

“Near-Shoring” Electronics Manufacturing

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There is much to read about the shifting sands of electronics manufacturing, including current moves by OEMs to alter their EMS relationships to better mitigate risk and cost, while EMS companies look for additional ways in which to adjust their business models in an attempt to improve their profitability. Electronics outsourcing over time evolved from a means to buffer manufacturing demand fluctuations into a wide scale shift in capabilities, in part in order to deal with vastly shorter product life cycles. Following the global economic crash of 2000, aka “the internet bubble,” more and more EMS providers responded by transferring their manufacturing to low cost labour regions, and in particular China.

Fast forward to a decade later and the increasing costs of labor in these regions, along with the realisation of the real cost of manufacturing vast distances away, have brought many fresh discussions about returning manufacturing capability back to the OEMs or their local EMS partners where it started. Natural disasters in Japan and Thailand in 2011 further heightened awareness of fragile long distance supply chains. More recently, India's 3rd major power grid loss just during this summer stranded well over a half billion people without transportation, running water or electricity to run air conditioning and factories. Evaluation of infrastructure is clearly another critically important factor when seeking the “best” cost solution for locating manufacturing. It's increasingly clear that the lowest price of land, construction or labor is not always the lowest cost solution for global manufacturing.

Contrary to the dreams of many, particularly politicians in economically challenged developed western nations, revived interest in OEM manufacturing at home is not a signal that millions or even hundreds of thousands of jobs will reappear there. Whilst there is no simple “either-or” answer to the question of where is the most appropriate location for outsourcing, in the context of the on-going evolution of outsourcing, a model termed “Near Shoring” is rapidly becoming a preferred approach. Proximity to the OEM and its customers, reduced logistics and supplier management complexities etc, whilst still benefiting from lower cost labour are key reasons underpinning this growth.

By means of example, JJS Electronics, as well as providing European OEMs outsourcing solutions has been offering North American OEMs a unique gateway into European markets. A member of the Paragon Electronics Group, JJS is a UK-based EMS company with facilities in Lutterworth, England and Chomutov, Czech Republic. With an established record of providing reliable and cost-effective electronics, electrical and mechanical contract manufacturing, JJS is a full range EMS provider including design for test, design for manufacture, PCB assembly, precision “mechatronics,” system assembly and Configure to Order services. The company's comprehensive EMS portfolio is supported by robust material procurement, inventory management, component engineering and test services, specialties of members of their parent Paragon Group organization. One company in the group, ISO 9001 and AS9120 accredited Vigilant Components, provides component sourcing, testing, counterfeit detection and verification services as well as supply chain management and point-of-use delivery options for the

electronics manufacturing sector. Serving a wide range of industries, JJS has a strong presence in market sectors including communications, industrial controls, IT, transportation, printing/packaging and scientific instrumentation.

Of particular significance in today's atmosphere of re-evaluation is the Like-for-Like similarity between the company's UK and Czech facilities. Both are modern, state-of-the-art operations, sharing advanced equipment sets, certified procedures, processes, language and IT infrastructure. The Czech facility offers regional labour cost advantages without the many associated risks of traditional Low Cost Region off shoring, whilst at the same time providing logistics advantages and a convenient proximity to the world's single largest market.

In addition to the JJS facilities, the Paragon Electronics Group also offers Paragon Electronics Components' innovative manufacturing solutions. The well proven 'best-fit' approach, supported by partnerships with specialist EMS companies, centres on decoupling the supply chain from the assembly process to provide a unique solution to the challenges associated with outsourcing electronics manufacturing.

Graham Smith, MD of Paragon Electronics Group's Electronics Division explains: "Our EMS model is primarily based on two key facts; rigorous management of supply chains is absolutely vital in order to ensure that all product is available when required, with the ability to respond dynamically to changes in demand; and secondly is the realisation that when it comes to contract manufacturers, one size does not fit all."

"These two points led us to create our different model which is based on decoupling the supply chain from the assembly and ensuring a best-fit between the customers' requirements and the one or more assembly facilities who will manufacture the products. Within the group, this approach can combine with the JJS facilities in the UK & Czech Republic to add fresh elements of uniqueness and maturity to today's outsourcing equation."

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