require a manual process in which the layout crew uses printed floor plans to mark locations on the floor with markers, using measuring tapes for accuracy. The method requires skilled professionals to accurately interpret and mark the floor plans, making it time-consuming and vulnerable to errors. Incorrect measurements can create a domino effect, throwing off nearby settings and leading to installation issues.

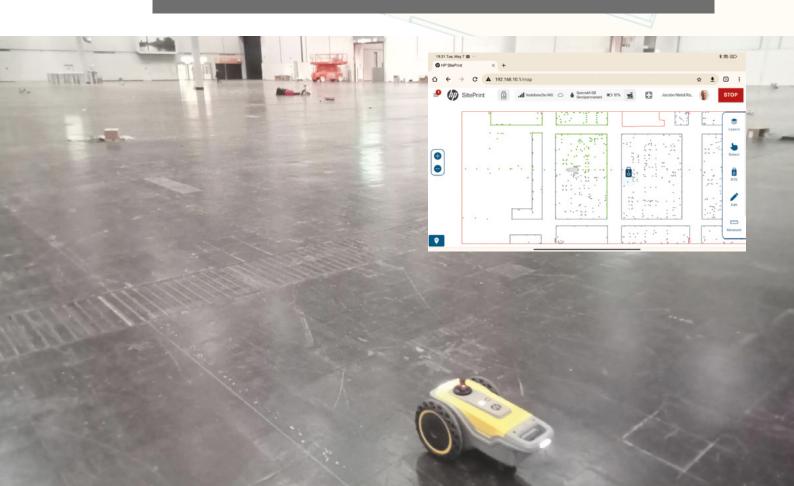
The Solution

ArtLab Studios needed a way to quickly and accurately lay out all the necessary systems for a large tradeshow, including lighting, sound, and electrical equipment for various displays, workshops, and presentations.

HP SitePrint proved to be a valuable solution for addressing the issues that typically occur with event setup. The Site Print robot uses CAD drawings as a single source of truth to automate layout, eliminating the need for paper floor plans and manual measurements. Instead of relying on 6 workers to perform laborious work over long hours without errors, the HP SitePrint robot accurately handled the job requiring only one operator. Since the robot marks continuous lines and adds printed text directly on the floor, the layout was generated with higher detail than the traditional method. The added detail facilitated quicker installation of stands, lighting, sound, and electrical fixtures.

The layout robot's speed was a stand-out factor in the improvements recognized by the ArtLab Studios team. Instead of requiring a full team to put in 16 hours for lighting design and layout, the work was completed in 9 hours, cutting time requirements by nearly half. The high level of detail in the printed floor plans passed time savings down to installation teams, allowing them to work more efficiently in less time.

I think it's a gamechanger product saving both time and eliminating many possible errors that could occur in an initial layout. - Eric Veenstra, Owner Artistic Director, ArtLab Studios



The Results with HP SitePrint

ArtLab Studios is a company well-known for creating accurate layouts under tight deadlines. However, they were impressed by the gains they achieved using the SitePrint layout robot.

Compared to the traditional manual methods, HP SitePrint saved the team substantial time and money.

- Total Cost Reduction: Cost reduction included reduced labor costs, and the elimination of costly rework that can occur due to errors.
- Total Time Savings: A more detailed layout was completed in just over half the time required by the traditional manual method.

Trade Shows always have last-minute changes.

HP SitePrint productivity allowed us to accommodate these changes without impacting the delivery of the layout.

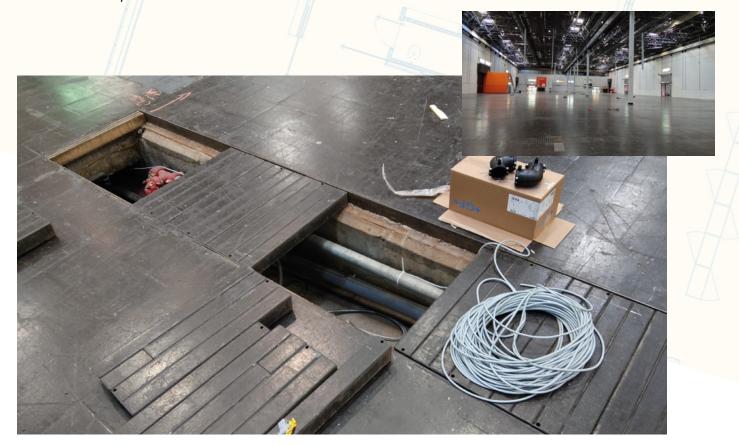
- Eric Veenstra, Owner Artistic Director, ArtLab Studios

Long Term Impact

ArtLab Studios first use of the HP SitePrint robot provided an exciting roadmap for company and industry-wide use of layout robots for temporary events in large venues. Such events have stringent requirements to provide participants with the necessary results, and lighting design and layout must be completed under tight deadlines so installation can immediately follow.

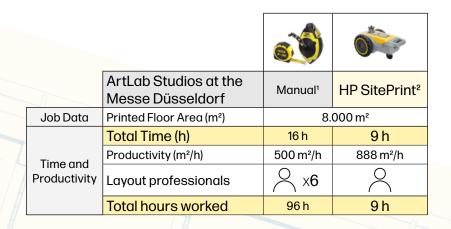
HP SitePrint's efficiency, accuracy, and ease of use make it an indispensable tool that can substantially reduce requirements for any type of event setup. Since the robot only needs one operator, team members can concentrate on other tasks to complete the entire job more accurately and in less time than traditional methods.

The detail of the plans adds another layer of convenience that extends to the installation team, enabling increased efficiency throughout the entire setup process. As a result, the SitePrint has the potential to become an indispensable tool in the industry.



Comparative Analysis

Consider this full breakdown of the savings and productivity gains possible when using HP SitePrint.



Manual 96 h HP SitePrint 9 h HP SitePrint 888 m²/h Manual 500 m²/h

10 Times more productive

2 Times faster

HP Proves to Be a Novel Tool in an Unexpected Industry

The word construction brings to mind images of permanent structures built with heavy-duty materials like concrete, wood, steel, and drywall. As a construction layout robot, the HP SitePrint excels at creating layouts for all types of construction projects including exterior and interior dimensions, electrical and plumbing layout, and other critical features.

Yet, when the same accuracy and detail are required to produce large events in temporary settings, this handy little tool seamlessly switches industries to provide incomparable results. Contact us to learn more about the HP SitePrint and how it can help you improve efficiency and accuracy to cut costs for your company.

² Data in the SitePrint scenario is gathered through robot telemetry



 $^{^1\}mbox{The computation}$ of time and cost is based on the customer's estimate of the duration it took to complete a similar project, along with the

average hourly rates of their layout teams.