DIG ASSIST
Volvo Excavators
Excavating the easy way – with the latest Dig Assist

Levelling sites, digging trenches, grading slopes – or creating site profiles – all have never been easier, thanks to the Dig Assist machine control system for excavators, from Volvo Construction Equipment. The Award-winning Volvo Co-Pilot with Dig Assist combines the latest location technology, sensors and an in-cab tablet to boost excavation accuracy and efficiency.

Dig Assist makes every operator your best operator – maximizing machine productivity.

Discover the capabilities of Dig Assist - powered by Volvo Co-Pilot
http://opn.to/a/QXpxB
Start
Intended for site levelling or profiling slopes, Start clearly shows operators when depth targets are reached. With no need for out-of-the-cab manual checks, safety is also improved. Start promotes high levels of accuracy, faster completion and less under/over excavation. Operators of any skill can become more productive.

In-Field Design
In-Field Design uses advanced sensors and GNSS (GPS) for accurate digging. The operator can define trenches or complicated shapes in 3D on the cab interface so that surveyors do not need to mark out the dig site.

3D
3D enables access to respected site preparation applications by industry leading 3D solutions suppliers. Design profiles can be imported from external sources (e.g. civil engineering design plans) for project execution. 3D is ideal for complex or larger infrastructure projects.

On-Board Weighing
Dig Assist can include a load weighing system to give a precise reading of each bucket weight. Operators can set targets by truck/hauler type to guarantee optimal loading. The system only counts bucket dumping in a pre-defined truck loading zone. Total tonnage moved is also recorded (e.g. per shift or day).
**IMPROVE PRODUCTIVITY BY 30%**

Volvo Co-Pilot offers a simple and cost-effective way into machine control. The in-cab tablet and inertial measurement units ensure perfect synchronization between the display and bucket. Operators can easily set parameters and work up to 30% more productively. Everyday tasks like levelling and creating slopes are transformed.

It can easily be upgraded, and third-party designs can be imported without the need for time consuming setting out. The system works seamlessly with On-Board Weighing, tilt-rotator support and Volvo Smart View.

**Volvo Co-Pilot**

Volvo Co-Pilot is a cutting-edge touchscreen tablet that powers all Volvo Assist platforms, to more easily complete tasks in less time. Simple and intuitive, operators can set up projects in just a few seconds and safely monitor progress as the job gets underway, with on-screen set height and depth alerts. On-screen alerts show when pre-set parameters are met.

A SIM card in the Android-operated tablet enables automatic, wireless software updates via a 3G network. An external modem can be used to get 4G connectivity.

**Levels**

Sensors calculate the distance from the bucket tooth to the target level. With Start, the Volvo Co-Pilot displays when more digging is necessary, and when the target level is reached.

**Slope**

Longitudinal and cross slopes can be created and monitored in the Co-Pilot. Offers the ability to work a slope out, even where the operator has no view (E.g. underwater.)
In-Field Design – take on more challenges

In-Field Design opens up a much wider range of tasks, such as trenching, road preparation, foundations and complex earthworks. It also enables 3D performance at local level, by letting operators create shapes and map out a job from the cab. The machine can even leave the jobsite and save the project for later. When coupled with Real Time Kinematics (RTK), Dig Assist can enhance the precision of data from satellites.

As easy as 1,2,3...

1. Create profile
2. Create profile path
3. Align profile
4. Get to work!
Tackle large and complex infrastructure projects with full three-dimension functionality. A software upgrade enables the Co-Pilot to run industry leading 3D solution suppliers applications (an extra-subscription to their application for Dig Assist is required).

Working with leading industry partners gives the ultimate flexibility – customers can choose the system they are familiar with. Offering a ‘plug and play’ solution, 3D allows designs (from surveyor/project designer) to be uploaded and is compatible with partners’ advanced site and project management solutions for productivity gains across any construction site. 3D provides the tools to be more efficient and accurate.
Giving you more

Volvo Smart View

Thanks to multiple cameras, Volvo Smart View gives a virtual 360° all-round view from a bird’s eye perspective. Improving safety, the image can be shown on the Volvo Co-Pilot tablet or on the machine LCD monitor.

Tiltrotator

Volvo Dig Assist integrates all the Steelwrist® tiltrotator’s possible movements into the machine control system. (Steelwrist® is a registered trademark of Steelwrist AB)

Tiltable bucket

Simply adding one additional sensor allows for a tilt bucket to be incorporated into Dig Assist applications.

Supported by Volvo

Giving the assurance and performance of an integrated system, Dig Assist components, hardware and software are factory fitted and fully supported by your Volvo dealer. Your one-stop-shop local partner is also on hand to provide software updates and can upgrade the system to more Dig Assist applications as they become required.