

QUALITY IS NOT A LUXURY

Car manufacturer Brilliance is reaching for the premium segment in China with the help of improved quality assurance

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Hot, loud, fiercely competitive and extremely high-speed – China's automotive market is like a NASCAR race. The difference is that in China there are significantly more players on a distinctly more confusing racetrack. 90 domestic and foreign OEMs currently compete in this market and overcapacity of up to 10 million vehicles is possible in the coming three to five years. Many manufacturers are already turning to consolidation strategies to combat the pressure on margins that can be expected from this since it is also recognized in China that high sales and low prices are not the decisive criteria for pole position in the market.

“Good quality and a robust brand image will decide long-term success.”

wishes to gradually expand its range, currently limited to mid-range cars, minivans and light duty vans, to embrace the premium segment in China and in the process to raise quality significantly.

Three switching steps to measurable quality improvement

So far the brand image has suffered from outdated technology and poor crash test results. In order to effect the transition to a luxury brand Brilliance must therefore achieve above all a rapid, significant and sustained improvement in quality in all areas of production such as pressing plant, body shop, paint shop, final assembly and engine plant. For this purpose, the car maker has been using the expertise of ROI Management Consulting AG since June 2012. "Good experience with ROI in the past convinced me to bring the team back on board this time," says Franz Gollmann, Head of Central Quality at Brilliance Automotive.



**Franz Gollmann,
Head of Central Quality,
Brilliance Automotive**

The ROI team uses various KPIs over the entire project such as the audit score for the entire vehicle, warranty costs and ex gratia payments as well as the duration of rework per model to examine what measurable quality results have been achieved. Accordingly, as many potential quality-related improvements need to be identified over a total of three project phases and rapidly integrated into daily operations. The analysis phase, in which the team used lean scans to identify processes over the entire production chain, some of which they then redefined, has already been completed. Particular attention was given to checkpoints such as process design and the quality of bodywork and parts. However, process and manufacturing management standards and employee skills were also examined.



The focus in the second phase was on staff training and the pilot implementation of improved manufacturing processes. Here the project team optimized workplaces at various stages of the Brilliance production line (e.g. body shell construction and assembly) in accordance with the 5S workplace organization methodology. First, with regard to setting in order and systematic cleaning in order to create an uncluttered environment and to lower the risk of

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work-related accidents. Second, to create the basis for manufacturing improved quality vehicles. The employees welcomed the new workplace organization enthusiastically. "In the past many workplaces were cluttered and without any form of visual management, which resulted in inefficient work practices and consequently in quality defects," relates Franz Gollmann. "In future the workforce should be sensitive to and identify opportunities for improvement. For this reason, we have introduced quality gates all the way from body pressing through to final assembly. Together with quality circles and the introduction of a structured problem-solving methodology, we wish to insure that the defect ratio continues to fall."

The roll-out of all identified improvement measures in both factories is currently under way as part of the third phase of the project. For this purpose, the project team systematically coaches Brilliance employees to insure that the new processes are stable and adaptive for future changes. "We are currently training 12 employees as production champions in order to propagate initial successes to all areas of production. In actual fact, not only have methodologies such as 5S or the 'A3' structured problem-solving technique achieved very good results, but it has also

been possible to sensitize Chinese colleagues for an entirely new appreciation of quality. This has already led to a significant reduction in the amount of reworking required at a number of points. This can be seen, for example, in the body shells for the new Zhonghua model," emphasizes Franz Gollmann.

Intercultural underbody as a success factor

In addition to initial successes with measurable KPIs in quality assurance, all those involved are benefiting from experience in intercultural exchange. The Brilliance workforce had after all known almost no Western quality standards and the working and communications processes were characterized by typical Chinese structures with bureaucracy and party officials in management functions being able to make working processes difficult without feeling bound by milestone schedules. It thus takes longer than in companies with a Western structure to implement improved processes and to create genuine quality awareness. In general it is however the positive 'lessons learned' in the project that Franz Gollmann emphasizes, "Brilliance employees

are very motivated, keen to learn and deliver good results if given good, clear work instructions. At all events, an obvious success factor can be seen in the mixed teams working together on a common task."

The ROI team supports this intercultural approach with a combination of Chinese consultants and German advisors with many years of experience with Asian OEMs and suppliers. As an example, the project team at Brilliance succeeded in optimizing and stabilizing a protracted problem with irregular clearances on the vehicle body following joint 'A3' problem-solving workshop in the body shop – a further step towards the premium class in China.

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Brilliance China Automotive Holdings Limited

is one of China's leading car makers, particularly in the minivan and light duty van segments. The company set up a joint venture with BMW in 2003, BMW Brilliance Automotive Ltd, to produce BMW 3 and 5 series sedans.
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