

Agilent 708-DS Dissolution Apparatus: Programming Sampling Depth

Sampling Depth Matters

For a 708-DS that is configured with the Auto Sampling and/or Auto Temp option, the appropriate Sampling Depth must be defined. This ensures the proper depth of the manifold is achieved to remove samples and/or record vessel temperatures depending on the media volume and apparatus installed. To achieve repeatable, automated positioning at each timepoint, simply complete the following steps.

Sampling Depth Tutorial

1. Install the desired apparatus (e.g., Baskets or Paddles) and properly set the height of the accessory.
2. Place 500 mL of water in a vessel; as the manifold lowers to the same position for each, it is not necessary to fill each vessel.
3. Lower the dissolution apparatus to its operating position (fully lowered).
4. From the Main screen of the 708-DS, press **Menu**.
5. From the Menu screen, press **Calibration**. The Paddles/Baskets Sampling Depth screen displays.
6. If applicable, for USP apparatus 5 or 6, press **Next**. The Rotating Cylinder / Paddle over Disk Sampling Depth screen displays.
7. Lower the manifold incrementally by pressing the DOWN arrow inside the Manifold box. The Current Position value increases. (Note that "0" indicates the manifold is fully raised, i.e., in "home" position.)
8. Once the sample cannulas have reached the proper sampling location, press the **Save** button that corresponds to 500 mL in the installed apparatus. The number visible in the Current Position box is now stored in the appropriate location.
9. Add 400 mL of water to the vessel (total 900 mL).

10. Adjust the manifold height incrementally by pressing the UP/DOWN arrow inside the Manifold box. The Current Position value changes accordingly. (Note that "0" indicates the manifold is fully raised, i.e., in "home" position.)
11. Once the sample cannulas have reached the proper sampling location, press the Save button that corresponds to 900 mL in the installed apparatus. The number visible in the Current Position box is now stored in the appropriate location.
12. Repeat these steps to properly set the manifold sampling depth for all additional USP apparatus (i.e., 1, 2, 5, or 6).
13. Press **Finish** to return to the Main Menu.

Key Reminders

- At any time, pressing **Restore Defaults** will reset all values to the default positioning.
- For any media volume between or outside the set points, the position will be interpolated or extrapolated accordingly.
- Systems configured with an 850-DS or controlled by Dissolution Workstation software will automatically utilize values stored in the 708-DS firmware.
- Remember to adjust the Vessel size setting if exchanged – go to **Menu > Instrument > Next**.

Figure 1. Paddles/Baskets Sampling Depth dialogue box.