## **Converting a High Pressure Brewer from Doser to a Timed Grind**



1: To avoid unnecessary rebooting if the machine detects a Doser error during the conversion, you must first ensure that the machine has a minimum firmware version of:

Sigma Touch [03.19]

Sigma Simplicity or Café [03.05.0013]

The below instructions apply to the Sigma Touch. All the references are also found in the same programming areas on the Sigma Café and Simplicity machines.

Important: Before upgrading Sigma Café and Simplicity

**Important**: Before upgrading Sigma Café and Simplicity machines, first take a copy of the config and audit files to re-load back in after the firmware upgrade.

2: After the machine has been upgraded to the minimum version as above enter service mode and BREWER SETTINGS.

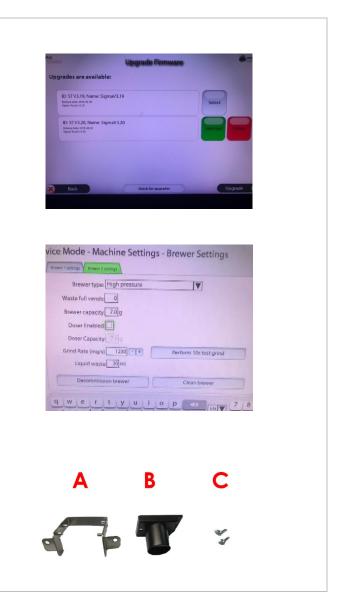
You will find two new entries - one is DOSER ENABLED and the other is the GRIND RATE. Turn off the DOSER ENABLED tick and save settings. This will now switch off the mechanical Doser and the HPB will no longer be looking for the switch on power up. You can now switch off the machine and remove the Doser Unit (the top plate of the Brewer Module needs to be removed to disconnect the Doser and switch cables). Keep the screw removed that was securing the Doser to fit the new Grinder Outlet.

3: The Conversion Kit includes the following parts:

A – 1 x Replacement chute holder (1037406)

B – 1 x Grinder Outlet (1055002)

C – 2 x M4 Wing-nuts (1023083)



4: Remove the current stainless steel chute and fit it to the new replacement chute holder bracket (A) above, this will now look like this.



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5: Fit the new Grinder Outlet (item B above) using the screw removed from the Doser Unit to secure it.



## 6: Calibration.

The new timed grinder uses time to calculate the grind volume in grams. The grind rate must now be calculated and programed.

Enter service mode – Machine Settings - Brewer Settings – Brewer 2

In here you will find a PERFORM 10S TEST GRIND button. Place an empty container under the Grinder Outlet and press the PERFORM 10s TEST GRIND button. Check the grind for the correct consistency, adjust the grinder as required and repeat the test grind until you are happy with the grind coarseness.

Repeat the test again and discard the ground coffee, the grinder chamber will now be full and the grinding time can now be calculated.

Have a cup available to hold under the Grinder Outlet and select the PERFORM 10s TEST GRIND. You must do this 3 times and weigh the total content of all 3 test grinds.

Divide the total weight by 3 to give an average weight per dispense.

For example, if the total weight of the 3 test grinds is 36.9g, divide this by 3 to equal 12.30g in 10 seconds, or 1.230g per second.

Next to the PERFORM 10s TEST GRIND button there is a space to enter the grind rate in milligrams /second, take the average grind per second and multiply by 1000 and you will get 1230, enter this number in the GRIND RATE box.

i.e. 12.30 g/10s X 100 = 1230 mg/s

Now press the 'Save and Exit' tab to save the settings.









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7: To test the correct gram throw, In the DRINK SETTINGS menu, select 'Fresh Ground Coffees' then select any coffee drink. Place an empty cup under the Grinder Chute and press the 'Test' tab next to the 9oz 7g gram throw.

A 7g test dispense should throw around 7g of coffee as shown.

If this is not the case then check your 10s test throw again and re-enter the new mg/s grind rate.



8: Remove the M4 locknuts that previously held Stainless Steel Doser Cover and fit the new chute you assembled in stage (4) onto the two M4 studs and fix with the supplied M4 Wing-nuts.

**IMPORTANT:** When secured, ensure that there is some 'free-play' of the stainless steel chute, it should not be held solidly, it needs the requirement to be able to vibrate. If necessary, form inwards slightly the right-hand upright of the chute, where it is located on the one pin.

The original Doser and Doser Cover are no longer required.

**NOTE**: when programming individual drink strengths:

37mm Brewer = Lower setting = 6.5 to 8.0grams

37mm Brewer = Upper setting = 8.5 to 9.5grams

44mm Brewer = 11.5 to 14.0grams (Maximum, dependent on grind coarseness)

As current drink settings may now be incorrect, the grind may overflow the Brewer. If this is the case you can now change the main ingredient to reflect a lower gram throw for each individual drink. It is therefore important to perform a test vend of each ground coffee drink and check that the Brewer Chamber does not overfill.

Should you need to have 14grams into the Brewer and the Brewer Chamber is overflowing you can no longer just make the grinder finer, if any further adjustment to the grind coarseness is performed you will also be changing the grind rate. This must then be recalculated again by following step 8 and re-entering the grind rate into the box in Brewer 2 settings.

As grinder blades gradually wear over time the calculation performed in step 6 must also be re-done at set intervals to maintain drink consistency.

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