

# FREEFORMING

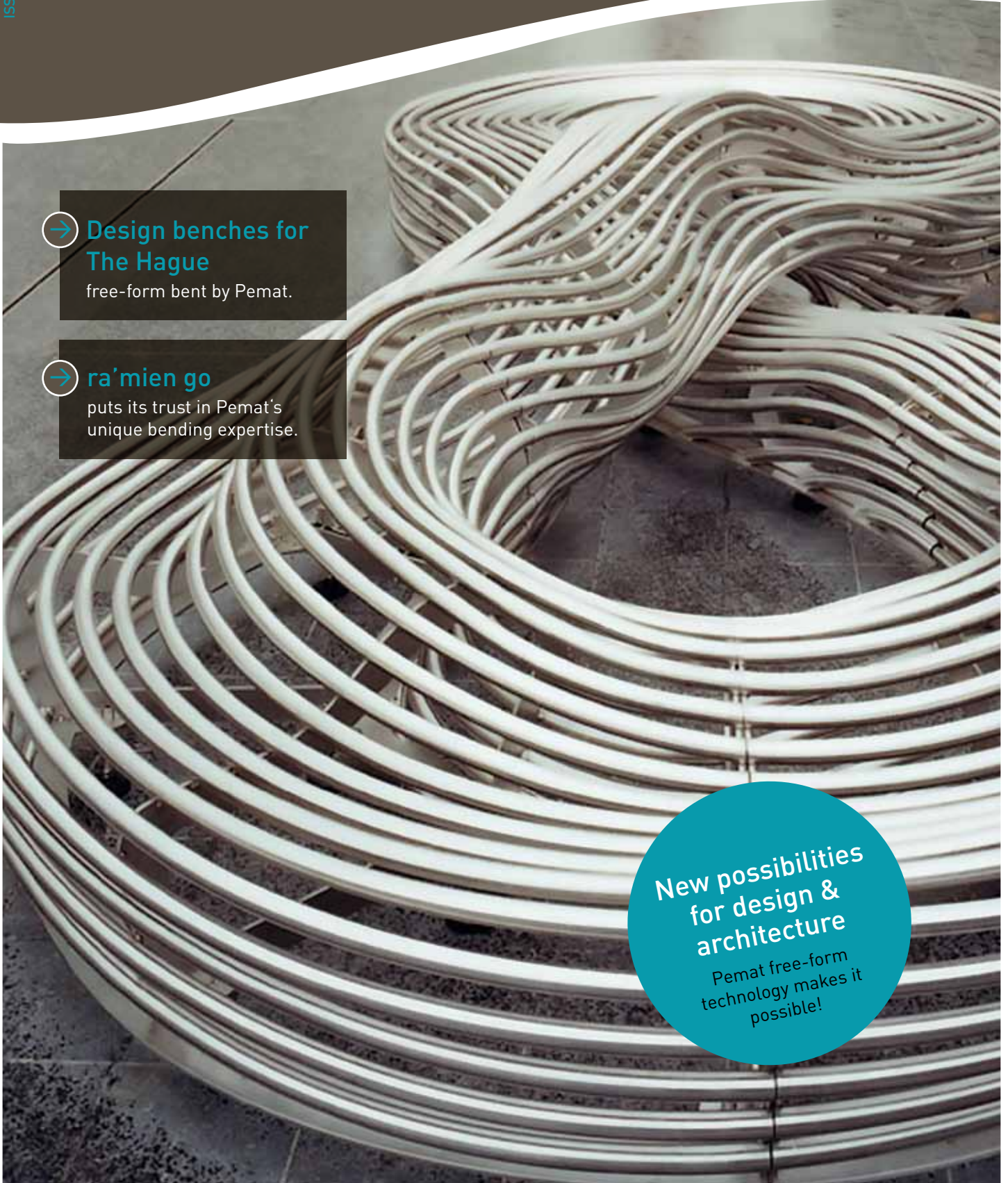
The Technology Magazine of Pemat AG, Switzerland

→ **Design benches for  
The Hague**  
free-form bent by Pemat.

→ **ra'mien go**  
puts its trust in Pemat's  
unique bending expertise.

**New possibilities  
for design &  
architecture**

Pemat free-form  
technology makes it  
possible!





Challenging forms –  
Model C part of the project  
„Benchmark“



accuracy to be completely fulfilled, the material also had to satisfy the highest requirements.

And so Pemat procured absolutely identical stainless steel tubes, from a single production batch, for the entire order volume. This was the only way to exclude variations in the material.

**„Each tube a single piece in length and shape and absolutely precision-fitting.“**

Once the definitive production data and quality material had been obtained, the bending work began. Pemat formed and machined around 400 individual tubes for the three different benches, around 300 m on average for each individual object and with bending radii up to Rm60.

The manufactured tube elements were then subjected to a quality control and electronically measured again, before leaving the production plant in Oberriet / Switzerland.

With the implementation of this project Pemat has impressively proven once again how freely and precisely it can bend tubes for even the most complex projects. Extremely cost-effectively, efficiently and punctually.

Further project information can be found on Sebastien Wierinck's website and that of his „Workshop“ design studio:

<http://www.swws.net>

On final placement of the order, the customer sent his CAD data to Pemat. This data was processed and electronically measured by the Swiss bending specialists, in order to obtain the corresponding production data on this basis; the production data was then transmitted directly to the machine – all in one digital process.

But perfect production data was only part of the process. In order for the fitting



## ➔ Impressive interior architecture –

Pemat makes it possible.

**The Asian restaurant chain „Ra'mien go“ commissioned Pemat with manufacturing a dominating design element for its brand new restaurant in Vienna. A 33 meter long ceiling installation was created from free-formed tube elements based on the designs of Austrian architects „Tzou Lubroth“.**

The word is also out in Austria, that Pemat is the first port of call when it comes to free forming metal. And so the implementing architects, who were responsible for the design of the Asian restaurant chain, contacted the Swiss specialists.

The idea: A ceiling installation, which hovers above the heads of the guests. A fishbone structure in a bent shape - like a spinal column. The formed tubes form a framework with terminations in aluminium flat steel. Pemat was commissioned with implementation of the entire structure including main beam and assembly in Vienna.

After receiving the enquiry, Peter Mattle, proprietor of Pemat AG, got on a plane to meet the client on-site and to gain an accurate picture of both the planned installation and the building situation. Back in Oberriet, armed with additional information and the relevant CAD data, the bending specialists started work on the detailed plan.

How could it be otherwise - this project was ideal for Pemat: highly complex, each tube individual in respect of bending radii and length, and only possible to produce efficiently and accurately fitting in free form.

**„For the ceiling structure more than 1,300 meters or 460 individual tubes were bent.“**

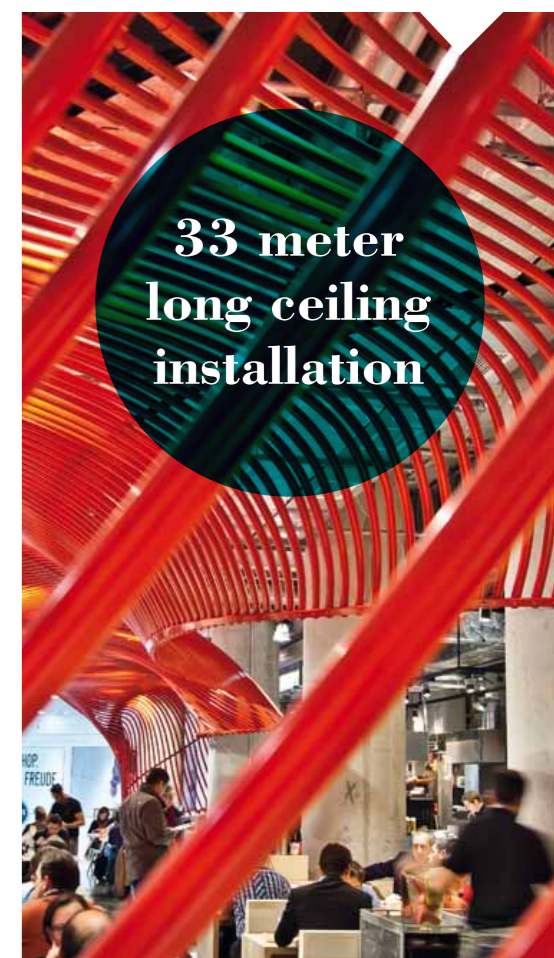
Each tube on the basis of its individual data profile in length and shape. Always with the maxim that each tube would ultimately fit perfectly in its designated position – which could be fulfilled almost as a matter of course.

The tubes formed by Pemat were provided with a quality paint finish in a further work step. In an attractive red – the brand color of Ra'mien Go.

The final step was expert assembly in-situ. Pemat was also responsible for the installation. And so the bending specialists traveled to Vienna where, together with local assembly professionals, they created this unique construction out of four prefabricated pieces.

The customer is delighted with the high quality of work and the efficiency displayed by Pemat. The Asian restaurant chain is already planning to continue this concept in future restaurants.

Useful links: Tzou Lubroth Architects: <http://www.tzoulubroth.com>  
Ra'mien Go Restaurants: <http://www.ramiengo.at>



**33 meter  
long ceiling  
installation**

## ⇒ Pemat AG, Oberriet:

Bending and rolling technology from Switzerland.

**Pemat has focused on bending and rolling metals for over 20 years. During this time the company has achieved a first-class reputation for the creation of highly complex and unusual structures.**

Where others are reluctant to get involved, Peter Mattle and his team really come into their own – challenging projects are their preferred field of activity. Pemat offers its customers unique know-how in bending and rolling technology.

With a technical infrastructure which is perfectly tailored to these tasks. It is therefore not surprising that Pemat is far more efficient in the execution of bending orders and can offer its customers extremely interesting solutions so cost-effectively.

Pemat is an innovative company, which never rests. It is constantly testing new technologies and developing new processes. Whether industry, architecture,

stair construction or vehicle manufacture, companies throughout Europe and the USA rely on Pemat's expertise and meticulous work.

During the last few years the company has become internationally renowned in the field of 3D bending technology in particular. But Pemat wouldn't be Pemat, if it didn't impress the market with further innovations. The keyword for the future is „Free forming“!



„Free forming opens up brand new possibilities for design, architecture and industry!“

**Imagine that you could free form metal tubes or even profiles like a piece of wire, with absolute precision. This is not a dream, but reality!**

With its „Free forming“ innovation Pemat offers all possible options for bending tubes and even profile systems (thermally separated pro-

files, for example) in every direction and radius. Metals can be made into brand new shapes – in architecture, design, industry or exhibition stand construction. Pemat not only implements creative shapes, but it inspires architects, designers, planners and design engineers in turn with new ideas. This exchange gives rise to new objects and solutions.

These are based on design data or 1:1 models from a different material. Pemat scans these objects in, measures them with the aid of unique measuring software developed in-house and so prepares data for manufacture. However, free form bending doesn't just push boundaries with regard to possibilities. Thanks to the modern infrastructure this method allows highly efficient processes, which translate into advantageous costs.

**As you can see, the future has only just begun.**



Stage elements for international sporting events.



Floating stage, Bregenz Festival

