



Laser cutting in education

Production of models and maquettes

TU/e

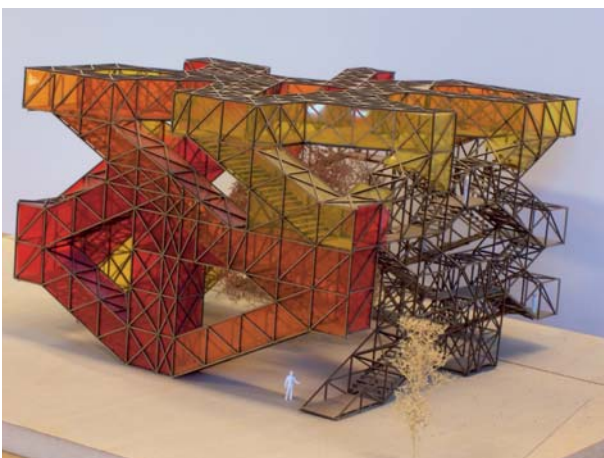
■ Technical university of Eindhoven www.tue.nl

The technical university of Eindhoven is a research-driven, design-oriented university of technology, with the primary objective of providing young people with a competitive academic education within the engineering science and technology domain.

The TU Eindhoven strives to ensure that its research results are translated into successful innovations. In order to preserve the headstart of their university, employees and students are supported by latest technologies.

■ The application

As a part of their studies, students at the department “architecture, building and planning” are requested to produce models to gain practical experiences. The models are predominantly made of different sorts of wood and acrylic. All model parts have to be cut to size before they are assembled.



Trotec Case Studies

■ The challenge

The production of models is a very time consuming and labour-intensive work when done by hand. The university was looking for a technology that reduces production time, and can be used by many students. It should provide a software feature that allows the attribution of working hours to the users. As model making is an extremely precise craft, the cutting system must realize excellent results on a large range of materials.



■ The Trotec solution

After serious consideration, the TU Eindhoven decided to invest into a laser cutting machine from Trotec. The Speedy 300 60 watt combined with an elaborate exhaust system perfectly serves the university’s needs. On 726 mm x 432 mm the laser system works extremely fast and handles even very complex and difficult geometries with ease.

Trotec laser cutting technology provides an intuitive and user-friendly software package that allows newcomers to work fast and efficiently and offers unexpected possibilities to practised users. Thanks to the flexible interface to various graphics programmes the direct transfer of files is completed easily and fast.

Final year students are permitted to use the CO₂ flatbed laser system for a low hourly rate. Thanks to the Trotec software feature “Job History”, billing is accurate and therefore fair. Students are thrilled by the excellent results they achieve on the Speedy 300. Not only are their models of higher quality, but they can also distinctively reduce the production time. Working with the latest technologies also increases the students’ attractiveness for future employers. As a result of the success, the university is going to order a second Speedy 300 for another department.