

ISO-KINETIC SAMPLING PROBE SYSTEM

The iso-kinetic sampling probe is an intrusive pointwise measurement system used to sample the amount of liquid entrainment in the gas stream. The probes are inserted into the gas phase in order to collect the liquid droplets into a separator through the fluid transmission lines. The measurement location can be adjusted or a system of probes can be installed in the facility for entrainment measurements at different locations. Figure 1 and 2 show the schematic and photograph of the iso-kinetic system, respectively. In these figures, the depicted probe array is installed in a 6-inch inner diameter (ID) pipeline operating in high pressure conditions.

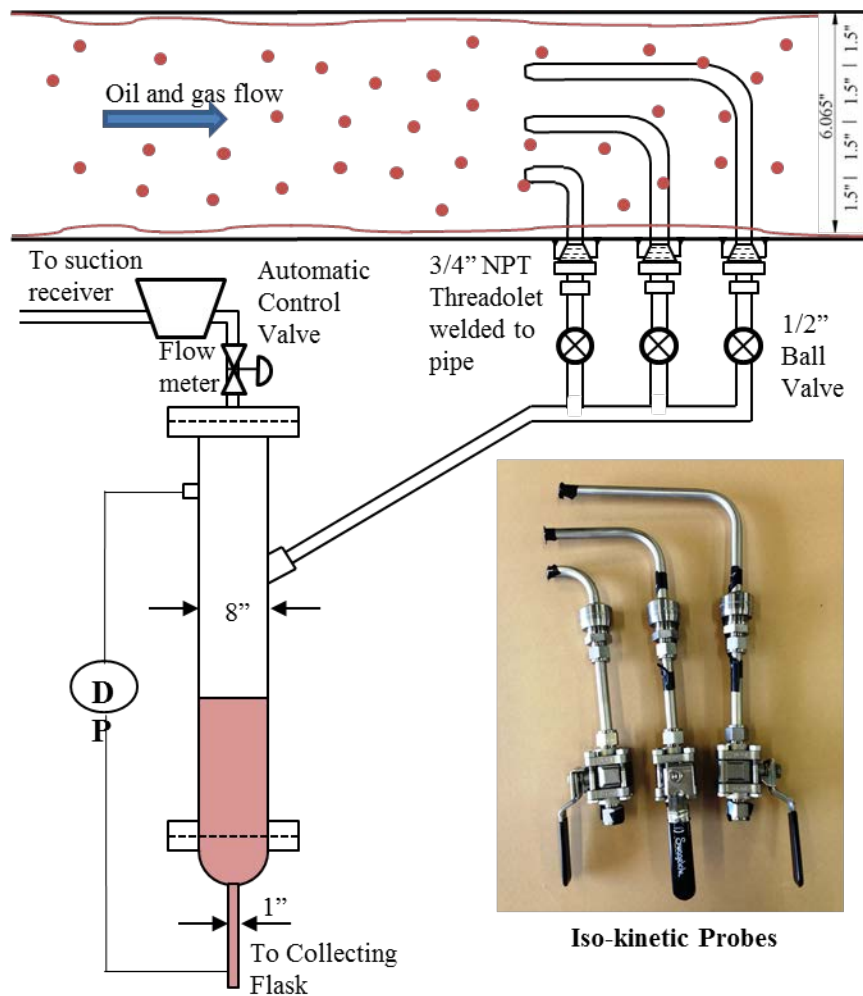


Figure 1. Schematic of the iso-kinetic sampling probe system and a close-up photograph of three probe configuration.

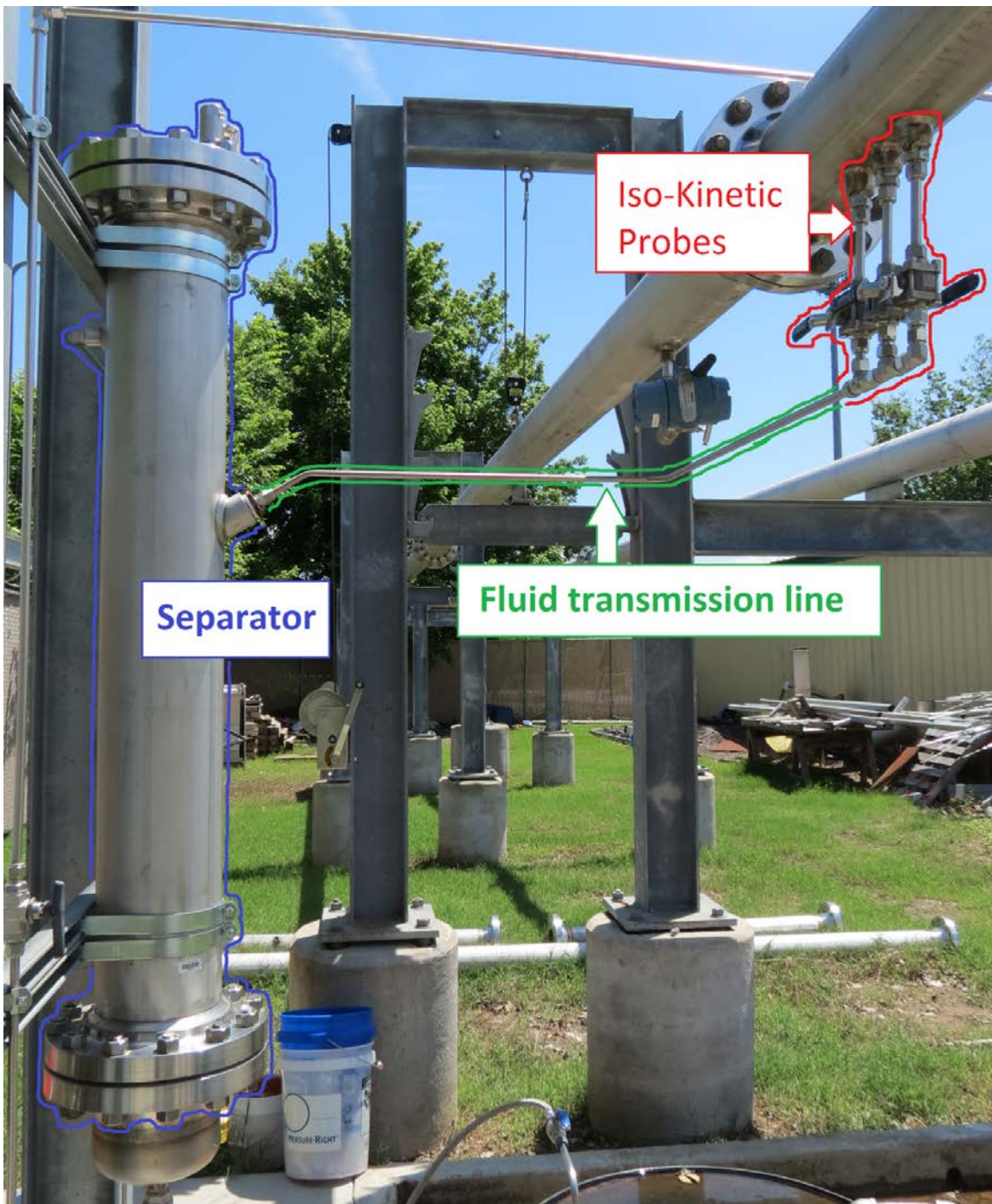


Figure 2. View of the iso-kinetic sampling probe system (separator, fluid transmission line and the probes) install at 6-in. High Pressure Large-Diameter Pipeline Flow Loop.