



Inside Story: Shock therapy for Porsche: The prestigious German car firm was speeding to destruction, so its chief swallowed his pride and hired Japan's top consultants to improve outdated methods of production. John Eisenhammer charts the brutal remedies they prescribed at the company's plant near Stuttgart

JOHN EISENHAMMER

Sunday, 3 July 1994

AT THE very thought of his first impressions of Porsche, Chihiro Nakao claps both hands to his head and shakes it vigorously

'It was appalling,' he exclaims. 'Where is the car factory, I asked myself. It looks like a mover's warehouse. And there were no workers, just apes clambering up and down shelves.'

Apes? Warehouses? Is that any way to talk about what Germans consider God's gift to the sports car world? It is if you belong to Shin-Gijutsu, one of the toughest consultant groups around, for whom praise is an inefficient use of energy. Yoshiki Iwata, the group's founder, is equally graceless. 'Everybody here talks of what they have achieved, but I only believe what I see. And most of that is the way we did things in Japan 30 years ago.'

To one man at Porsche, such humiliation is like a drug. Wendelin Wiedeking, at 41, is the youngest of the new generation of German car bosses. He took charge of Porsche in October 1992, knowing that only brutal therapy could save one of the great status symbols of the sporting world. For the previous six years, Porsche, based in Zuffenhausen, near Stuttgart, had been accelerating downhill, blind to its perilous course through arrogance and complacency. In the mid-1980s, it was selling 50,000 cars a year; last year it sold 14,000 and made a record loss of DM239m (pounds 98m).

Japanese look-alikes, at about half the price, had virtually annihilated Porsche in the crucial US market. The company had neglected its model development; it had disappeared down the field in sports car competitions. Porsche in the early 1990s was rapidly heading for the same fate as Aston Martin, Ferrari or Lamborghini: becoming the 'toy' sports car department of a mass manufacturer.

'We needed a complete culture shock, because that is the only way to achieve a revolution in a traditional firm like Porsche,' says Mr Wiedeking. 'We had so much to learn, and so little time.' In his view, the only people who could deliver that shock were the Japanese - the very people Porsche had to beat in order to survive.

It was a brave decision. The Americans and British had accepted many years before that the Japanese were the best car-makers in the world - that their manufacturing systems produced cars of phenomenal quality with extraordinary efficiency. The Germans were less convinced: everyone knew, did they not, that they were the best engineers in the world? In going cap in hand to the Japanese, therefore, Mr Wiedeking was committing something close to heresy.

But at least he went to the best Japanese. For 30 years, Mr Iwata and Mr Nakao had been steeped in the development of Toyota's super-efficient production process, whose principles inspired and drove the Japanese conquest of world markets. They were part of the inner circle around the legendary engineer Taiichi Ohno, who began to create what is now called the 'lean' factory in the 1960s. When the master retired in the mid-1980s, Mr Iwata, who had spent many years in charge of Toyota's Kaizen, or continuous improvement programme, left to set up Shin-Gijutsu, which means 'new technology'.

He and Mr Nakao travelled the world improving the production of anything from biscuits to aero engines. But they swore they would never work for a foreign car-maker. It would be disloyal, and they were tired of cars anyway. They had already turned down several offers. But Mr Wiedeking had no time for such niceties; the fate of one of the world's best-known brand names hung in the balance. 'Perhaps Mr Wiedeking was aware of the Japanese custom, that when a top manager asks for something three times, you cannot refuse,' notes Mr Nakao. 'And so we are here.'

Mr Wiedeking's decision to bring in Shin-Gijutsu was the natural extension of his campaign to bring Japanese systems into Porsche. He believes in the superiority of his company's engineers and innovative capacity. Porsche had plans for new models to claw back its market share - but they would succeed only if they could be priced, and manufactured, competitively.

To do that, Mr Wiedeking believed, he would have to learn from the masters. 'The Japanese are kings in three areas,' he says. 'First, production; second, production; and third, production.'

Mr Wiedeking had worked at Porsche in the 1980s but had left to join another engineering company in 1988. He returned in October 1991, as board member in charge of production, and transformed sporadic fact-finding trips to Japan into a systematic learning campaign. 'The Japanese production system has nothing to do with culture or Buddhism,' he says. 'It has everything to do with clarity of strategy and can be applied everywhere.' For up to three weeks at a time, key members of the production process, from foremen to senior managers, were schooled in the Japanese way. They spent a lot of time with Toyota, Nissan, Isuzu and Mitsubishi. They spent even longer with suppliers, who were more willing than the car-manufacturers to reveal what lay behind the surface impressions of lean production. The notes, sketches, and lessons of these visits were painstakingly recorded in a highly confidential 300-page book known to insiders as the 'bible'.

But it was only after he took over as chief executive in 1992 that Mr Wiedeking could go the whole hog and bring in Japanese consultants. He knew he would face massive opposition among middle management. The first week-long visit by Mr Iwata and his colleagues in late 1992 was painstakingly prepared. In that week, six workshops were held, three by Shin-Gijutsu and three by Porsche's in-house people. 'The results spoke for themselves,' says Mr Wiedeking. 'The Japanese were better; the ice was broken.'

He then launched his own softening-up process, slamming into the management structure. He cut out a third of the managers as well as two of the six hierarchical layers. 'There is no second- or third-tier manager doing the same job he did 20 months ago. Many were saying, just let the new boy break his horns and then things will settle back down again. I gave no one the chance,' he says.

Down on the production line there is a commotion around Tadanori Mizoguchi, another Shin-Gijutsu man. He jabs at the cabin of a Porsche 911 Carrera, his finger shaking with indignation. 'Bring me the person responsible for this,' he bellows. The workers require no translation. The object of his outrage is an imperfectly glued piece of carpet. Someone mumbles about sorting it out later. 'What] No solution] No deadline]' barks Mr Mizoguchi in a tone reminiscent of Prussian parade grounds. 'Only tell me what you have done, not what you have not done.'

This is precisely the type of scene that Franz Steinbeck, head of Porsche's works council, had feared. He is no particular friend of the Japanese. 'For my book, the entire management should simply let itself be told it is incompetent by the Japanese. But not the workers,' he says. 'On top of that, they cost a fortune.' When Shin-Gijutsu first came to Porsche in late 1992, the management agreed with the works council that the Japanese would not be allowed to order the workers around. Mr Wiedeking knew the agreement would soon lapse. 'In the fat years, the moaners were always quick to dominate events. Today they are more likely to be out of a job.'

He made clear that anyone who wished to complain about the Japanese would have to do so in the chief executive's office. No one has taken up the offer. This is partly because the workforce realises the Japanese are bringing home the bacon. 'It is pretty hard when a bunch of strangers walks into a company with a reputation like Porsche and describes what you have been doing for years as rubbish,' says one assembly worker. 'There was a lot of tension at the beginning. But then people saw things getting done.'

The most dramatic transformation has taken place in the engine assembly plant, where a horrified Mr Nakao made his first acquaintance with the 'apes' in the removal warehouse. 'You could not see what people were making. There was only a dark tunnel, with shelves two and a half metres high on either side stacked with parts. The workers spent half their time climbing up and down looking for bits and pieces.'

The Shin-Gijutsu men made the workers halve the height of the shelves. But this was only an intermediate solution. Earlier this year, the shelves were removed altogether. Where previously parts for 28 days' production engulfed the line, there are now enough for just 30 minutes, hanging on specially designed trolleys that come up continuously from the 'supermarket' in the basement. Porsche has leapt from old-fashioned stock control to a just-in-time system.

'Things have clearly improved. The quality of the cars is better, there are far fewer errors,' says a worker in the rectification area. Many on the shopfloor, it appears, have got over their first misgivings about the Japanese and have emerged from the savage criticism with their pride intact.

Mr Wiedeking's enthusiastic support for the changes, his constant pushing, helped. So did the widespread belief among the workers that it was not they who were at fault, but management, and that it was the men in suits who were really suffering at the hands of the Japanese. This assessment tallies with Mr Wiedeking's own thinking. 'Who told the workers on the line how they must do things? We, the management, we told them how to work inefficiently; we had forgotten how to ask their advice,' he says.

Porsche now likes to give the impression it started in August 1991, the beginning of the business year in which Mr Wiedeking went on the board. The more distant past has been erased. 'We are not here to talk about why we used to do things differently. That is over with - gone. We are looking to the future,' says Manfred Kessler, in charge of the company's continuous improvement programme, which carries on between the bi-monthly Shin-Gijutsu visits.

When not discussing production-line changes or conducting workshops, the Shin-Gijutsu people are ambushing staff. 'When I see one of Porsche's fine engineers, I do not say 'good morning', 'grins Mr Nakao. 'I say, 'show me your hands. They must be dirty - engineers must always have oily hands'. 'Used also to checking the soles of shoes worn by managers in the finance department, to see if they spend enough time walking around the factory, Mr Nakao was devastated to discover the trick did not work with Germans, who are used to

resoling old shoes. 'We do not do this in Japan,' he says. 'How can I see if a man is doing his job properly if he keeps changing his soles?'

Mr Nakao is impatient with managers who believe the job is almost done. 'Those who have been here for some time look around and think this is good progress. But if you compare Porsche with most other car factories in the world, it is not good. We are only at the beginning of the beginning.' But the men from Shin-Gijutsu rebut suggestions that they are doing no more than any number of consultants in any number of car factories. 'Even in Japan, there are at best five managers who have really understood Kaizen,' Mr Iwata says. 'Many people talk about it, but only a very few know it.'

The name of Jose Ignacio Lopez de Arriortua, the self-proclaimed saviour of Volkswagen, raises only a polite smile. 'Look at what is happening at Mazda, Nissan and some of the electronic companies. This proves they have forgotten Kaizen. Even in Japan it is not automatic,' Mr Nakao says. He estimates that about 10 per cent of Porsche's managers have understood what Shin-Gijutsu is trying to achieve. 'The rest are asleep,' he says.

The results are already impressive. The production time of the new Porsche 911 Carrera has been reduced by a third, to 86 hours. That is still some way behind the best comparable Japanese time of 50 to 60 hours, but Porsche claims to be well on target. Whereas 70 per cent of Porsches three years ago required expensive rectification at the end of the production line, the proportion is now half that. Inventory levels have been reduced by 44 per cent: 7,000 square metres of shopfloor space have been freed and rented out. A worker suggestion scheme, which in the past generated fewer than 20 ideas a month, has now exploded to around 2,500 - probably helped by the prospect of rewards such as a world trip or a Harley-Davidson motorbike.

In the year to the end of this month, Porsche expects to make another loss of about DM140m to DM150m, but to break even in 1994/95 and to make a healthy profit by 1997. By then, it will also have revamped its range. First comes the two-seater Boxster in 1996: it will cost about DM75,000 - below Porsche's traditional price bracket - and will battle it out with the upstart Japanese. It will be followed a year later by the 996, the successor to Porsche's 30-year-old hallmark, the 911.

Mr Wiedeking aims to produce 30,000 vehicles a year, of which more than half will be the Boxster. He says Porsche will not repeat the mistake of the mid-1980s, when it rushed after the short-lived yuppie market. 'We need to re-position ourselves, reaching the sort of clients we want to see in our cars.'

Although spending DM1.5bn on developing these two models, the company says its cost savings and productivity gains will allow it to sell the Boxster at DM75,000 - and to hold prices on the 911 replacement - while still earning a 5 to 10 per cent return on sales. Mr Wiedeking has no doubt that this is possible. 'In 1997, if you want to see the most efficient low-volume car producer in the world, come to Zuffenhausen,' he says. 'You will save yourself a ticket to Japan.'

In his own gruff way Mr Iwata agrees. 'We are not here to praise,' he growls. 'But there is hope for Porsche.'

(Photograph omitted)

Mr. Nakao on
the genba,
teaching
people the
basics.

**“Master the
basics.”**



KAIZEN FOREVER

Teachings of Chihiro Nakao

Kaizen for the Next Generation



Bob Emiliani
Katsusaburo Yoshino
Rudy Go

Shingijutsu-Kaizen

The Art of Discovery and Learning



Ralph Wood
Michael Herscher
Bob Emiliani

Learn more at www.bobemiliani.com/books