



Moba GS 506

+

Moba 3D

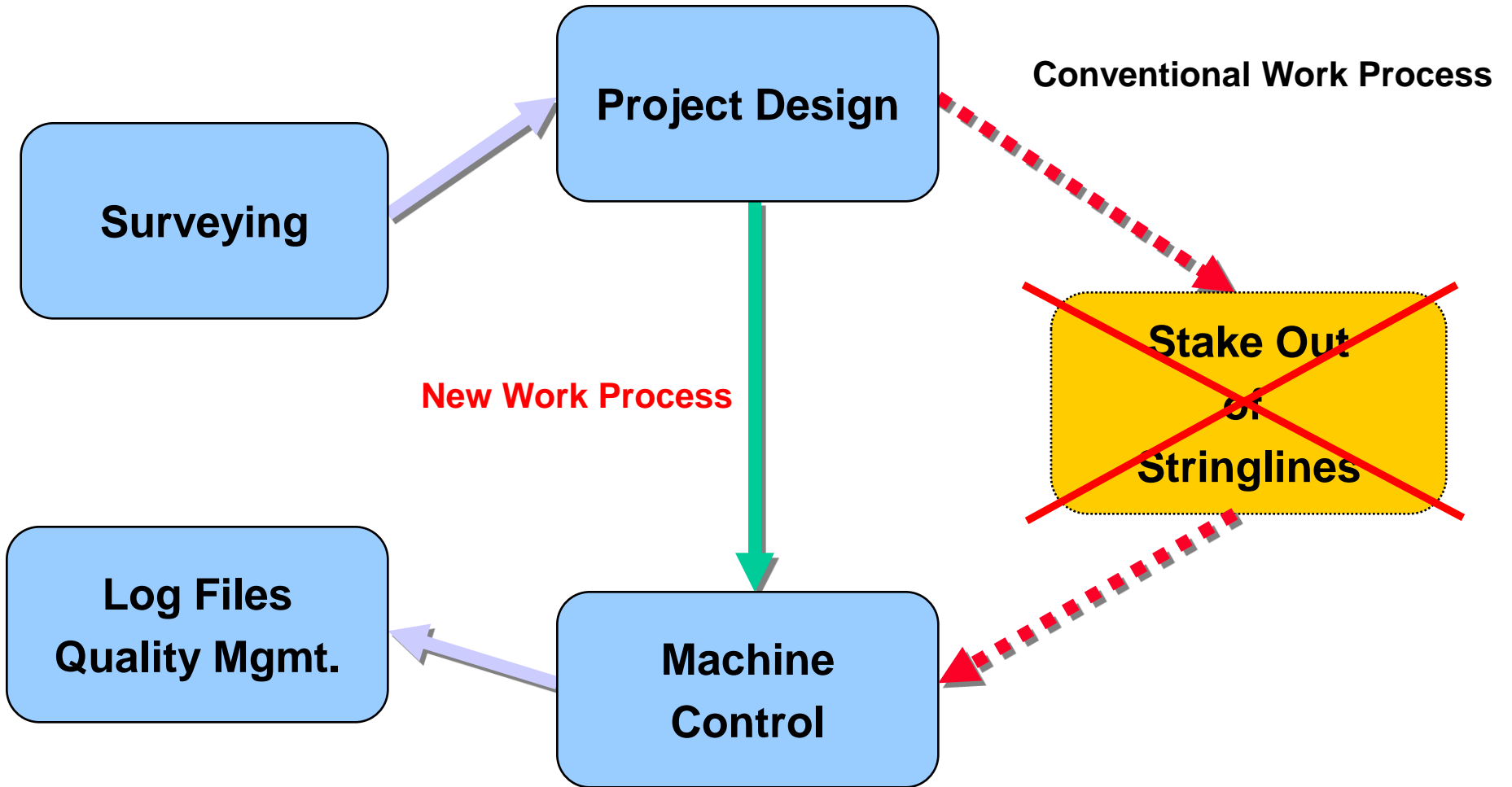


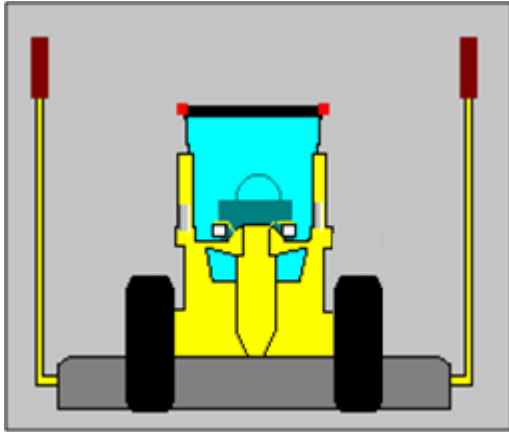






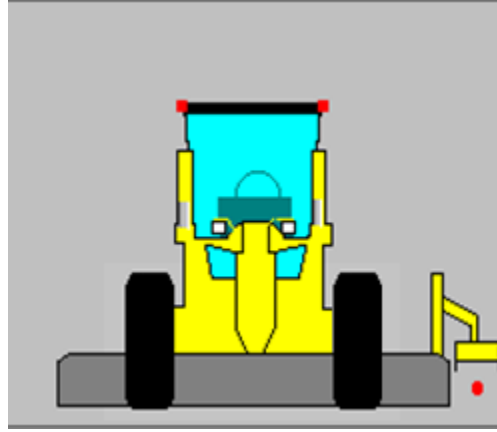
Application *pcX 3D*: Gebr. Meyer, Balancing areas Hanöversand, EADS





System with Rotation Laser

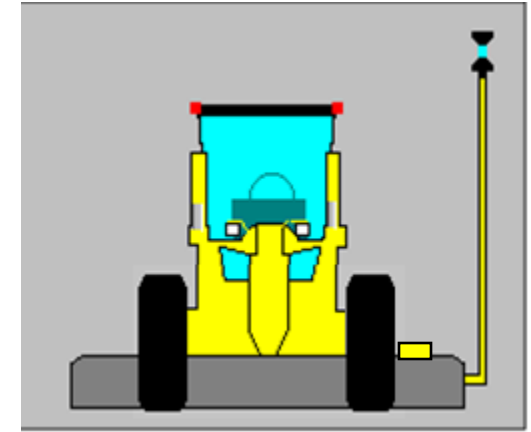
Absolute measurement
Flat and inclined surfaces



System Ultrasonic

Absolute measurement
with stringline

Relative measurement to
reference surface

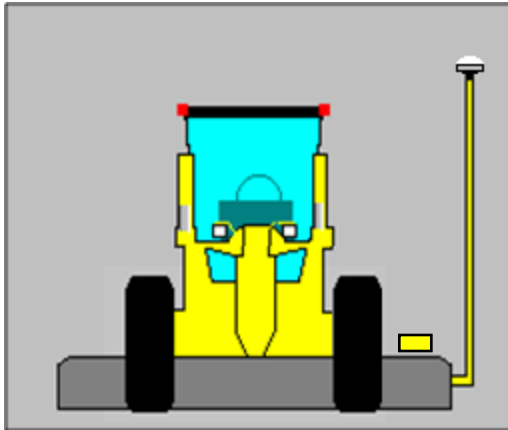


3D System

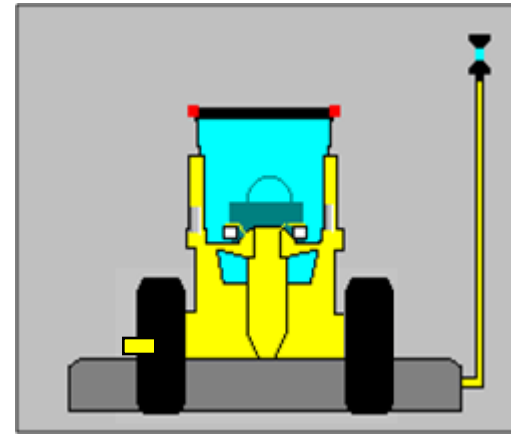
Absolute measurement
of any curved surface

Further options:

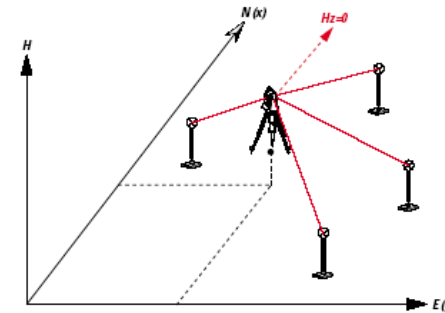
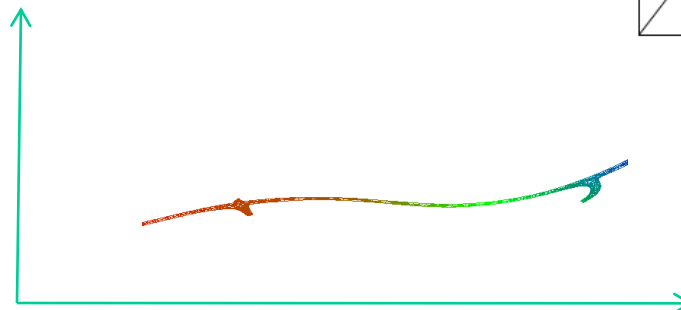
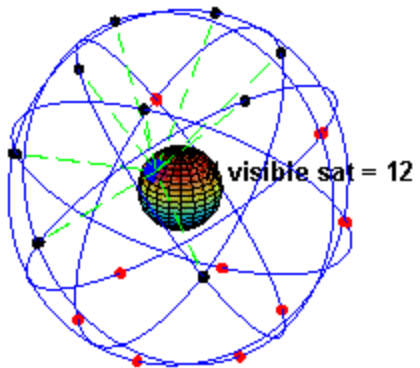
- 1 Laser Receiver + 1 Cross Slope Sensor
- 2 Ultra Sonic Sensors
- 1 Ultra Sonic Sensor + 1 Cross Slope Sensor
- 3D Prism combined with Ultra Sonic Sensor

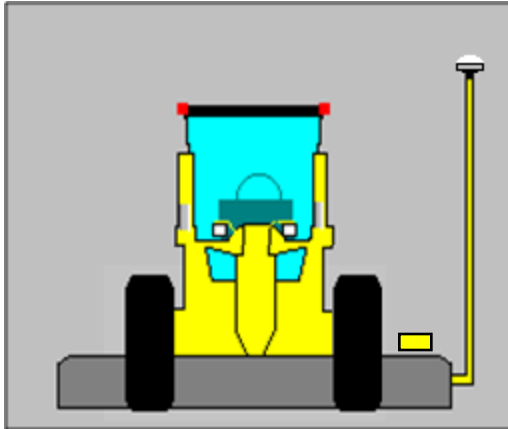


3D System with GNSS



3D System with Robotic Station





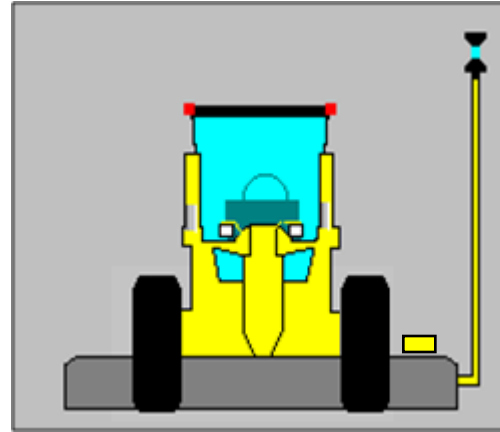
3D System GS with GNSS

GNSS = GPS+Glonass
NMEA Standard

+ Easy to use

- Lower accuracy
- Requires open sky (360)

Dozer, Grader(US), Compactors



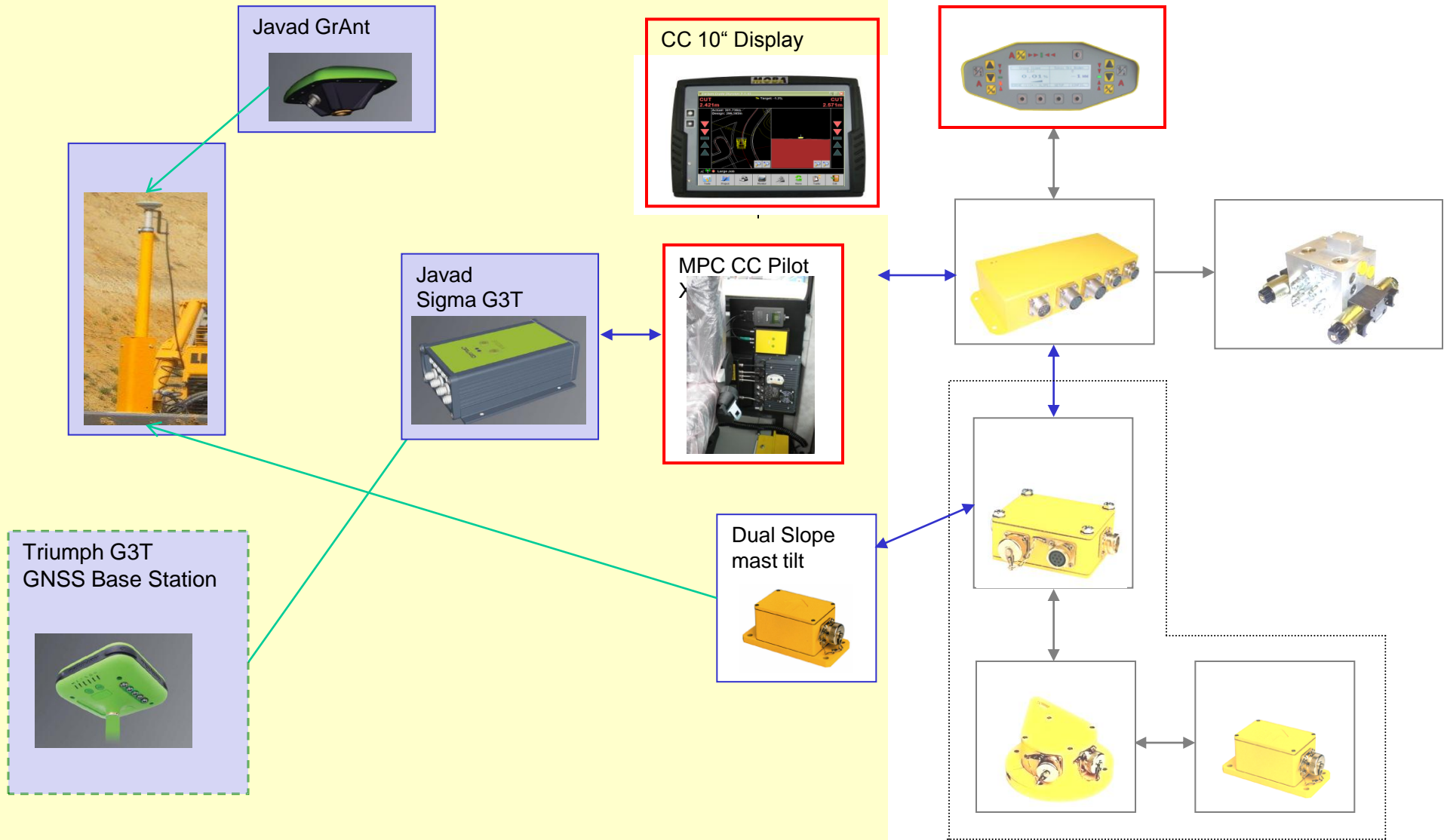
3D System TS with Robotic Station

+ High Accuracy

- Requires free line of sight
- Daily setup of Total Station
- Weather condition can affect accuracy
- Fast moving machines can loose lock

Paver, Milling Machines, Grader (EU), in Tunnels

3D GS Components required to upgrade GS 506







MPC CC Pilot XL





**Project Data to the
Machine Computer**

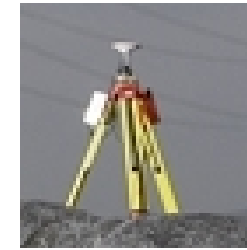


No more Stringlines

No workers around the machine



Project Data
via Memory Card
or USB Stick



RTK Signal

Comparison of Position
With Project Design Data



**Height- and Position-
Deviation**
sent to GS506 Controller



Control of Hydraulics



GNSS





- Not any longer analog data on construction sites
- design data in standard formats 3 dimensional (DGM)
- 3D machine control at big earth moving sites anyway
- **New, now and in future:**
 - **all job site indpending from size and location would be prepared in 3D**
 - **or prepared at place by the construction teams with GPS and field software**

- Machine automation got more and more the standard
- GNSS is coming very strong on dozer, excavator and grader
- User for other machines asking for: pulling blades for tractors, asphalt paver, milling machines, curbers etc.

- High investments (60 000€ for a GNSS dozer control without base station)
- Additional cost for base station (15 000€)
- Design data not available for smaller projects
- Effort and survey knowledge to setup a job site GNSS location

- High investments (60 000€ for a GNSS dozer control without base station)
 - Costs moving down slowly imaginable is 25 – 35%
- Additional cost for base station (15 000€)
 - Replaced by GSM RTK reference signals
- Design data not available for smahler projects
 - Produced on place by outdoor survey solutions with CAD functionality
- Effort and survey knowledge to setup a job site GNSS location
 - Not any longer necessary with a RTK referenc signal

- 100 % availability everywhere!
 - Not any longer RTK losts
- The height component of the coordinate is mainly deciding
 - 1cm must be guaranteed
- No measurements for job sites setups
 - Location sets





● **Take the machine to your site**

● **Start the system**

● **Got the data files by the radio**

● **Start work**



Questions?