Column 5 ARKTECH Co., Ltd

Quest for supply chain stability—a behind-the-scenes look at an ideal international procurement of materials

ARKTECH Co., Ltd (the number of employees: 33; equity capital amount: 10 million yen [as of February 2024]), based in Shimotsuga Gun, Tochigi Prefecture, manufactures high-quality precision sheet metal products in the semiconductor, healthcare, logistics, aviation and other sectors. ARKTECH, established in 1963, has excellent technological expertise concerning precision sheet metal processing. For example, in 1997, the company acquired ISO9001 certification, becoming the first company to do so in the sheet metal industry, and in 2021, it was selected as a "Tochigi SDGs Promotion Company."

In 2003, ARKTECH established a fully-owned subsidiary in the Philippines called ARKTECH PHILIPPINES, INC. The subsidiary has secured a production system equal in quality to the system at the Japanese parent company, rather than a system with problems particular to overseas procurement, such as being unsatisfactory in terms of quality, delivery time, and customer relationships despite being low cost. That was achieved by installing equipment similar to the one used by the Japanese parent company, by stationing Japanese staff at the subsidiary on a permanent basis, and by having the parent company accept local staff from the Philippine subsidiary for training.

Column Figure 5-1. Pictures showing the factory building, a scene from a manufacturing process, and a turret punch press of the subsidiary in the Philippines





Source: Pictures shot by ARKTECH Co., Ltd.

For sheet metal processing, stainless steel and aluminum are mainly used as materials. Before the COVID-19 pandemic, ARKTECH was procuring a certain volume of Chinese sheet metal materials, which were of lower cost than products from other countries and were of adequate quality.

However, the company started a supply chain improvement initiative in order to diversify procurement sources of sheet metal materials, for whose supply it had depended on China, because procurement from China became unstable due to the COVID-19 pandemic and also because the relationship between Japan and China deteriorated.

When shifting to procurement sources other than China, ARKTECH increased procurement from existing procurement sources, mainly in Japan but also in the United Kingdom and the continental Europe, with which it had continued to do business. As a result, the company could reduce the cost of finding new procurement sources and the burden of administrative work related to starting procurement from new sources. In addition, the cost associated with supply chain diversification could be kept lower than had been expected because of the long-standing relationships with the existing procurement sources.

Some sheet metal materials procured from alternative sources were of a sort for which an order was placed for the first time, so some coordination work was necessary. However, the coordination work did not pose a major problem because it could be dealt with under an extensive application of existing transactions.

When ARKTECH conducted the supply chain improvement initiative, logistical bottlenecks due to the COVID-19 pandemic was a daily topic not within the industry but in the mass media. While the risk from depending on particular countries as procurement sources was well known, it seems that few companies actually became aware of the problems and risks inherent in their supply chains and took actions.

Vice President Arakawa of ARKTECH PHILIPPINES, INC. said: "Importing from China is one option that companies can adopt as part of cost reduction in order to protect their profits, but having excessive dependency is not desirable. In many cases, companies can become aware of the need to disperse risks through supply chain diversification only when specific risks, such as delayed delivery and failure to ensure quality, have materialized."