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# **Korolev Tips: Sample Length Implications for CIP, CIP-GS, CCP and CAPS Users**

**DMT Technical Note  
DOC-0303**



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There is one very important thing to know about receiving a Korolev-tip upgrade on an existing CIP-based probe: the probe arm width specified in the data system must match the arm width of the Korolev tips. If there is a mismatch between these numbers, the sample volume and particle concentrations will be off.

Users of the Particle Analysis and Display System (PADS) can modify the arm width directly in the software by following the steps below:

- 1.) Identify the width of the Korolev tips. This number will be either 40 mm or 70 mm, and is engraved on the sides of the tips.
- 2.) Open PADS.
- 3.) Click on the relevant instrument tab (CIP or CIP-GS - component instruments like the CCP and CAPS will still have a CIP or CIP-GS tab).
- 4.) Click on **Configure** in the data menu, and select **Configure Instrument**.
- 5.) Modify the **Arm Width** parameter to match the value identified in step 1.
- 6.) Click on **Save**.
- 7.) Click on **Reset Program**.

*Note that sample width is only a concern with tip upgrades on CIPs and instruments that contain a CIP component. Although other instruments may have modified tips, sample width is not affected.*

For more information on Korolev Tips, consult the CIP or CIP-GS Operator Manuals or visit <http://www.dropletmeasurement.com/products/probe-upgrades-and-accessories/korolev-tips.html>.