

# Laser cutting in architectural model making

## Processing of wooden and plastics parts of all sizes

### Trotec Case Studies

#### Peter McCann Architectural Models Inc.

Peter McCann Architectural Models Inc. is one of the largest architectural modelmakers in Canada. In business since 1980, PMAMI has served the model making needs of local and international architects, industrial designers, engineers and manufacturers.

Peter McCann provides a one-stop solution for architectural and industrial design presentation. Available services include model making and prototyping, 3D computer rendering, graphics, signage and brochures. Located in downtown Toronto, PMAMI is a 6000 square foot facility with full range of model and presentation capabilities.

Among the high profile projects of PMAMI are:

- Trump Tower
- Morgan Condominiums
- Magna World Headquarters
- Baltimore Hospital
- Westbay Lagoon
- Burj Dubai Tower
- Plaza Hotel N.Y.

#### The application

Peter McCann stands for highly detailed models. A typical model contains literally thousands of individual parts. Models are built from client supplied drawings and cad files. At PMAMI, plastics and wood are the primary materials used in the construction of models, along with a wide variety of composites and unique materials. All these parts have to be cut to size before they are painted and then hand fitted and assembled.



Moscow Business Center

#### The challenge

Architectural model making is an extremely precise craft. All parts used for a model must be of outstanding accuracy and quality. Therefore, the cutting system has to provide excellent results on different materials and for all sorts of geometries and part sizes. As the applied materials are generally very thin, it is important that the cutting system does not damage them during the cutting process. The cutting system must be highly reliable and easy to operate as time is a crucial factor in architectural model making and schedules are often very tight.



#### The Trotec solution

With the large format laser Professional TP 1313 Peter McCann Architectural Models Inc. are perfectly equipped for their cutting jobs. The CO<sub>2</sub> flatbed system achieves excellent cutting results on wood, veneer, cardboard, paper, acrylics and many other materials. On its large working area of 1300 mm by 1300 mm the laser processes large as well as small work pieces. The laser operates contact free—processed materials lie flat without having to be clamped. This ensures that even very thin materials remain completely undamaged during the cutting process. The Professional TP 1313 works extremely fast, with a max. processing speed of 60 meters per minute. Thanks to the extremely fine laser beam, the Professional TP 1313 handles even very complex and difficult geometries with ease. Trotec laser cutting technology provides a software package that makes working on the Professional very intuitive and user-friendly. The flexible interface to various graphics programmes allows direct transfer of files.

At PMAMI the Trotec laser system Professional TP 1313 provides high productivity and efficiency thanks to excellent cutting results, top flexibility and high processing speed.

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