

Product Knowledge is Product Quality

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At the Rayong axle plant, we had been struggling to overcome a repeat of issues that prevented us from achieving the next level of quality performance. We implemented poka-yokes and some 200-percent checks, but certain problems kept coming back just when we thought we had buried them.

By studying these problems closely, we realized the real issue was lack of product knowledge. Because most of our employees come from non-industrial areas – Rayong’s largest industry is commercial fishing – it is hard for some to understand the products we’re making, much less what constitutes

good and bad quality. Defects such as poorly machined surfaces and dents might be red flags for employees with machining skills or industrial experience, but not so for those seeing axle components for the first time.

To help our people better understand good and bad quality – and to allow them to take action when necessary – the managers focused on three areas: safety, product knowledge, and layered process audits (LPAs).

I equate quality to safety – if people aren’t taking personal safety (quality of life) seriously, then it’s tough to convince them to focus on product quality.

Product knowledge is essential if we want employees to understand the “why” and not just the “do as I tell you.” Thus, we embarked on learning sessions led by our quality control technician. The “customer” was defined as the next operation on the line, as well as the vehicle manufacturers we serve.

To take this concept one step further, we also started an LPA program:

- 43 teams conduct first-layer audits daily;
- 13 teams audit weekly; and
- Three teams audit monthly.

With 59 audits per month, we can cover the entire plant in two months.

Editor’s Note: The Rayong plant improved its PPM performance by 65 percent from 2007 to 2008.

From left, Dana employees Prakasit Sriputtha, Somjet Pacharawongsakul, Amporn Thongsaard, and Noppadol Sansuwan in Rayong learn more about Spicer® axles. Their operation has improved product quality by improving product knowledge, as well as through an aggressive layered process audit program.

