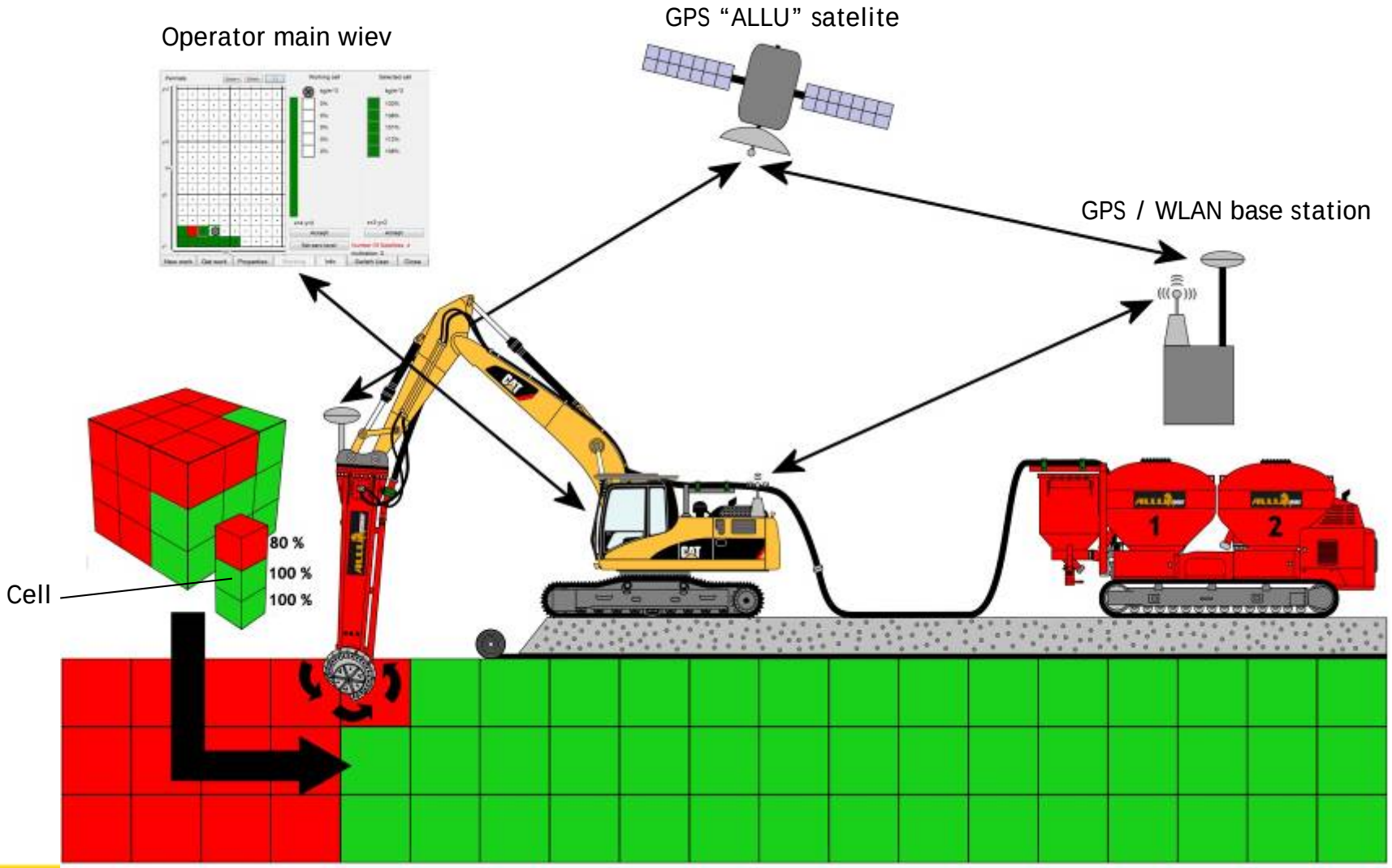
ALLU 3D Positioning System

System shows to the PMX operator where the mixing head is and how the process parameters are reached.



ALLU 3D Positioning System

3D components

PMX mounting

Master Antenna
Finds it´s position and utilizes the correction data from the ALLU base station
Receives position information from the slave antenna and uses it for calculating the direction.

Tilting sensor for PMX and RS-232 ->RS 422 transformer

Slave antenna
Provides position data to master antenna for direction calculation

Base station on site

Fixed mounting at the job site.
Provides correction data to the master antenna

WLAN sender

Power supply, monitors the base station

Operator´s display

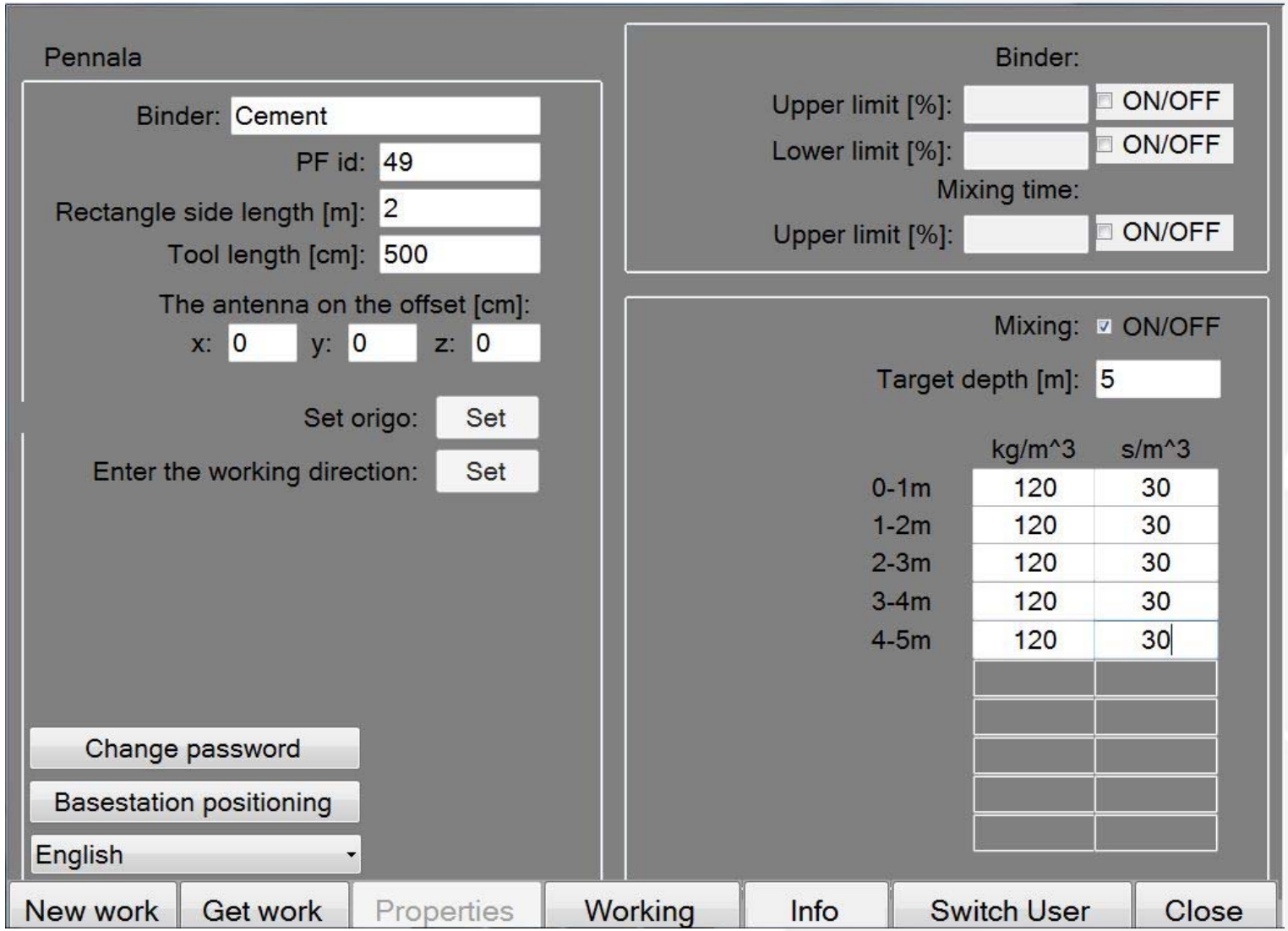
Job site settings input.
Operator monitors the mixing progress.

Inside/outside the excavator

Industrial PC
Stores data into SQL database. USB port for data transfer to reporting PC

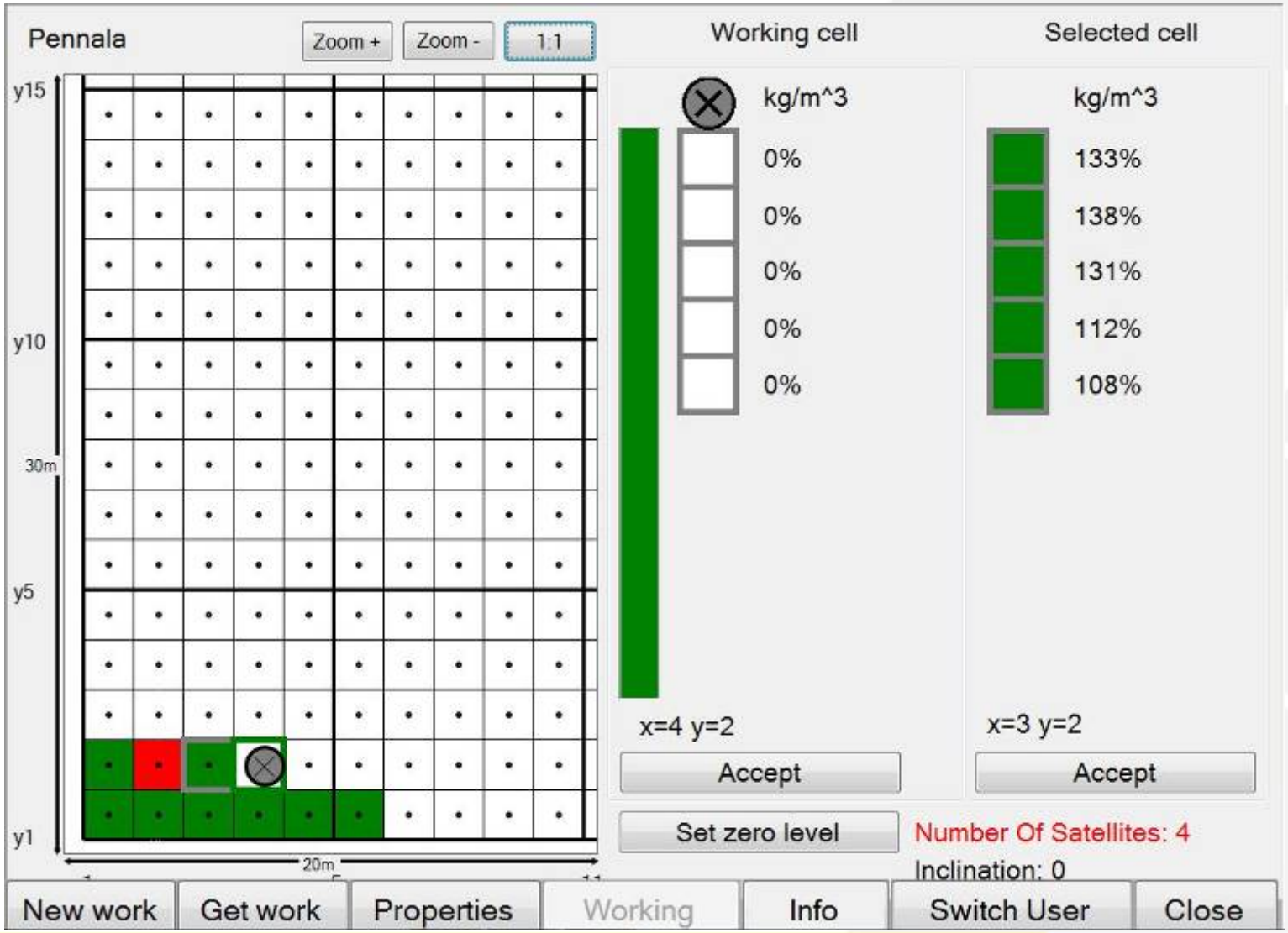
ALLU 3D Positioning System

Jobsite data entry windows

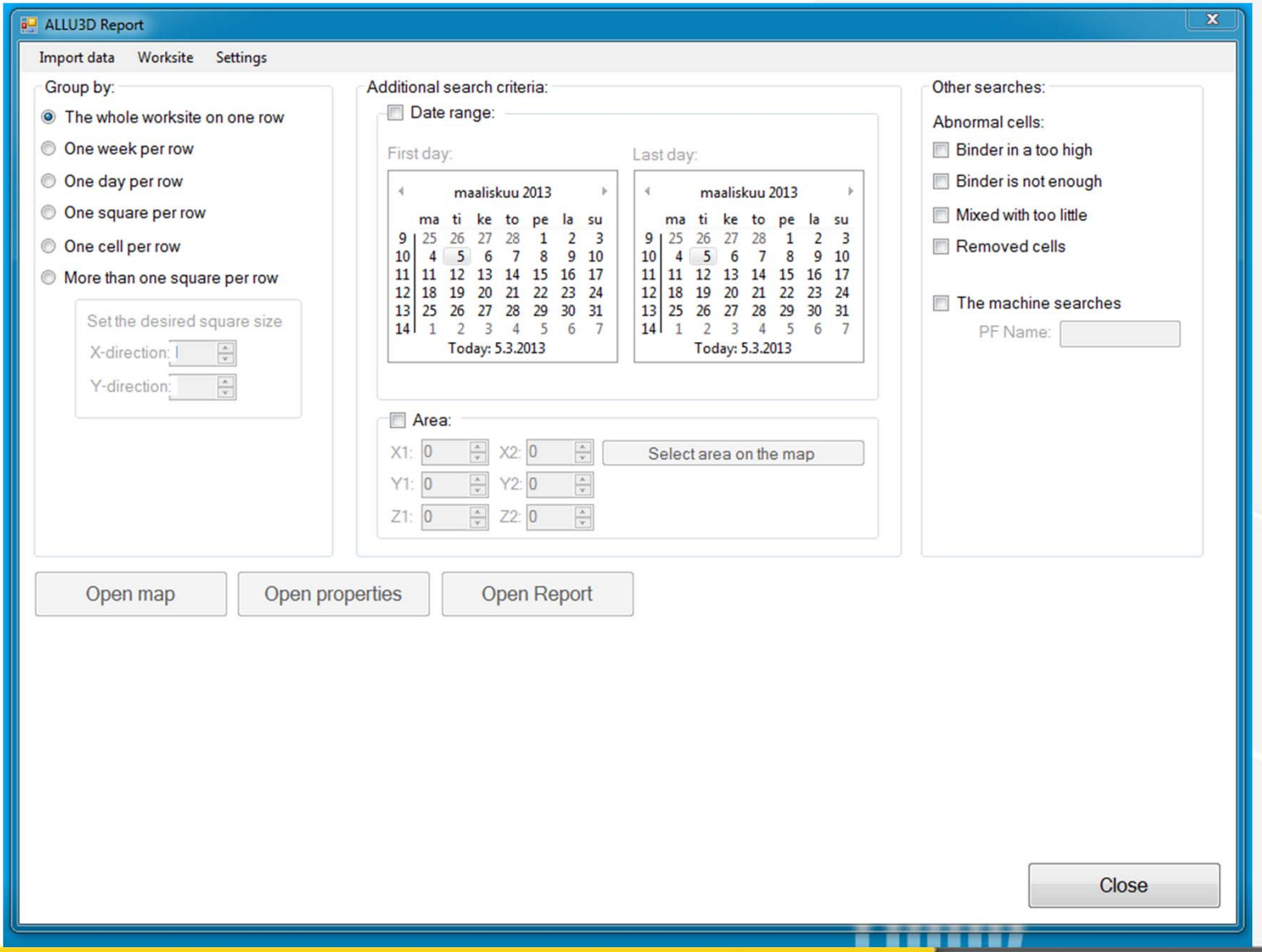


ALLU 3D Positioning System

Main user interface



Report program Main user interface



Report excample

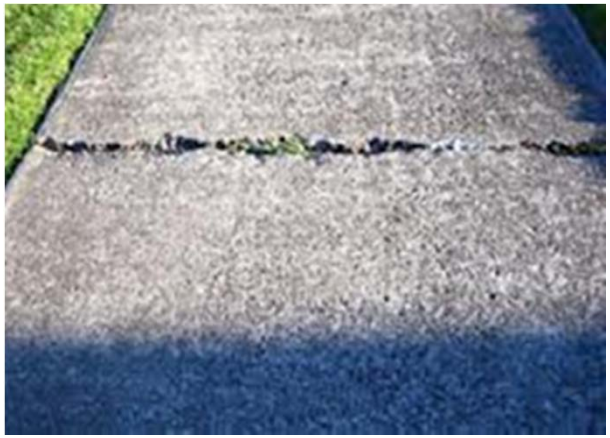
Site	Date	Binder	Total	Total volume	Feeding time	Mixing time
piha3	22.11.2012 - 14.12.2012	vesi	6187 kg	306 m^3	00:52:13	00:00:00

Grid [x,y]	Date	Binder [kg/m^3]	Binder % [OK/NO]	Total amount [kg]	Total volume [m^3]	Feeding time [hh:mm:ss]	Mixing time [hh:mm:ss]	Mixing % [OK/NO]	Number of cells	The number of cells removed	Flow [kg/s]	Pressure [bar]	Machine
1,1	14.12.2012	301	OK	301	1	00:00:00	00:04:52	NO	1	0	#Error	#Error	7
2,1	22.11.2012	0	NO	0	1	00:00:00	00:00:00	NO	1	0	#Error	#Error	7
7,1	22.11.2012	0	NO	0	1	00:00:00	00:00:00	NO	1	0	#Error	#Error	7
9,1	22.11.2012	0	NO	0	1	00:00:00	00:00:00	NO	1	0	#Error	#Error	7
18,1	14.12.2012	1518	OK	1518	1	00:00:00	00:03:57	NO	1	0	#Error	#Error	7
24,1	14.12.2012	10	NO	10	1	00:00:00	00:00:01	NO	1	0	#Error	#Error	7
27,1	14.12.2012	0	NO	0	1	00:00:00	00:00:00	NO	1	0	#Error	#Error	7
29,1	14.12.2012	0	NO	0	1	00:00:00	00:00:00	NO	1	0	#Error	#Error	7
31,1	14.12.2012	12	NO	12	1	00:00:00	00:00:01	NO	1	0	#Error	#Error	7
18,2	14.12.2012	0	NO	0	1	00:00:00	00:03:02	NO	1	0	#Error	#Error	7
19,2	14.12.2012	0	NO	0	1	00:00:00	00:01:35	NO	1	0	#Error	#Error	7
31,2	14.12.2012	69	OK	69	1	00:00:00	00:00:10	NO	1	0	#Error	#Error	7
2,3	22.11.2012	0	NO	0	1	00:00:00	00:00:00	NO	1	0	#Error	#Error	7
6,3	22.11.2012	12	NO	12	1	00:00:00	00:00:01	NO	1	0	#Error	#Error	7
7,3	22.11.2012	12	NO	12	1	00:00:00	00:00:01	NO	1	0	#Error	#Error	7
8,3	22.11.2012	13	NO	13	1	00:00:00	00:00:01	NO	1	0	#Error	#Error	7
9,3	22.11.2012	5	NO	5	1	00:00:00	00:00:00	NO	1	0	#Error	#Error	7
10,3	22.11.2012	5	NO	5	1	00:00:00	00:00:00	NO	1	0	#Error	#Error	7
11,3	22.11.2012	0	NO	0	1	00:00:00	00:00:00	NO	1	0	#Error	#Error	7
16,3	14.12.2012	0	NO	0	1	00:00:00	00:00:00	NO	1	0	#Error	#Error	7
17,3	14.12.2012	0	NO	0	1	00:00:00	00:00:01	NO	1	0	#Error	#Error	7
18,3	14.12.2012	0	NO	0	1	00:00:00	00:00:00	NO	1	0	#Error	#Error	7
1,4	22.11.2012	0	NO	0	1	00:00:00	00:00:00	NO	1	0	#Error	#Error	7

ALLU 3D Positioning System

- Eases the mixing work
  - → better performance
  - → homogenous mixing results
- Eases binder feeding
  - → accurate binder distribution
  - → reduces the consumption of the binder

HIGHER QUALITY AND BETTER JOB SITE ECONOMY CAN BE REACHED



QUALITY DO MATTER

PROCESSES
and
MONEY