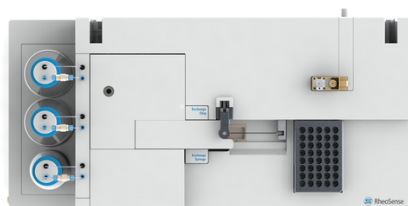


SAMPLE SIZE CALCULATION GUIDE

SMALLER SAMPLE TEST SIZE - MORE RETURN ON INVESTMENT



AUTOMATIC VISCOMETER/ RHEOMETER

THE WORKHORSE FOR VISCOSITY FINGERPRINTING

VROC® initial one plus is the leading automatic viscometer that measures true viscosity with the highest accuracy and repeatability. Its superior resolution is revolutionizing characterization of Newtonian and non-Newtonian samples

Flow rate or shear rate vs. sample volume

Retrieved Vol (μL) = Loaded volume (μL) - 12

Chip Type	K1, μL	K2, (min/μL/s)
A05	2	19.05
B05	2	19.05
C05	2	19.05
E02	3.8	119.05

Volume in vial, μL	Loaded volume, μL
26	17 ~ 20
35	21 ~ 25
50	35 ~ 41
90	65 ~70

Flow rate (μL/min) = 40 * (Retrieved Vol (μL) - K1)

Shear rate (1/s) = K2 * Flow rate (μL/min)