JST’s Combination Rinse and STG Dryer is capable of Quick Dump Rinsing (QDR) and IPA vapor drying substrates in a single chamber eliminating air contact. The STG Dryer is able to dry both hydrophobic and hydrophilic wafers with low particle adders (<10 @0.16μm). It is also compatible with drying wafers with exposed resist without affecting the resist.

Full QDR rinsing capability includes top sprays, high flow laminar bottom fill / cascade overflow, and funneled bottom to a quick dump valve for fast draining. Ambient IPA vapor is generated and mixed with high purity nitrogen and delivered to the chamber for the drying. Programmable Ionized N2 is also delivered to the chamber for low particle performance during the IPA Vapor process. This provides for an inert environment while the product is being dried and minimizes surface charges on the substrates. High Purity Heated N2 is also provided as the final drying step. An automated pneumatically power lid remains closed during the dry process.

The STG Dryer reduces damage and particles common with spin dry processes. The STG Dryer will consume less IPA than traditional IPA Dryers. It also allows for rinsing and drying in a single chamber reducing the overall footprint in the cleanroom.

The combo rinse dryer is available as a stand alone module or integrated into a JST automated station.