

# Life begins at forty

The red Dutch mailboxes, the emergency roadside telephones, the Senseo coffeemaker and the SENZ umbrella. Alumni and staff of the Faculty of Industrial Design Engineering have certainly made their mark on the Netherlands. In 2009, the faculty celebrates its fortieth anniversary. A proud milestone, yet the faculty's innovative drive remains as great as ever.

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Entering the Faculty of Industrial Design building, one cannot help but notice the bright green banner proudly proclaiming that the faculty has now been around for forty years. Scores of students bustle past, narrowly avoiding the car chassis parked beneath the banner. In this cavernous space, students sit busily sketching their latest new design ideas between the empty coke cans and yoghurt containers strewn across the lunch tables. This relaxed atmosphere of lunching, sketching, thinking, tinkering, and organising has characterised this faculty since its inception. Even so, a lot has changed over the years: the number of students has increased considerably, the faculty's home is now a state-of-the-art building on the Landbergstraat, and even the faculty's reputation stands in stark contrast to what it was in the 1960s.

### Hardly academic

In 1968, a handful of pioneering students were the first to enrol in what was then known as the Technical Industrial Design programme, and which, as an enrollment prerequisite, required students to have their first-year architecture diplomas. Industrial design engineering in Delft was born, but the achievement did not come without a fight. In the early 1960s, various Faculty of Architecture instructors, led by Joost van der Grinten (1927), had embarked on a lengthy struggle. "It wasn't until 1969 that our programme received the recognition it deserved. That was when Technical Industrial Design received an independent status with an engineer's degree of its own," says retired professor of industrial design and former faculty dean, Dr Hans Dirken. In 1968, he was one of the three people who began teaching this new course. "We were rather looked down on by the rest of the university," Dirken recalls. "They thought we were too much into aesthetics, and that we would probably be more at home at an art college. The general view was that our programme was hardly up to academic standards." There was little truth in this criticism, Dirken says. "We engaged in research right from the start. Of course, we didn't have many people with PhD degrees on our staff at the time, but the same applied to the rest of the university up until the 1980s. I had always tried to get the name of the faculty changed from Applied Industrial Design to straightforward Industrial Design Engineering. Applied design led to a misconception, as if the outside of an object was all that mattered to us. Nonsense, of course. The technological side has always been just as important as the design."

Despite such misconceptions, Dirken looks back on the early years with nostalgia: "We were pioneers. We actually had to invent the course from the ground up. It was pure improvisation. Teaching industrial design was the red thread running through the entire enterprise."

The students in those days were drawn from a wide variety of backgrounds, and included former chemical and mechanical engineering students. The now professor of Industrial Design, Jan Jacobs, was one of the first students to enrol in the new programme. He began his university studies at the Faculty of Architecture, but wasn't satisfied. "All of us wanted to design products. We had young teachers, and everybody was really enthusiastic. Protests at our faculty were practically non-existent in the tumultuous 1960s and 70s."

Initially, the industrial design students had to visit other faculties for many of their courses. "Analysis, for example, was taught at the chemistry faculty. We also had to take lots of mathematics and metallurgy courses to keep up to TU Delft standards."

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The first assignment the students were given was to design a fishing cabin at the Faculty of Architecture. This was followed by a prefab doorframe. The nutcracker was another notable assignment. Jacobs: "Today, that nutcracker wouldn't be made much differently. At that time the object was made of wood, while today you would use plastic, but the stresses are still the same."

Jacobs graduated in 1973: his graduation project was the design of a piece of office furniture. "That was a great shock," he says, laughing. "It just wasn't done at a polytechnic institute. Automotive design was another definite no-no in Delft. Now, of course, things have changed for the better. One of my graduates, Adriaan van Hooijdonk, is now a top designer at BMW, the car manufacturer. At least today we're allowed to be proud of that."

A vital part of the industrial design training was the graduation project, which the students completed during a one-year internship at a company. ➤



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### Anniversary festivities

The fortieth anniversary of the Faculty of Industrial Design Engineering will be celebrated throughout the year with lectures, conferences, and an exhibition in the Kunsthall museum in Rotterdam. On 8 April, Dr John Ehrenfeld will give a luncheon lecture at the faculty. Prior to retirement, Ehrenfeld held a position at the prestigious MIT Center for Technology, Policy and Industrial Development. Late last year he published his magnum opus, 'Sustainability by Design'. The anniversary year will also be marked by a number of conferences. On 13 May, the conference subject will be Context Mapping; in September, a conference will celebrate a decade of Design & Emotion; and in October, the Living Symposium will be held. The anniversary year concludes on 19 December with the opening of an exhibition covering forty years of TU Delft Industrial Design, held in the Kunsthall in Rotterdam. For more information: [www.io.tudelft.nl/evenementenagenda](http://www.io.tudelft.nl/evenementenagenda).

Dirken: "In that commercial context, the students were forced to think about the development of a new product. And as a teacher you also learned a lot there, because you were exposed to every aspect of the design process."

As an example, Dirken recalls the design of an ambulance that provided space for a traumatologist. "It turned out that many people died in the ambulance en route to the hospital. Since a traumatologist greatly improved a person's chances of survival, the new design included space for this important member of the medical team. This assignment brought me into contact with vehicle technology," Dirken, who studied at the University of Amsterdam and Cambridge University (UK), specialising in statistics, psychology, physiology and ergonomics, considers the multifaceted nature of the industrial design programme to be one of its major assets.

### Milestone

During those early years, the faculty had no home of its own. Students and staff would roam between buildings scattered all over town, from the Oude Delft and Julianalaan to the Ezelsveldlaan. In 1973, however, Industrial Design won a major battle: the programme was awarded the status of sub-department (in those days, TU Delft had departments rather than faculties). In addition, a dean was appointed: founding father Emile Truijen (1928-2003), who since 1962 had joined with Van der Grinten in fighting hard to get the new faculty off the ground.

The ultimate victory however did not come until the 1984, when Hans Dirken, who had succeeded Truijen as faculty dean, was appointed TU Delft's rector.

The faculty staff regarded this as a milestone on the road to recognition for the Faculty of Industrial Design Engineering. "As rector, you would of course never favour your own faculty, but I also never discredited industrial design either," Dirken says. "It was important that for once the rector was an industrial design man. This showed that we were indeed being taken very seriously."

In the meantime, student enrollment numbers were rapidly increasing, making Industrial Design a large and important faculty – no longer the odd one out in Delft. Its acceptance and popularity were partly due to the efforts of the staff and teachers who left their mark on the Netherlands through a series of eye-catching designs, like the red Dutch mailboxes and yellow emergency roadside telephones. The success of Industrial Design can also be traced back to the fact that from the very beginning the subject was wide-ranging. "In alumni surveys we always ask what graduates really learnt during their student days," the current dean, Professor Dr Cees de Bont, says. "The results show that students appreciate the fact that they really learnt how to analyse problems. Our curriculum teaches them to investigate the origins of a problem, and provides them with the necessary techniques for tackling the problem. They learn how to think outside the box and how to turn improvements into concepts." De Bont studied the psychology of economics at the University of Tilburg, and in 1992 he received his PhD degree from TU Delft's Faculty of Industrial Design. Looking back, he believes the main difference between today and twenty years ago is that the programme has become more international: "That goes for the nationalities of the students and staff, as well as for the way we





collaborate with companies abroad.”

De Bont says that today there is greater focus on finding “different design approaches”. To illustrate this, he cites an industrial design PhD student who is currently developing an information system for people in remote areas of India, where illiteracy is rife. “Information about hygiene often fails to reach these people. Some women don’t even know why they menstruate. Many of the infections that occur in these rural areas could be prevented. Our PhD student is developing a system that can impart this kind of vital information.”

The first pioneering industrial designers were of course also engaged in tackling social problems. “However, they primarily designed things that go thud when you drop them,” De Bont says, “and although that is still a feature of industrial design, we also teach students that a ‘thing’ is not always the best solution to a problem.”

Jacobs provides the figures that support De Bont’s assertion. In the early years of the faculty, ninety percent of the graduation projects involved an object, compared with thirty percent today, with the other projects now involving concepts, ideas, plans

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and strategies. “On the one hand, it’s a pity for the pioneers like me, but on the other it reflects the spirit of the age. Today, Western society carries the conceptual side of design on its shoulders.”

New products designed by former faculty students are still conquering the world – just think of the Senseo coffeemaker. “It was designed by an industrial designer, but the product manager, the business manager, the packaging designer and the person who designed the sound also came from our faculty,” De Bont says. The most recent success story is the SENZ umbrella, which is also enjoying commercial success in the United States and Japan. “And let’s not forget Windows Vista, which was partially designed by one of our alumni,” De Bont adds. “All this illustrates the great versatility of our alumni, which we’re very proud of. Industrial designers bring experts together, consider the context, and are very good at directing specialists. They have a bird’s eye view.”

This is also becoming increasingly apparent within TU Delft, De Bont adds. The Faculty of Industrial Design Engineering participates in numerous research projects, including one, involving electric cars, that entails collaborating with the faculties of Applied Sciences and Electrical Engineering. Such



The former Faculty of Industrial Design in the late 1980s.

initiatives have gradually led to the acceptance of Industrial Design as a fully-fledged member of TU Delft’s technological team, despite the occasional grumbles to the effect that the curriculum is too light on mathematics. The faculty’s great diversity is also prominently displayed in De Bont’s conference room, where visitors can view a new design for a guitar, a ‘lifestraw’ that turns polluted water into clean drinking water, a wheelchair that can do wheelies, and a colourful cake stand.

### Innovation

De Bont points to the inauguration of the new faculty building in 2002 as a high point in the history of Industrial Design at TU Delft. This however was preceded by an all-time low in the late 1990s, when the faculty was merged with the Faculty of Mechanical Engineering, because the then TU Delft Executive Board decided it wanted to reduce the number of faculties. “We were being marginalized,” De Bont says about that time. Jacobs also vehemently opposed the plan, and led the opposition against the merger, which was finally rolled back in 2004. During the same period, several of the faculty’s professors left, leaving a large void in the teaching staff, which happily has now been filled. Jacobs: “Seven or eight new, young professors are now leading the way, which is great for the faculty’s dynamic and revitalization.”

The three generations of industrial designers are extremely proud of the forty-year milestone. “Forty years seems young for a university faculty,” De Bont says, “but in the world of design that’s quite a respectable age. We are one of the world’s oldest industrial design faculties. Fortunately, forty years is an age you can still celebrate. At forty, you’re in your prime. You’ve passed puberty and gained your independence from your parents, but you’re not yet overripe. At forty, you’re still very ambitious in wanting to change things. It’s a good age, and one that reflects the current state of our faculty.”

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