

Foxconn Precision Component (Beijing) Co., Ltd.

Technology Partnership with POCO Improves Production

If your goal is to be the leading cell phone manufacturer, it is important to have the best technology partner available. Having made the decision to transition from copper electrodes to graphite electrodes, Foxconn needed a partner that could help them make this transition to graphite electrodes that would help them reduce their lead times. Applications support and advanced training for their new graphite technology would be important to a successful transition. Foxconn Precision Component (Beijing) Co., Ltd. has just equipped their new tool factory with high performance CNC graphite mills and sinker EDM machines. The goal of this factory is to produce 300 new molds this year. Their aggressive plan is to increase the monthly output each quarter. To meet this goal they must have continual improvement in their processes and upgrade the technology level of their employees.

When the Beijing factory first started replacing copper with graphite electrodes, they experienced chipping and cracking problems during machining of the graphite and problems achieving the desired finish in the cavity. Because they were not able to get the necessary support from the manufacturer to solve these and other problems, they changed graphite suppliers.

Following the successes at the Shenzhen factory, the Beijing factory chose to use graphite grades from POCO. They knew that high performance graphite grades such as EDM-3 would allow them to achieve faster productivity in their milling and EDM operations. They also knew that they needed the added benefit of POCO applications support and training to solve problems and to achieve maximum performance with their equipment was necessary in order to meet their goal of 90% graphite electrodes.

Now, 4 months from the first POCO visit, the benefits of a custom training program and selection of grades with the best physical properties, they are moving closer to their goal. This partnering relationship includes the authorized POCO distributor, Kushan Dongyang Precision Mould Co., Ltd. who supplies machined graphite blanks in standard sizes for Foxconn's tooling system.

The electrode milling operation is 3 times faster in graphite than in copper and they have virtually eliminated hand polishing of electrodes. They have been able to decrease the EDM time for each job. Higher power settings can be used with graphite electrodes providing 20-30% faster cuts. The time is further reduced by eliminating the semi-finishing process that was needed with copper electrodes.

This increased productivity was easy to achieve once the operators and supervisors understood the basics of graphite technology.

Continuing support from POCO includes scheduled factory visits to cover advance training topics that will help them to make continual improvements in their productivity as they increase their customer base. Currently, Foxconn's major customer in Beijing is Nokia and they continue to supply molds to the Shenzhen factory.