

## Quality Management

Refocusing on across-the-board, thoroughgoing quality management, we are promoting Total Quality Management (TQM).

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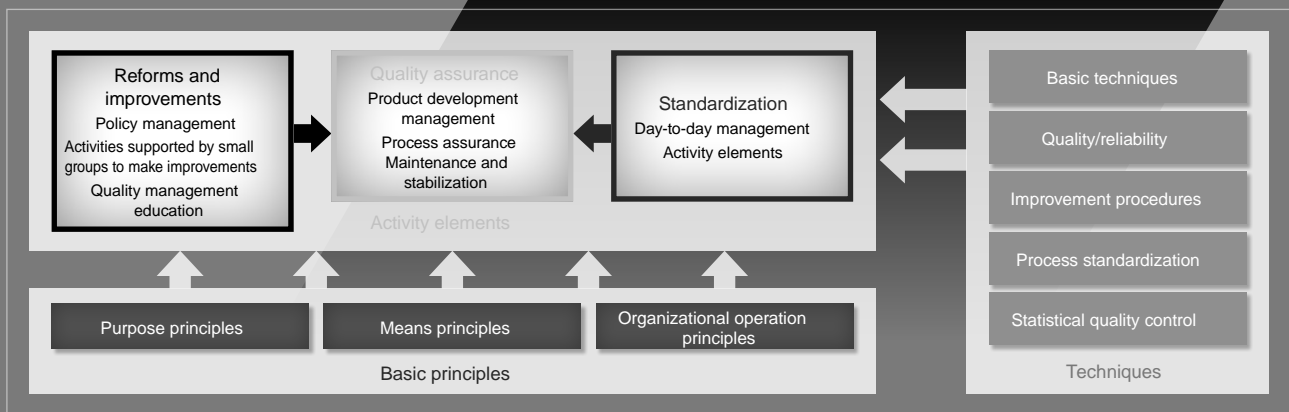
### Drawing Lessons from a Major Incident, We Redoubled the Priority We Place on Prevention

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In December 2017, partial crack was found on the bogie frame of a series N700 Shinkansen railcar manufactured by Kawasaki Heavy Industries. After this incident, we set up

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TQM Framework



upgrade Total Quality Management (TQM), our system of quality management and in-house quality standard evaluation and enhancement.

We believe TQM represents our commitment to ceaseless quality improvement. Improving product quality requires the involvement of top management as well as every employee in every relevant department, so in fiscal 2018 we carried out across-the-board quality inspections embracing the TQM perspective, beginning with the Rolling Stock Company and going on to all other business segments.

In fiscal 2018 we established the TQM Promotion Department and focused on three areas: policy management, day-to-day management and quality management education.

Policy management entails rolling out policies determined by top management at each organizational layer and their full adoption by frontline workers. It is important to ensure that takeaways from issues identified in the course of operations are shared vertically with upstream sections and horizontally with other departments for policy optimization.

In day-to-day management, we prioritize the standardization of operations and detection of abnormalities, to this end engaging in KPS activities to break down the time frame allotted for and compile records about each operational process. We are able to identify potential issues and opportunities for improvement, for example, taking four minutes to execute a three-minute process. The detection of abnormalities requires monitoring and quick response systems. From a broader perspective, we aim to ensure that managers are on the lookout for abnormalities that may have become normalized in routine operations.

With regard to "quality management education," we have positioned the MTBP 2019 as a starting point and are reviewing the educational curriculum in place at the corporate level under the initiative of the TQM Promotion Department. Similar efforts are under way at each business segment. We are thus redeveloping our platforms for employee education and sharing information as necessary.

The Companywide Quality Meeting facilitates the sharing of best practices as some business segments have already determined TQM-based quality policies and created