

# 3D MACHINE CONTROL FOR EXCAVATORS



# WORK EASIER, FASTER AND MORE SAFELY WITH MACHINE CONTROL

## No need for paper plans, manual grade checking or jumping on-and-off the machine!

Xsite® PRO 3D enables doing the work correctly at the first time, avoiding overcuts or undercuts. Work with centimetre accuracy without unnecessary interruptions.

All the project information and desings are displayed to the machine operator in real-time, in an easy-to-follow visual format.

**Xsite® Machine Control can be installed on any excavator.**



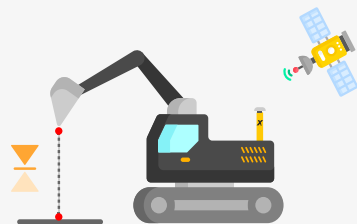
## XSITE® PRO 3D MACHINE CONTROL SYSTEM COMPONENTS



Components: Tilt sensor (optional), Bucket sensor, Boom sensor, Arm Sensor, Frame sensor, Display unit (8,4\"/>

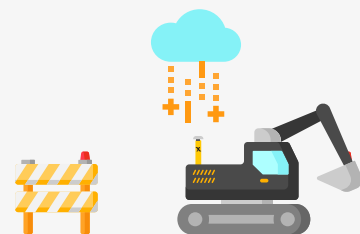
*See available accesories and optional components on page 18*

## Benefits of Xsite® PRO 3D Machine Control



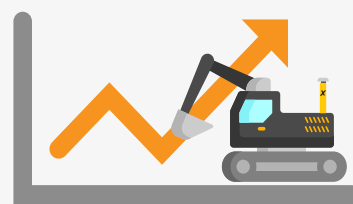
### NO OVERCUTS OR UNDERCUTS

With Xsite® PRO 3D, you'll always know exactly how much to cut or fill. Material and transportation costs decrease as extra materials are no longer needed.



### STAY CONNECTED

Always work with latest project plans. Desing models can be uploaded to the system with wireless data transfer automatically, so you can concentrate on productive work.



### INCREASE PRODUCTIVITY

Machine control system guides the machine operator in attaining the target plane quickly and easily. When the job is carried out properly the first time, you can save time, materials and fuel.

## Xsite® Antenna Masts

Xsite's antenna masts offer a new design and enhanced security.

The satellite antennas are fixed to the masts, making them less prone to theft and more stable.

To give a more uniform and complete look for your excavator, Xsite's antenna masts are available with four different colors.

The available mast colous are Xsite Yellow, Matt Black, Blue-Green and Orange.



Xsite  
Yellow

Matt  
Black

Blue  
Green

Orange



## BEST USABILITY FOR EVERY PROJECT

Whether you are working on a small construction site, or a large project with 3D design models, Xsite® PRO 3D will make your work easier, faster and more accurate.

# EASY TO USE. FOR REAL.

**Xsite® PRO 3D offers ease of use with intelligent features, real-time information and best customer support.**

### Built-in user guidance

Xsite PRO is full of intelligent features to make your work easier. Easy-to-follow guides are available throughout the system, helping you to utilize all the features you'll need to make your work more efficient.



### Unbeatable Efficiency

Xsite's compact G2 sensors offer extremely fast and accurate measurement. The rugged design also enables underwater usage.

### The Best User Experience

Xsite PRO 3D's easy-to-use and intuitive user interface, real-time information and professional support guarantee the best possible user experience.

With Xsite® you'll do your best work yet!



**Xsite®**  
MACHINE CONTROL



# XSITE<sup>®</sup> PRO 3D - USER INTERFACE

## CHANGE ACTIVE MODEL

Change quickly between different 3D models on your project. No need to browse through menus.

## PROFILE VIEW

The profile view shows your bucket's position in real time, in relevance to the shape/cut profile of the selected surface model.

## MEASURING VALUES

The system's dashboard shows you the numerical values of your measurement. e.g. how far the bucket is from the desired level.

## PROJECT INFORMATION

The status bar shows relevant project and system information.

## SYSTEM MENU

Easy access to main functions and customization options of the system.

Xsite<sup>®</sup> PRO

## YOUR MACHINE

A 3D model of your excavator visualizes movements, heading and the exact position of your machine on screen in real-time.

## MAP VIEW

The map view shows you your project and the location of your machine in real-time. You can change and adjust the view easily to your liking.

You can also select 3D models by "point and pick" directly from the map view.

## CUT / FILL GUIDANCE

Bucket corner indicators give you real-time information about the height difference between your bucket and the surface.

## QUICK BUTTONS

Set different functions to quick buttons to be used quickly without accessing menus. e.g. saving an as-built point or resetting your height reference

## PROJECT MENU

Easy access to project settings and functions related to your project.

## Customizable Views

Xsite PRO 3D's user interface can be easily customized to suit the operators needs.

## Familiar UI Gestures

The intuitive user interface makes the system very easy to use, even for operators with no prior experience of machine control.

# NO 3D MODELS? NO PROBLEM.

**Harness the efficiency of 3D machine control in smaller projects - Make your own 3D models easily from the cabin with built-in model tools.**

**Take full advantage from Xsite® PRO, even in smaller sites.**

With Xsite® PRO 3D you can create simple or more advanced 3D models from scratch without leaving the cabin.

This speeds up the construction process remarkably - No need for manual grade checking or waiting for a surveyor to visit the site.

A built-in guide helps you through the process step-by-step, so you can put your time to productive work!



## Add 3D models to an existing project

You've received 3D models for a project from the designer, but models for the pipe trenches are missing? No problem, with Xsite® PRO you can easily add self created 3D models to project designs.

You can create a pipe trench easily by using an existing line model as a reference, for example.

You can also duplicate an existing line, and set a new height and sideways position for it.



## Xsite® PRO Model tool -Features

- Create planes & slopes quickly
- Create cut profiles
- Add 3D models to existing projects
- Create line models easily
- Use existing lines as reference/ center lines for profiles
- Offset surfaces



Xsite® PRO enables you to harness the efficiency of 3D machine control even in smaller projects. The operator can easily create e.g. a simple model for house foundations using the built-in model tools. This speeds up the construction process remarkably - No need for manual grade checking or waiting for a surveyor.



With Xsite® PRO 3D, all the project information and designs are displayed for the machine operator in an easy-to-follow visual format.



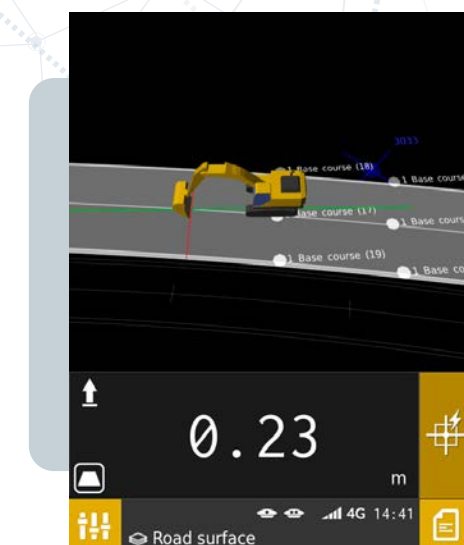
# COLLECTING POINT DATA

**Document as-built information from surfaces, cables, wells etc. with one simple touch.**

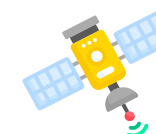
Documenting completed work, also known as as-built, is one of the key benefits of 3D machine control.

Documenting as-built with Xsite PRO 3D is made quick and easy for the operator. Just one simple touch, and the system stores an as-built point, with all the relevant information!

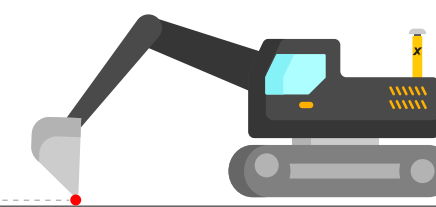
Collected point data can be automatically saved to Xsite® MANAGE cloud service.



X COORDINATE: 6782261.46,  
Y COORDINATE: 21530729.08,  
Z COORDINATE: 23.10  
POINT CODE: 109  
DESCRIPTION: BASE COURSE  
POINT ID: 10  
TIME: 08:24:20 DATE: 05.10.2021



As-built information documented with Xsite contains more information than just coordinates.



## Stake / Log points

With Xsite PRO 3D, the operator can also stake points or lines. This is especially useful when installing equipment that was not in the original designs.

The saved point data can be transferred wirelessly back to the designer or office.



# STAY CONNECTED

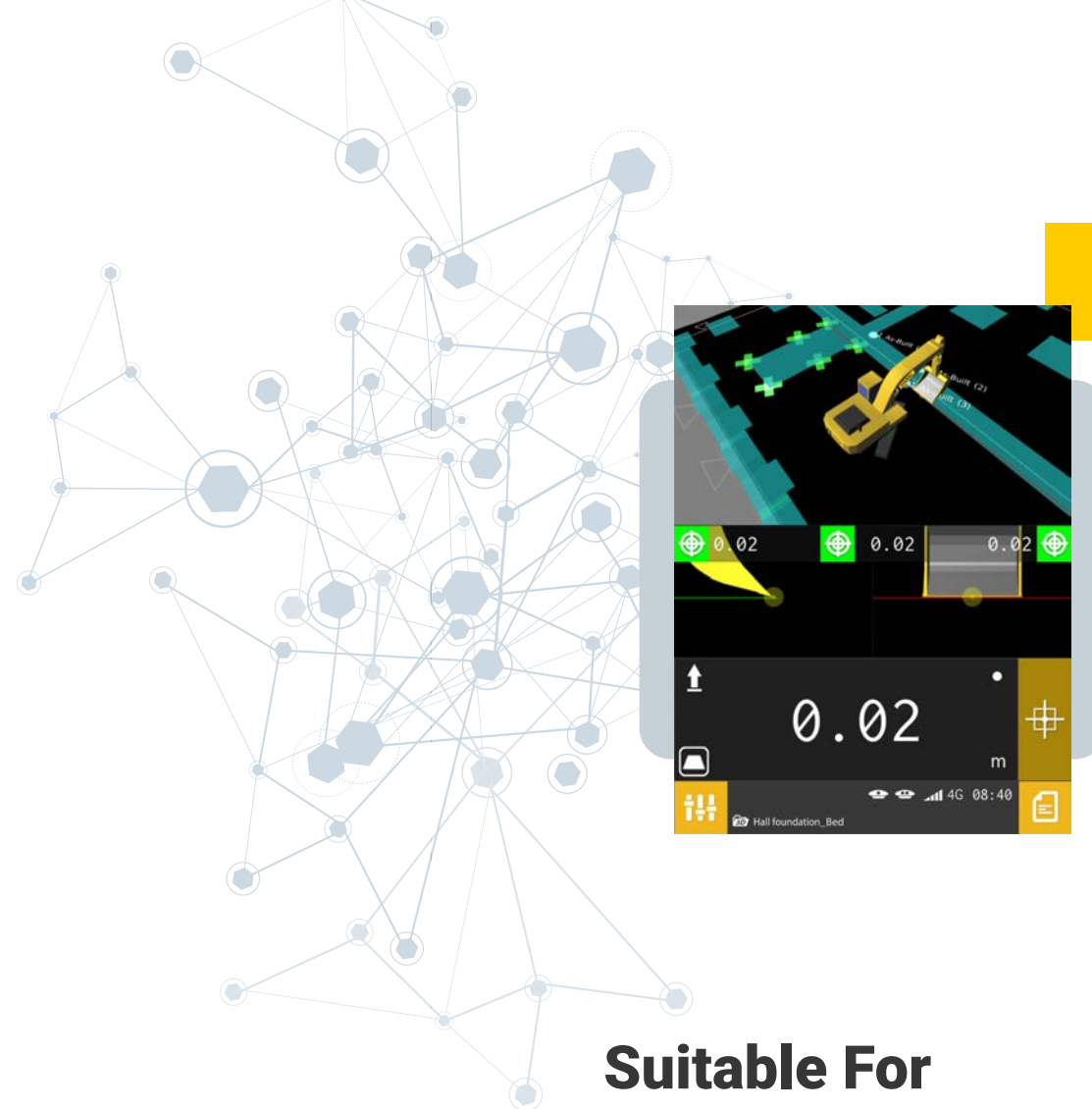
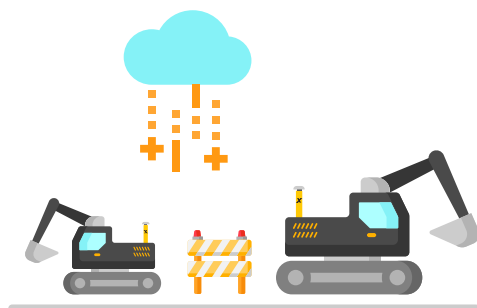
**Always work with latest project plans!**  
**Wireless data transfer enables the right information to be in the right place, in real time.**

## Automatic Data Synchronization

Fast information flow is crucial on a modern-day construction sites. With Xsite PRO's automatic data synchronization, the machine operator always has up-to-date project plans at hand.

In addition, the data collected with 3D machine control can be transferred automatically back to the office for quality control.

The same data is also available for site managers, surveyors, site-coordinators, and projects owners.



## Data Sharing Between Machines

Sharing data such as collected points is possible between Xsite® PRO 3D systems when connected to the Xsite MANAGE cloud service.

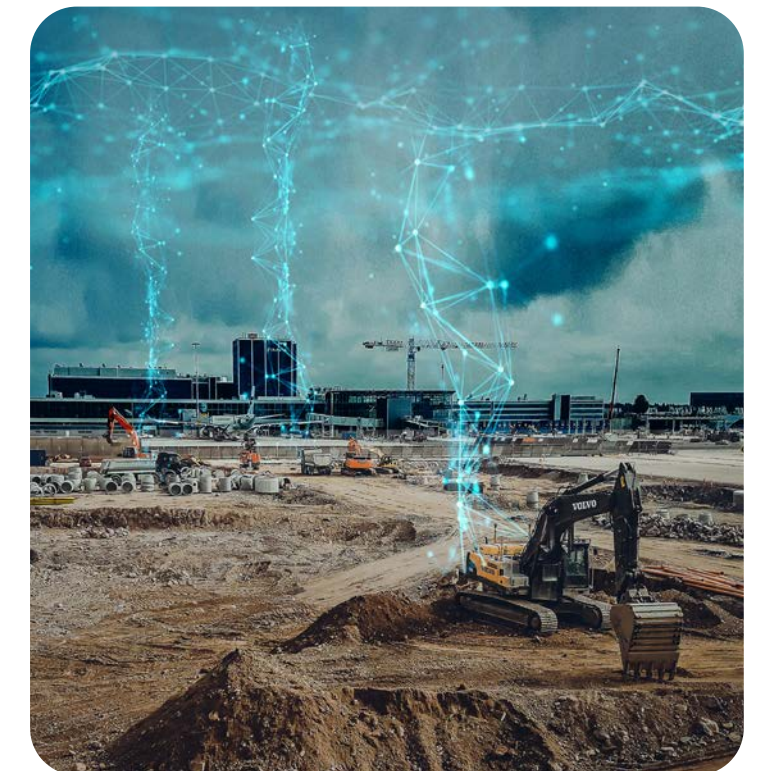
Points collected by other machines are easy to tell apart by their symbol and color.

## Suitable For Every Jobsite

Unlike many other manufacturers, Xsite® products are based on open standard file formats.

This means you'll be able to work in different projects and not have to worry whether the project models will work on your system.

With Xsite®, all 3D models will work automatically, from any designer, without unnecessary conversions or transformation tools.



## Supported File Formats

For the convenience of the operator and the designer, Xsite® PRO 3D supports open standard file formats: **.XML and .DXF**

# INCREASE SAFETY



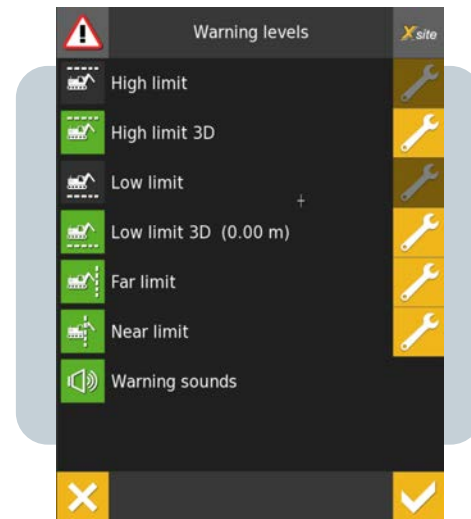
**Increase the safety of your work and co-workers with automated alarms.**

## Proximity Alarm

Xsite systems proximity alarm can be used for warning the operator when he is getting too close to existing structures or a powerline, for example.

## Work More Safely

When using Xsite PRO 3D Machine Control, there is no need to jump in to excavations or spend unnecessary time around the excavator. This helps avoiding dangerous situations.



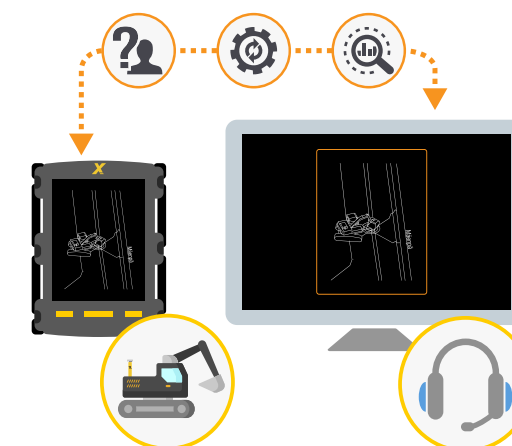
# BEST SUPPORT GUARANTEED

**Our friendly and professional support ensures that you can keep working smarter without interruptions.**

## Xsite® Remote Support Minimizes Downtime

To maximise the return on your machine control investment, the equipment needs to be ready for use at all times.

With remote support, your local Xsite support personnel can provide you with guidance or troubleshooting without having to visit the site.



## Help Is Always Available!

With Xsite you don't have to worry about learning all the tips and tricks at once. Additional user training is always available remotely or on site.

## Xsite® Remote Support

- Operator training
- How-to / Guidance
- Troubleshooting
- Software updates

## How Does It Work?

With remote support, your local Xsite support personnel can access your machine control system wirelessly, without visiting the site.

The support personnel can see your systems view on their own screen and operate the system remotely in real time.



# BEST 2D FEATURES INCLUDED

**Working with satellite positioning is not always possible. This is why Xsite® PRO 3D is equipped with the best 2D features on the market.**

In addition to being a industry pioneer in 3D machine control, we have developed our 2D solutions for over 30 years.

That said, it is a no brainer for us that our extensive 2D features are always included in our machine control solutions.

With Xsite® you can have the best of both worlds - with just a one touch of the screen.

## Xsite® PRO 3D - 2D features

- Plains & slopes
- Dual slopes
- Simple cut profiles
- Laser reference (height/slope)



## Extreme accuracy

2D mode is especially usefull in tunnels/ inside buildings, or when extreme accuracy is needed e.g. pipeworks.

With Xsite® PRO you can easily use worksite lasers for height and slope reference, and benefit from comprehensive 2D features when needed.

# TIME TO GET PERSONAL

**Xsite® PRO 3D offers the operator an easy access to customize and modify the system's user interface.**



## A menu that makes sense

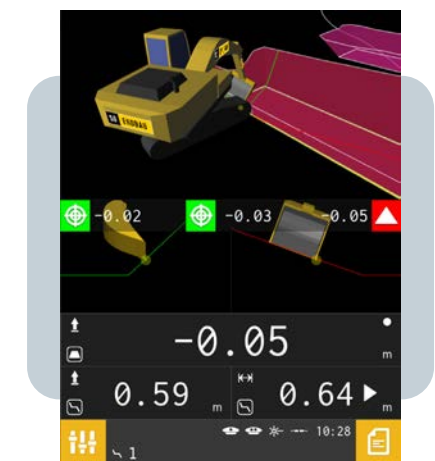
Xsite® PRO offers a clear main menu that is easy to navigate. All the important functions are easily accessible.

## Transform it to your liking

Customizing the system's UI and views to serve your needs on site is made simple and easy.

### Customizing options

- Edit dashboards layout
- Show/hide main view elements
- Set user profiles
- Set quick button functions
- Edit LED-display settings
- Change measuring units



Adding your company logo to the system's machine model is also possible with Xsite® PRO.

## Don't need it? Leave it out.

Xsite® PRO's main view can be easily customized to suit the operators needs in different projects.





# ACCESSORIES FOR XSITE® PRO 3D

Enhance productivity and safety with additional accessories



## TILTROTATOR INTEGRATION

Connection between the Xsite system and a tiltrotator. Available for:

- Engcon
- Rototilt
- Steelwrist
- SMP
- Marttiini



## JOYSTICK INTEGRATION

Use the main functions of the machine control system directly from the excavator joystick.



## DREDGING KIT

Extra protection for sensors and cables of the system, for extremely demanding environments.

## Optional components



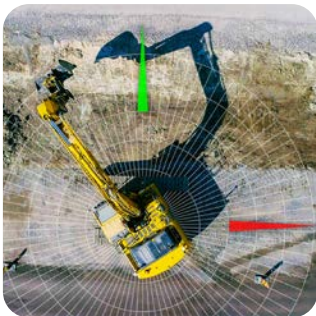
## XD2 LED-DISPLAY

LED display guides you to achieve the target level. Easy to follow from a corner of your eye.



## EL3 LASER RECEIVER

Take advantage from a worksite laser with EL3 receiver. Durable design with large reception area.



## GNSS COMPASS

Xsite's GNSS compass provides accurate heading of your excavator in 2D mode.

# SPECIFICATIONS

Xsite® PRO 3D - For excavators

### DISPLAY

Size:	8,4"
Type:	Touch / TFT-LCD
Multitouch support:	Yes
Antiglare panel:	Yes
Mounting:	RAM mount
Connectivity:	2 x USB

### SENSORS

IP rating:	IP 69K
Internal heating:	Yes
IMU:	Yes
Connectivity:	CAN-Bus
High durability:	Yes

### SATELLITE POSITIONING

Dual GNSS:	Yes
Constellation support:	(Multi) GPS, Glonass, Galileo, BeiDou
Correction types:	NTRIP (All vendors), Radio
Correction formats:	CMR, CMR+, sCMRx, RTCM 2.1, 2.2, 2.3, 3.0, 3.1, 3.2

### FILE FORMATS

Xsite® PRO 3D supports open standard file formats:

.DXF and .XML

### CONNECTIVITY

Wireless data transfer:	Yes
Remote connection:	Yes
3 <sup>rd</sup> party cloud services:	Yes
Mobile data	2G, 3G, 4G (Via regular SIM card)
Other:	2 x USB (Suitable for manual data transfer)





Join our community!



@xsitemachinecontrol

## BRING OUT THE BEST

Xsite® Machine Control improves the productivity and accuracy of your work at every stage of your construction projects.

Cut your operating and maintenance costs, increase work safety and bring out the best in your staff and fleet!

Find your local Xsite® dealer. Visit:  
**[XSITEMACHINECONTROL.COM](https://xsitemachinecontrol.com)**

### Need something else?

Xsite® Machine Control systems are **developed together with our customers, machine operators and construction companies** all over the world, to provide the best systems for any construction project.

Don't hesitate to contact your local Xsite® dealer for any feedback or development idea on our products.

**Xsite®**  
MACHINE CONTROL