



USER GUIDE

Reimer

Cement mixer

Display mix control

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I. Revisions

LEVEL	DESCRIPTION – ECO NUMBER	DATE	BY
0	CREATED	2/25/08	JH
1	Added printer	10/15/08	JH
2	Added Remote Print button	11/25/08	JH
3	Added company name to printer and ticket number	1/26/09	AE
4	Changes per Rev 110 addendum	4/7/09	AE
5	Updated to match current code rev	5/8/09	AE
6	Updated to match current code rev	5/22/09	AE
7	Updated to match current code rev	5/27/09	AE
8	Updated to match current code rev	6/9/09	AP
103-116	Shown on obsolete SA-3258-PRR revision record	5/11/11	AP
117	Added water ratio in Gal/Yd3 or Liter/m3. Switched rev record to User Guide	5/11/11	AP
118	Improved accuracy in the Liter/m3 calculations	5/18/11	AP
119	Corrected Cement, Stone and Sand kg values on Mix Setup screen	7/8/11	AP

II. Software Specification

Module	NODE #	HWD Version	Baud Rate	Program Number
10106883	11	10106196v110	250k	SA3258DP200xxx

III. Description of Operation:

This machine is a truck mounted cement mixing unit. The electronic display system is used for monitoring purposes and setup calculations only. It also is used to save specific data after a run is complete. There is also voltage monitoring that is done, so if the system voltage drops below 10VDC two red LED's will flash indicating to the operator that their battery voltage is too low. If the voltage gets too low, the display may not operate properly, and the counts from the pulse pickups will lose accuracy.

Main Screen 1:

Shows in large font the amount of counts that the conveyor has rotated. This is primarily used in calibrating the machine.

The operator will have to print after they are done with the mix. The operator will not have the ability to print previous runs after they have been reset.

Main Screen 2:

This screen shows operating data; which mix is selected, the strength that is being produced, the SA and ST gate positions, the amount of water that has been mixed with the concrete(H2O), current water flow meter reading(H2O) the RPM and Count of the cement conveyor, and in large letters the overall cubic yards or meters of concrete that have been distributed. It also shows the C/W (cement to water ratio) overall since the last reset.

Program Screen:

The operator will use this screen to navigate to the following;

Mix Select screen to select which mix he would like to run.

Mix Entry screen, used to setup the parameters for 10 preset mixes. This is where the operator will enter values that they want used for all calculations to include; Truck number, Strength, Pulses per yard (or meter), Cement weight per yard (or meter), Stone weight per yard (or meter), Sand weight per yard (or meter), ST gate position, SA gate position, Low Flow gallons (or liters) per yard (or meter), and Hi Flow gallons (or liters) per yard (or meter).

Setup Parameters, where the operator has the ability to set the contrast and backlight of the display, set the time, set the amount of pulses per gallon or liter of water, and to select between metric and imperial units of measure. This screen also shows the pressure at the belt and auger motors.

Last 5 Mix, when the operator is done with a load, they press the reset button to clear the counts. The values are calculated and will show the yards that were distributed and the strength of the mix for that and the 4 previous runs. This screen is also where the operator will need to go in order to reset the run values.

Admix Screen:

The operator will look at this screen for a reference as to how much of the Hi and Low flow fluid they should be adding to attain the correct mix they selected for the speed in which they are pumping.

Calibration:

There is no calibration required for the display once the program is loaded.

IV. DP200

SPLASH SCREEN



MAIN SCREEN



SCRN – Switch to Run Screen, PGRM - Switch to Program Screen
ADMIX - Switch to Add Mix Screen

RUN SCREEN



SCRN – Switch to Main Screen, PGRM - Switch to Program Screen
ADMIX - Switch to Add Mix Screen

PROGRAM SCREEN



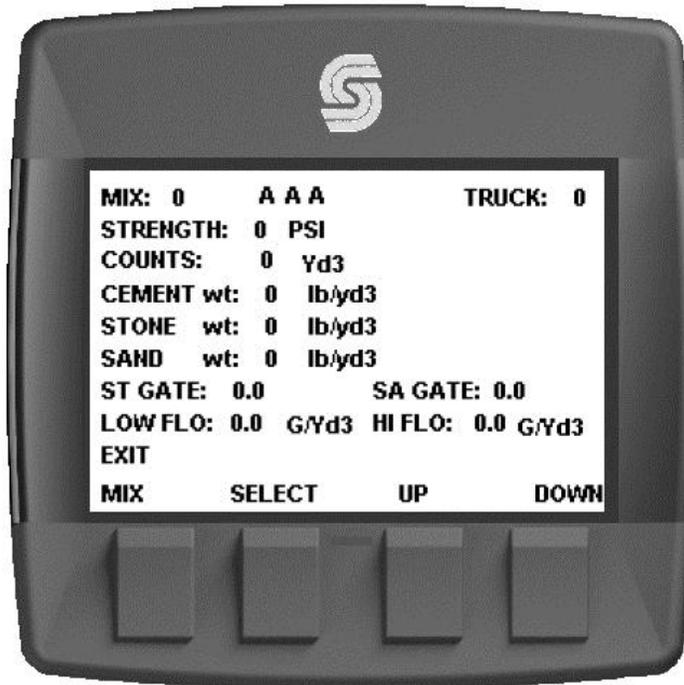
OK – Switch to Run Screen, SELECT – Switch to highlighted screen
Up – Highlight previous, DOWN – Highlight next

MIX SELECT SCREEN



SELECT – Select current mix, Up – Show previous mix,
DOWN – Show next mix

MIX ENTRY SCREEN



MIX – Select mix number, SELECT – highlight value to adjust
Up – Adjust value up, DOWN – Adjust value down

SETUP PARAMETERS SCREEN



OK – Switch to Run Screen, SELECT – Switch to highlighted screen
 Up – Highlight previous, DOWN – Highlight next

LAST 5 MIX SCREEN



OK – Switch to Run Screen

ADMIX SCREEN



OK – Switch to Run Screen

SET CONTRAST



SET TIME AND DATE

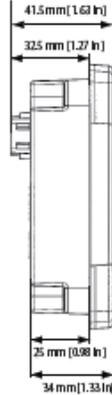
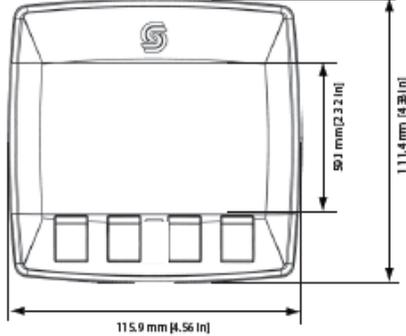


V. DP200 I/O

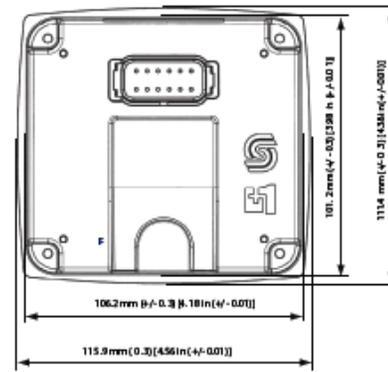


DP200 Series Graphical Terminal

Housing Dimensions



Mounting Panel Cutout Dimensions



DP200 Series Model Code

A Model Name

DP200	Graphical Display, IP 67 above panel
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B Inputs/Outputs

00	1 CAN port, 2 DIN/AIN
01	1 CAN port, 6 DIN/AIN
04	2 CAN ports, 2 DIN/AIN

Real Time Clock/Low Temperature Functionality

C

00	No RTC and LTF
01	RTC and LTF

D Flash Memory/Application Key

02	2MB without Application Key
03	2MB with Application Key

E Application Log

00	None
04	4MB

F USB Port Type

00	None
01	USB Device

DP200 Series Product Parameters

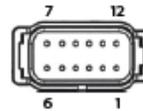
DP200 Series	
Processor	ARM 7 core, 32bit/60 MHz
RAM	64KB on-chip, 512MB on board
FRAM	16 KB
Power Supply	9-63Vdc/6.5 Watts
Connector	Deutsch DTM-12
Type	LCD with 32 grayscale levels
Resolution	160 x 240 pixels
Viewable Area	80mm x 55mm [3.15 x 2.16]
IP Rating	IP67
Operation Temperature	Code C00: -20 °C --- +20°C [-4°F --- +158°F] Code C01: -40 °C --- +85°C [-40°F --- +176°F]
Storage Temperature	-40 °C --- +85°C [-40°F --- +176°F]
Weight	250g [0.5 lb]
Vibration/Shock	5g/ 100g
EMC/ESD	100V/m / 15kV
Digital Output (0.5A)	1

DP200 Series Available Models

DP200-00-00-01-00-00	10107021
DP200-00-01-03-00-00	10107380
DP200-01-01-02-00-00	10106883
DP200-01-01-03-00-00	10107381
DP200-04-01-02-00-00	10107022
DP200-04-01-03-00-00	10107382

DP200 Series Related Products Part Numbers

Deutsch Mating Connector Bag Assembly	10100944
DP2XX Mounting Hardware Replacement Kit	10107354
PLUS+ 1 GUIDE Single User License	10101000
DP200 Panel Seal Replacement Gasket	10107355



Use care when wiring mating connector. Diagram shows device pins.

DP200 Series pin assignments

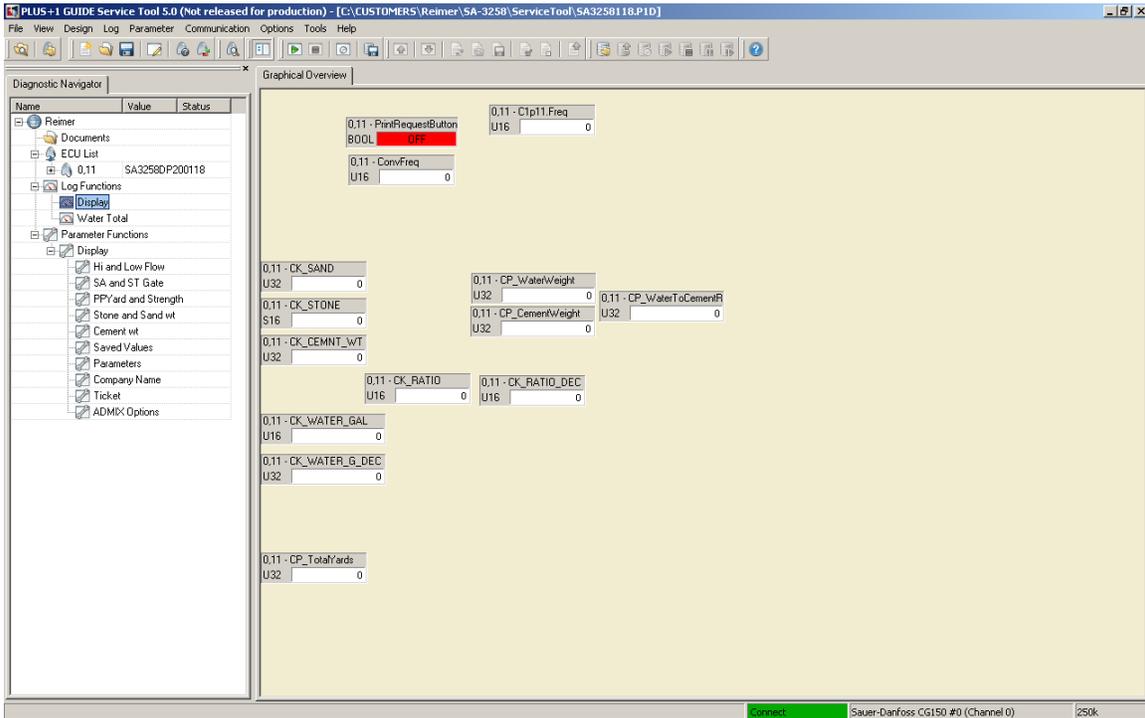
		Code B 00	Code B 01	Code B 04
1	Power ground-			
2	Power supply+			
3	CAN 0+			
4	CAN 0-			
5	AIN/ CAN Shield			
6	See Code B option	NC	DIN/AIN	NC
7	See Code B option	NC	DIN/AIN	NC
8	See Code B option	NC	DIN/AIN	CAN 1+
9	See Code B option	NC	DIN/AIN	CAN 1-
10	DIN/AIN/FREQ IN/ CURRENT IN			
11	DIN/AIN/FREQ IN/ CURRENT IN			
12	DCOUT (0.5A)			

Comprehensive technical information: DP2XX Series Graphical Terminals Technical Information, 11023625
Sauer-Danfoss product literature is online at www.sauer-danfoss.com

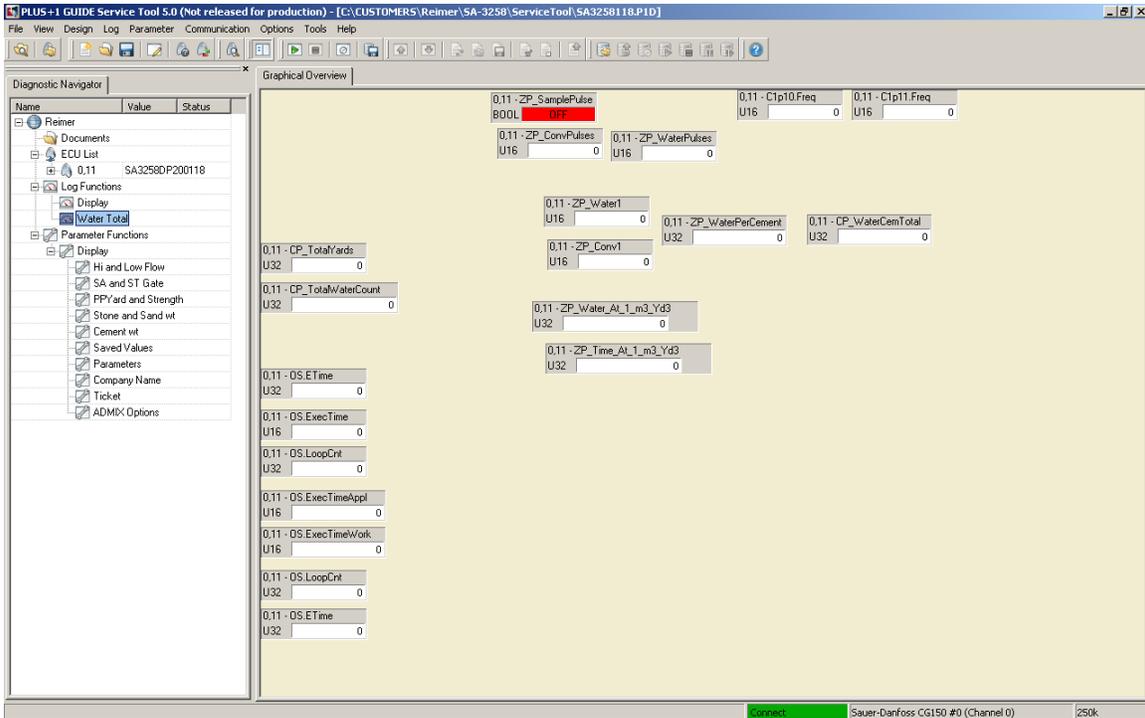


VI. Service Tool

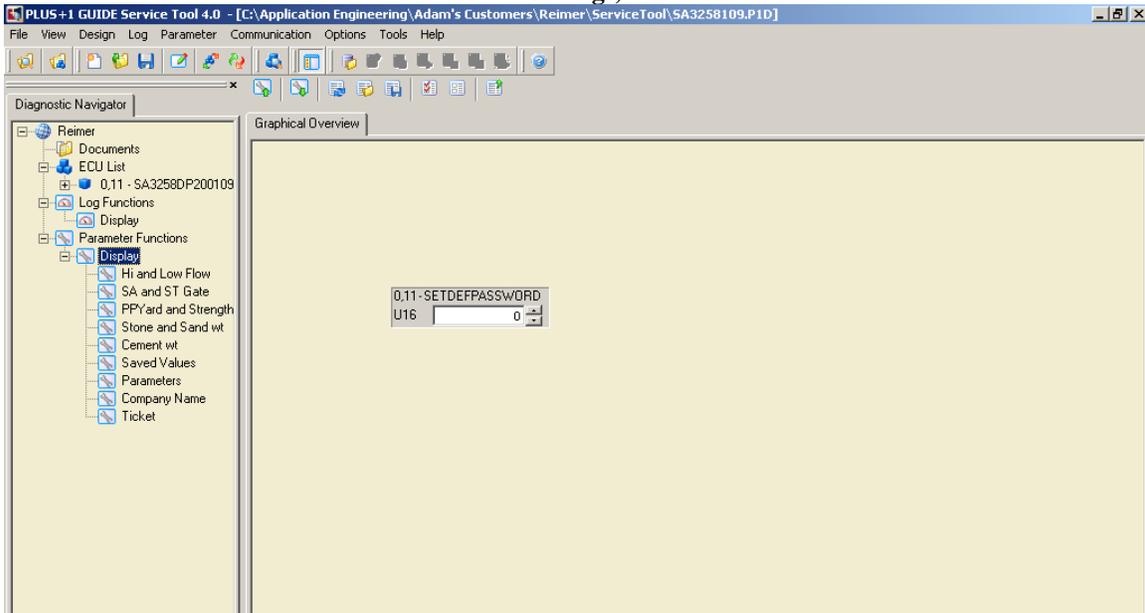
Main Screen



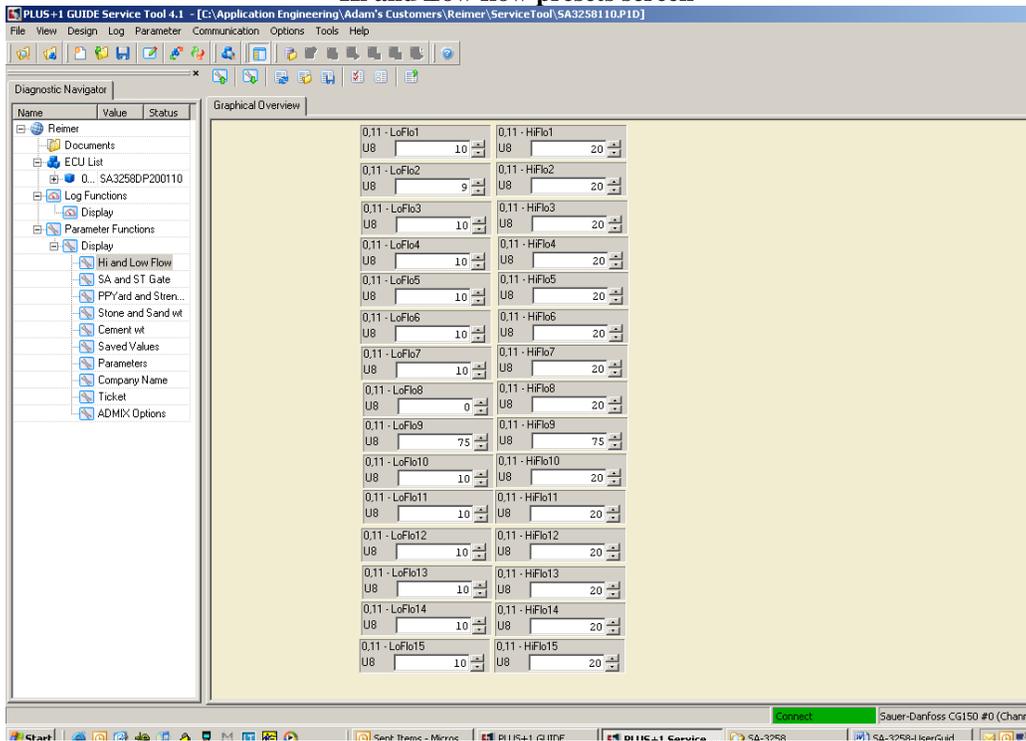
Water Total Screen



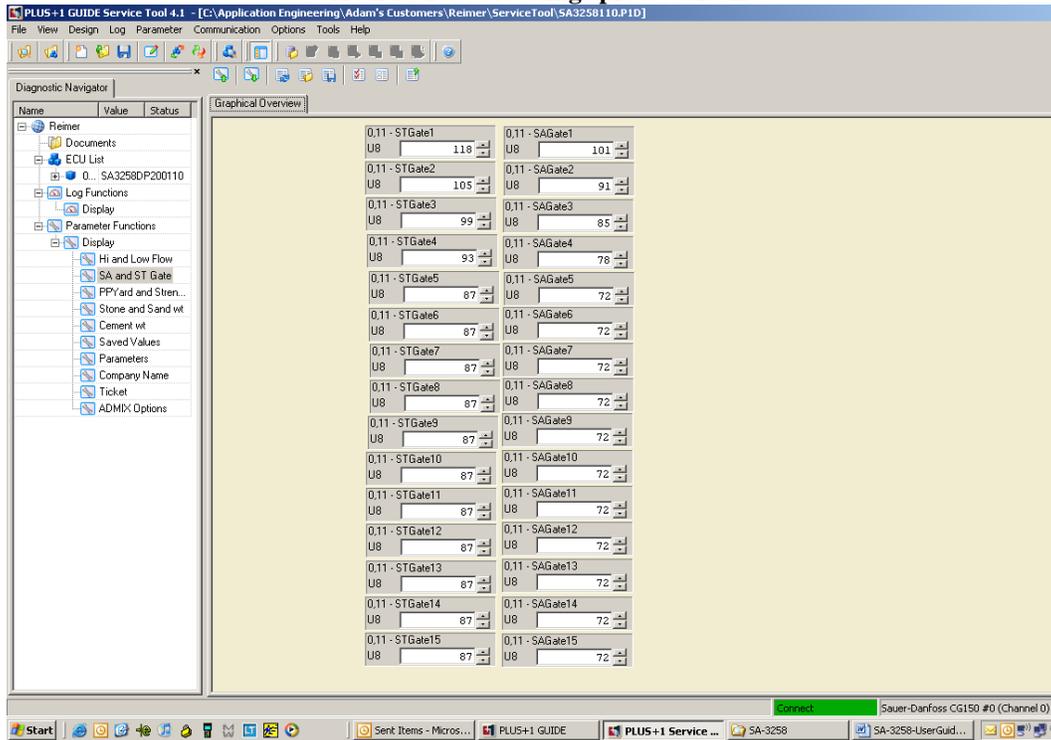
Set Defaults Screen
(If correct password is entered, all parameters go back to preset settings)



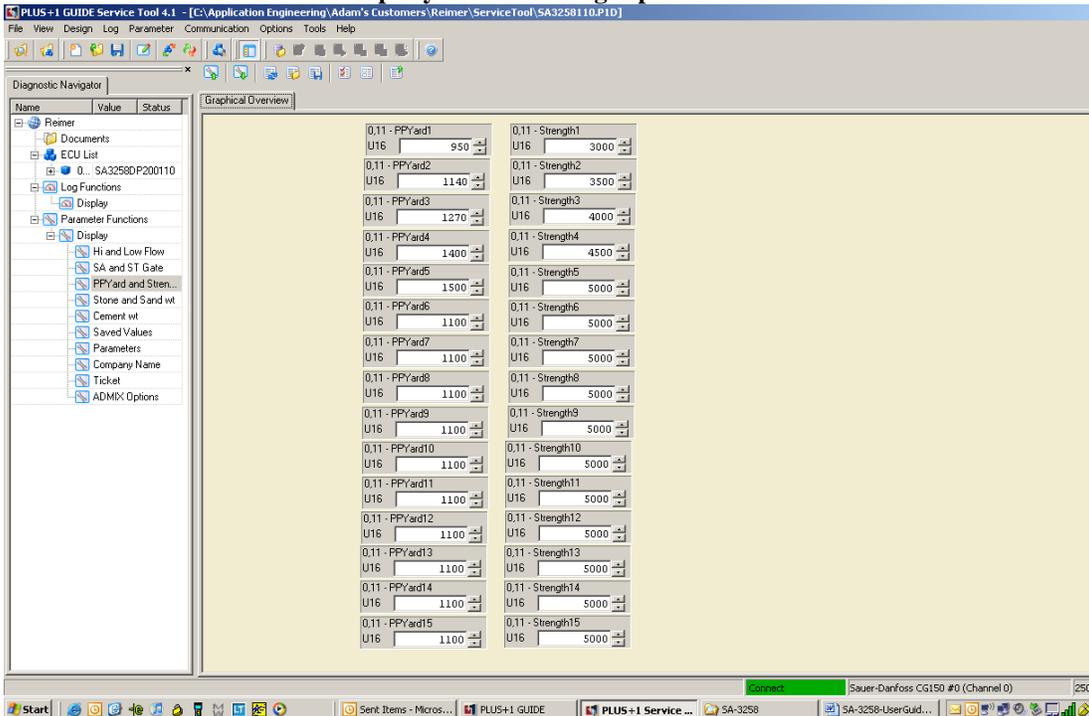
Hi and Low flow presets screen



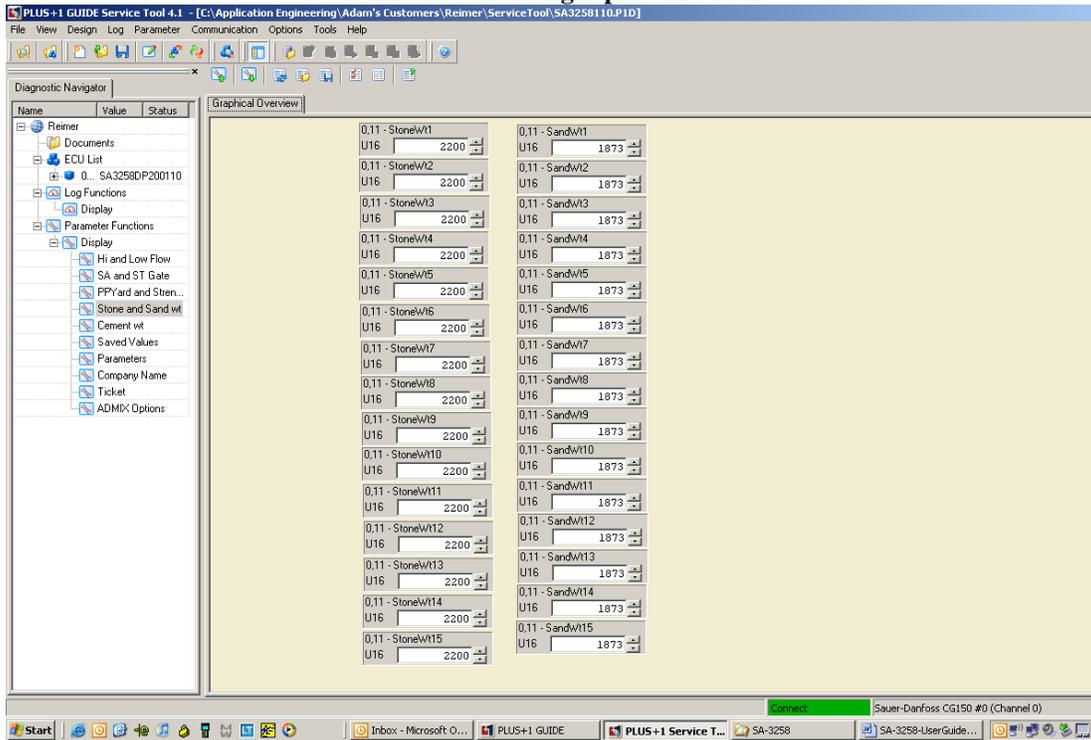
SA and ST Gate settings preset screen



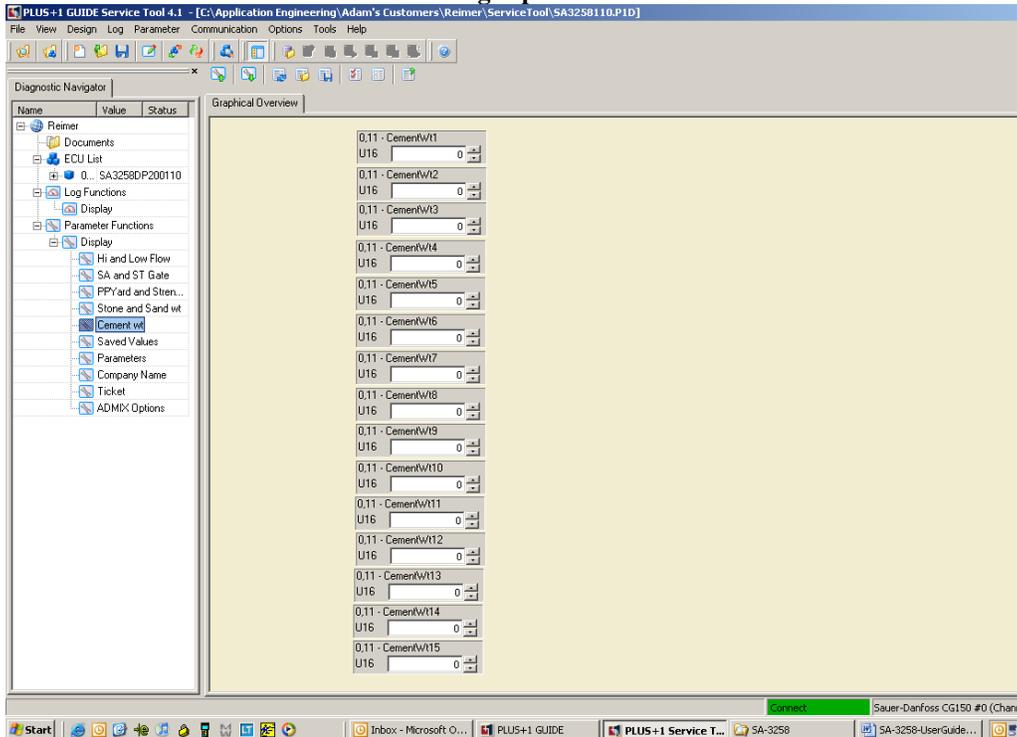
Pulses per yard and Strength presets screen



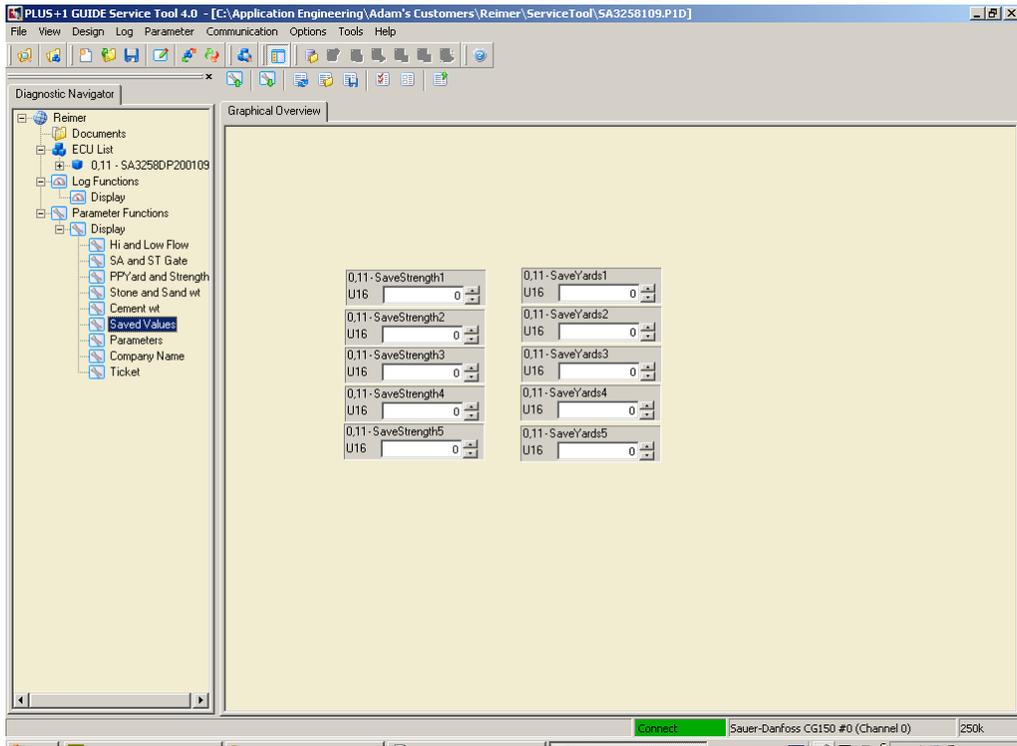
Stone and Sand weight presets screen



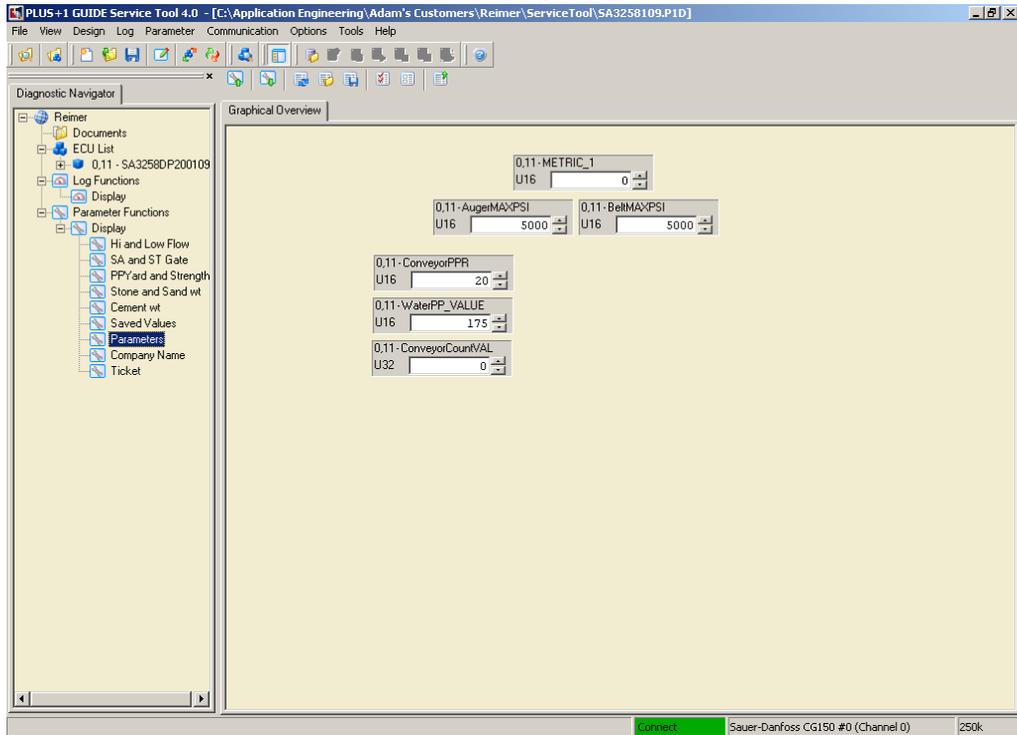
Cement weight presets screen



Last 5 saved values screen



Parameter Screen



AdMix Meter Options Screen

