



ADOPTION OF DIGITAL PROJECT SOLUTIONS BY TOUGH CONSTRUCTION

Location: Scotland

Sector: Construction

0330 678 0181

www.sunbeltrentals.co.uk/case-studies



SUNBELT
RENTALS®

ADOPTION OF DIGITAL PROJECT SOLUTIONS BY TOUGH CONSTRUCTION

Tough Construction works across a range of projects in Scotland for local authorities, housebuilders and commercial clients. The company has used a range of surveying equipment from Sunbelt Rentals across sites in Scotland for over 15 years, but was looking to implement more digitally focused 'connected sites'. This would allow Tough Construction to work smarter by reducing downtime, increasing productivity, increase cost savings and utilising streamlined communication methods.



THE CHALLENGE

It was evident that Tough Construction's workflows could be enhanced and the company was keen to readdress their way of working. However, the company's operatives were familiar with the surveying equipment and methods they had been using for a number of years. They were used to manually inputting setting out data and handing in sketches on paper. This led to inefficiencies throughout the Engineering Department as each Engineer had their own workflow and there were several different drawings in existence for each site.

It was a matter of instilling confidence in utilising state-of-the-art, surveying equipment able to instantly turn complex data into realistic and workable 3D models. Initially, Tough Construction's employees were hesitant about no longer inputting data manually and it was important to educate colleagues about how they could effectively work with electronic data and keep projects on track.

THE SOLUTION

We provided Tough Construction with a Digital Project Solution comprising multiple Leica Robotic Total Stations, GNSS smart antenna for accurate positioning, Machine Control Solutions and associated software. Alongside the equipment supply, we provided technical support and training, customer care, warranty and servicing packages.

This has helped Tough Construction to effectively adopt digital construction methods across their project base. The TS13 Robotic Total Stations allow Tough Construction to complete demanding measuring tasks out in the field without the risk of human error. The survey data is immediately transmitted to office staff and turned into 3D models.

PRODUCTS:

- Leica Robotic Total Stations
- Leica GNSS Smart Antennas
- Leica Machine Control and Software

▲ We were able to provide Tough Construction with a complete digital project solution alongside Leica Geosystems, but we went way beyond simply supplying surveying equipment.

We created helpful guides for Tough Construction staff and training was carried out with office staff to enable them to create data for Engineers out in the field. The training also covered the use of Machine Control equipment and all of Tough Construction's Plant Operators undertook practical training at our purpose-built Training Centre using our state-of-the-art plant simulator. The training even extended to site training on specific job sites. ▲

Alan Penrose, Technical Support and Training Manager, Sunbelt Rentals

▲ We have worked with Sunbelt Rentals for a number of years and when we were looking for a digital project solution, they were our first port of call. Everything has been first class - the equipment provided, the training and the technical support. Sunbelt Rentals and Leica Geosystems have guided us every step of the way - from the equipment we should use, exactly how we should use it and how we could get it out in the field as quickly as possible. ▲

Charlie Shearer, Head Engineer, Tough Construction

0330 678 0181

www.sunbeltrentals.co.uk/case-studies



ADOPTION OF DIGITAL PROJECT SOLUTIONS BY TOUGH CONSTRUCTION



The Leica Viva GS16 GNSS Rover allows Tough Construction to establish control, create co-ordinate systems and set up base stations to position Excavators and Dozers using Machine Control. The accompanying Leica Captivate software allows data to be viewed and used, providing a clear understanding of data in 2D and 3D views.

The Leica MC1 Machine Control Solution has enabled sites to become more efficient, helping plant operatives to work more accurately and enhancing safety. It is used for regrading work, digging of foundations, surveying and documenting soft ground areas that resulted in deeper excavations than originally planned. Using Leica's online cloud service ConX the design team are able to send the project data straight to the machine control system from the comfort of their office without the need to visit site, ConX then sends live as-built information back to the design team enabling them to produce detailed progress reports.

THE RESULTS

The solution provided by Sunbelt Rentals Survey and Leica Geosystems has transformed ways of working at Tough Construction. The company has now embraced digital construction, using online services for data sharing and digitally connecting sites. Productivity has increased significantly, workflows have been unified and drawings created in the office are being utilised by engineers who stake out directly from them.

▲ It's important when a customer invests in a fully digital Leica Geosystems construction solution that they look beyond the hardware to installation, training and ongoing support of their investment. Knowing the team at Sunbelt Rentals Survey in Scotland, I knew Tough Construction would be in safe hands, from concept to delivery with the added backup of Leica to support with their digital journey and ongoing success. ▲

**Gary Kelly, Regional Manager (Scotland),
Leica Geosystems**

0330 678 0181

www.sunbeltrentals.co.uk/case-studies

12/21/00922

