Buying spare parts of unknown provenance and quality can come back to haunt manufacturers and have a negative financial impact on company performance.

What you don’t know can hurt you. That’s what plant managers for a multi-billion dollar supplier of plastic resins found out when one of their computerized process control systems failed, knocking manufacturing operations offline for an extended period. The lost production was significant enough that it triggered an insurance claim. After his follow-up inspection the insurance adjuster gave the company some startling news.

Following management priorities, the parts department manager had been buying used control-system replacement parts from various dealers that he had found on the Internet. The parts seemed good because they had the OEM logo on them. But the adjuster thought otherwise. He threatened to increase the insurance premiums for all of the company’s manufacturing operations because of the ad hoc parts purchasing practice. There was no way to confirm, the inspector argued, that the parts purchased online were genuine OEM, or that they still functioned properly. In this instance, buying from surplus parts dealers may have saved the company several thousand dollars over a few years, but those savings were dwarfed by the potential insurance rate increase.

In the end the company’s insurance premium was not increased, but the incident did cause company managers to take a closer look at their spare parts purchasing practices. They were disturbed by the variability and lack of quality control that they found, and the potential risk that future failures could lead to more downtime.

A Cost-Effective Spare Parts Solution
After searching for an economical solution, the company agreed to participate in ABB Process Automation’s Pre-Owned Parts (POP) pilot program. Not unlike buying a certified pre-owned Lexus from an automobile dealer, the ABB POP program offers a quality-oriented, price-competitive alternative for companies buying spare parts on the surplus market.

ABB acquires parts from facilities that are upgrading equipment or that are targeted for closure. We then inspect, test, clean and repackage the parts in our ISO9001.2008-registered factory. We will immediately replace any replacement part that doesn’t work correctly, and escalate any issues to certified repair technicians. Other customer benefits include simple, single-source procurement, 24-hour availability and an OEM-backed one-year warranty.

Right Price, Right Parts
Part management costs can constitute a substantial portion of a maintenance budget. Manufacturers are always looking for better ways to manage such costs. In addition to buying parts that match management’s procurement priorities and risk tolerance levels, the right components must be stored in on-site inventory. Many companies over stock certain components and under stock more critical items.
ABB’s Parts Fingerprint service evaluates company parts management processes, including inventory levels, procurement processes and storage procedures. Parts are ranked as high, medium, or low risk based on criticality to the operation. Stocking levels are compared to equipment performance and uptime requirements. After considering equipment lifecycle status, past reliability and equipment supportability, recommendations may include consignment parts, lease to own, new inventory management tools, reset stocking levels, and the return of overstock or obsolete parts for credit. In fact, some of the parts offered through the ABB POP program are acquired this way.

At the plastics resin manufacturer a new engineer has since taken over responsibility for spare parts management. While he has been satisfied with the quality and delivery of parts through the POP program, he has calculated the cost of unplanned downtime and has decided that the risk of lost production isn’t worth the incremental cost savings. The operation is now moving away from surplus to refurbished parts. ABB refurbished parts go through a more time-consuming inspection, testing and repair process, and carry a two-year warranty.

Risk considerations, inventory priorities and lifecycle status will evolve over time with equipment upgrades, system hardware and software updates, and changes in component availability. All of these factors will influence parts management requirements. Regular reviews—conducted once a year at least—will ensure that your spare parts programs remain aligned with business goals and production objectives.