ProSys Announces Shipment of Synthetic Quartz 300 mm Direct Megasonic System

CAMPBELL, California, July 27, 2020 — ProSys is pleased to announce shipment of our newest 300 mm Direct Megasonic System – constructed of ultra-pure synthetic quartz. This synthetic material capability extends our extensive line of direct megasonic batch processing systems for customers who require metal ion contamination levels below that of standard semiconductor quartz.

Standard semiconductor grades of quartz have proven to be reliable process materials. However, advanced nodes require even lower aluminum and alkali metal content. Synthetic quartz addresses this need by reducing trace contamination of these metals below detectable limits (in ppb). This ultra-high purity is particularly important for advanced prime silicon wafer manufacturing.

“Our customers improve results with our uniform acoustic field and real-time data streaming, while lowering operating costs with our durable patented array technology” said Don Watson, ProSys vice president of sales & marketing. “This new synthetic quartz capability expands the range of processes that can benefit from our technology.”

ProSys patented technology outperforms alternatives. The full transducer active area is constantly driven with uniform sonic dosage. Our patented transducer bond — which is incorporated into the RF/electrical pathway — is more durable and can also be repaired, reducing lifetime costs. In addition, our electronics provide data streaming & logging functions and active alarm & warning monitoring. This enables customers to track the operating condition of ProSys systems in real-time, meaning wafers will no longer be misprocessed because of transducer malfunctioning.

ProSys offers Direct Megasonic System designs for batch processing with customizable active areas. Our standard models are designed to accommodate single 25-wafer cassettes up to 50-wafer cassettes, for substrates ranging from 100 mm to 300 mm, with custom sizes available. Standard tank systems are available in quartz (both standard semiconductor grade and now synthetic), 316L stainless steel, and PVDF construction.

ProSys technology is also available in models that replace megasonic stations in existing wet benches, extending the life of legacy tools. These ProSys models require no modifications to the existing wet bench, and our electronics can be integrated without reprogramming the host control software. They add the advantages of ProSys patented technology to existing wet cleaning tools without the need for a complete tool upgrade and requalification.

Contact sales@prosysmeg.com to discuss incorporating our direct technology into your process tools.
About ProSys, Inc.

Founded in 1996, Product Systems, Inc. (dba ProSys) designs and manufactures innovative cleaning products using Megasonic technology. Awarded multiple US and international patents, ProSys has developed technologies that deliver exceptional results at a competitive cost for manufacturers of products sensitive to nanometer-level contamination and damage. ProSys is headquartered in Campbell, California, USA.