In the equipment selection process, "saving costs" often tempts people to consider second-hand equipment. However, for Rapid Thermal Processors (RTP), purchasing used equipment is often "seemingly cost-saving, but in reality, a risk."

Old RTP equipment typically suffers from issues such as process inconsistency, hardware aging, outdated control systems, and a lack of professional supplier support. It is difficult to meet the strict requirements of modern semiconductor processes for consistency, uniformity, stability, controllability, and automation integration.

In the pursuit of high yield, high stability, and integration with smart manufacturing, old RTP equipment is no longer up to the task. Only by selecting a new RTP supplier with core technologies verified by mainstream semiconductor manufacturers, multiple product iterations, and long-term support capabilities can the process be truly controllable, operations sustainable, and investment returns maximized.

Six core risks cannot be ignored:

1.The original manufacturer no longer exists or provides support: Most old RTP equipment models have been discontinued by their original manufacturers, leaving spare parts supply and technical support unavailable.

2.Hardware aging, performance degradation: Problems such as chamber corrosion and component fatigue are common, making it difficult for the equipment to meet the original manufacturer's specifications.

3.Outdated control systems, inadequate accuracy and stability: Old control systems not only have bugs but also struggle to meet the precision requirements for temperature control and process management in current semiconductor processes. Many second-hand RTP equipment suppliers cannot upgrade outdated control systems.

4.Unable to integrate with modern processes and automation: Old equipment often cannot support new materials (such as compounds) or new processes, nor can it optimize equipment capacity. It cannot meet the integration requirements of mainstream fabs' GEM SEC II/MES/EAP systems and automation networks, severely restricting production line flexibility.

5.Core components discontinued, substitutes reduce performance: Non-original (self-made or third-party) or recycled components not only have poor compatibility but also raise maintenance costs and increase failure rates.

6.Non-professional suppliers, lack of continuous service capabilities: Most second-hand equipment suppliers are merely intermediaries and lack the professional RTP technical knowledge and process support capabilities. Many rely on third-party providers for technical support, making after-sales service unreliable, leading to unbearable difficulties for fabs.