

ASXPRESS PLUS Timings in Qtegra

Autosampler SDX Sprint Valve	
▼ Communications Settings	
Com Port	COM5
▼ Evacuation Settings	
1. Extra Loop Rinse	True
2. Loop Rinse Delay (s)	2
3. Loop Evacuation Delay (s)	1.5
▼ Load and Injection Settings	
1. Loop Load Time (s)	2.7
2. Equalization Delay (s)	1.5
▼ Probe Rinse Parameters	
1. Time to Evacuate Probe (s)	1
2. Probe Wash (s)	4
3. Rinse Station Fill (s)	10

Evacuation Settings

Extra Loop Rinse – Changing this value to True will add a wash before sample aspiration. The Extra Loop Rinse is made up of two parts: first, rinse solution is pulled through the sample loop; second, air is pulled through the loop to prepare for sample aspiration.

Loop Rinse Delay - The time that rinse solution will be pulled through the sample loop. Normally this is set to be equal to or slightly less than the sample loop load.

Loop Evacuation Delay – The time that air will be pulled through the loop before the sample is aspirated.

Load and Injection Settings

Loop Load Time – This is the time necessary to pull the sample fully in to the loop. Typically, this value is slightly larger than the sample loop size in mL (A 2mL sample loop will take 2.5s to load).

Equalization Delay – This timing allows the vacuum pump to cycle down and pressure equilibrium to establish, both of which are necessary before the valve switches to inject position (normally between 1 and 2 s).

After the valve switches to the inject position the sample is pushed to the nebulizer by the ICP-MS/ICP-OES peristaltic pump. While the sample is being analyzed the probe visits the rinse station to wash out the sample introduction line.

Probe Rinse Parameters

Time to Evacuate Probe – Before visiting the rinse station the probe line is emptied via the vacuum pump. The default time of 1 second works well for most applications.

Probe Wash – Time that the vacuum pump will pull rinse solution from the rinse station. Typically this is set between 3 and 5 seconds, though it can be set longer if desired.

Rinse Station Fill – After the Probe Rinse, the autosampler probe is raised and the autosampler peristaltic pump continues filling the rinse station. It is necessary to set this value so that the rinse station completely fills with rinse solution for the next rinse cycle.