

Taking a Quantum Leap

Kyoto's Samco Inc. is driving semiconductor innovation through cutting-edge R&D and empowering the next generation of researchers.

Tradition and technology go hand in hand in Kyoto, Japan's cultural capital. While millions visit for its serene gardens and ancient temples, Kyoto is also home to cutting-edge global tech firms driving innovations from advanced materials to consumer electronics. Since the 1970s, Samco Inc. has been a key supplier of semiconductor process equipment to major chip fabs worldwide. Under CEO Osamu Tsuji, a seasoned industry veteran, the company grew from a garage where it developed its first plasma-enhanced chemical vapor deposition (PECVD) equipment, into a global player supporting critical steps in the semiconductor supply chain. Tsuji remains committed to growth. Set to open a new R&D facility this year, he noted, "The semiconductor industry is undergoing a transition. While the sector now generates around 10 billion yen in revenue for us, we see potential for up to 15-fold growth." Collaboration has

always driven Samco forward, powering breakthroughs in silicon photonics and compound semiconductors, which Tsuji calls a "game-changer" for data center connectivity. The firm's specialized technology also supports ultra-low-temperature chip production, essential for quantum computing. "This is a highly competitive field, with companies vying for market share from the U.S., China and Japan," said Tsuji. Samco builds its network through industry and academic ties, including annual grants of 2 million yen per researcher in materials science through the Samco Foundation. Looking to expand globally, Tsuji noted that Samco's President Tsukasa Kawabe's recent visit to India revealed tremendous potential. Looking to tap into the country's vast talent pool, Tsuji added, "We hope to support young engineers both technically and financially, and we are excited about the possibilities this will create."

