

**Welcome to the torbo newsletter with the edition 04/2010!**

**In the current newsletter you will find important Datas & Facts, more informationen about torbo and the technology of wet sandblasting. Enjoy your reading. The torbo team will be happy to hear from you - via e-mail, fax or phone call - should you have any questions or suggestions about your special applications!!**

**torbo on tour in Prague  
- Charles bridge -**



Image 1.: Charles Bridge

The Charles Bridge is a gothic bridge and is one of the oldest stone bridges in Europe. The Charles Bridge is crossing the river "Moldau" and is a must for every Prague visitor. The Charles Bridge connects over 16 arches the districts "Malá Strana" (small side) and Staré Mesto (old town). Today only pedestrians crossing the bridge, but the Charles Bridge was open since 1883 for the horse-trams and at the beginning of the 20th century also open for the electric tram.

Image 2.: Charles bridge



The placing of the foundation stone was in the year 1357 by the emperor Karl IV., at the date that was calculated from astrologers: 9th of July at 5:31 o'clock. The bridge was built in design set by the stone bridge in Regensburg / Germany. The bridge was called Prager bridge to the year 1870.

Numerous holy statues from the 17./18. century are standing at the edges from the bridge. The most famous statue is in memorial of the holy "Nepomuk". In the year 1393 Wenzel V. threw Nepomuk in the river "Moldau". Nepomuk drowned and after that he was declared holy.



Image 3.: Holy statues at the Charles bridge

The bridge is looking like an open air museum. Many original holy statues are now replaced by copies. You can see the original statues in the "Lapidarium" at the national museum.

**Restoration**

Since 2007 the restoration of the Charles Bridge is continuing but is still open for public. In the first the road stones and the protection balustrades were replaced. At the restoration of the sandstone walls many stones had to be replaced. To adapt the new stones to the old sandstones color, the old stones were in first washed with hot steam. After it was gently cleaned with the torbo-system. During this cleaning only the surface



Image 4.: torbo machine M120

was treated and no original material was taken off by the torbo system M120. It was adjusted in that way that the effect is comparable to micro sandblasting but with the torbo system it was much easier and faster. They used fine calciumcarbonat as blasting media. They carried out the sandstone works under management and supervision from Dr. Jiri Novotny. The company Axiom Real s.r.o. carried out the sandstone works in close contact with our Czech agent Mr. Ladislav Janca. They worked with the laval nozzle no. 6 and the rotation nozzle TS98. The nozzle was connected to a 19/7 hose and the blasting pressure was 3 bar. In the meantime the sandstone works are finished and the Charles bridge is shining in her new old gleam.



Image 5.: torbo at work

### New torbo XS20

The torbo XS20 was specially designed for spot blasting on board of ships and platforms, making the job more easy for its maintenance people. The machine with its vessel capacity of 20 liters and about 45 Kg is a lightweight in his class. With his demensions of L=40cm by W=40cm by H=80cm it is very easy to handle and move the system. Connected to a compressor of 1,5m<sup>3</sup>/min.(60cfm) with 7 bars you can do already 0,5 to 1 hour of spot-blasting with a quality of SA 2,5.



Image 6.: torbo XS20

The torbo XS20 is built for small maintenance on platforms and steelconstructions in the area of oil and chemical works. Even weldings of oil or gastanks can easy be done. Because torbo`s enviromental friendly aspects there is no dust, you do not need to cover the working place and other works in the area can still be done. The new machine is standard equiped with a 10 m or 20 m long blasting hose. It is possible to connect it directly to an airring. These airrings are often on board of ships or platforms but also in a lot of factories.

An ATEX (Ex) model is already built for the Ex-free areas. Also you can have the XS20 in a skid unit with a watertank and built in compressor. In this way you can work everywhere stand alone without fixed water or airconnections.



You have the opportunity to see the system live because we are showing it at the International Ship Exhibition SMM from 7 to 10 September in Hamburg. You will find us in Hall B2 Stand EG20. We are happy to meet you there. torbo stands for 25 years of experience in wet blasting machines with a high quality.

### Endurance test for torbo - Building Cleaning Organisation, Essen -

The master in building cleaning, Mr. Bernd Dornbach, had in the old days unwavering confidence in the JOS-system. But in the year 2005 torbo Engineering donated him a torbo machine for an endurance test. Since that date,



Image 7.: Mr. Dornbach

Mr. Dornbach is convinced of the torbo system and its wide range of possibilities. Now he is testing for torbo all the new developments in facade cleaning. At this moments

a lot of teenagers, which are learning for building cleaner are trained at the torbo system. These students see the torbo machine practicy at work and collect their first own experience with the system. They are amazed at which application fields you can use torbo.



Image 8.: Students at work with torbo

### Preview:

Here is a small preview of our next newsletter:

- Façade cleaning from the german museum, munich



- Steel work in Taiwan  
- Looking back to the SMM 2010 exhibition

**You will find regular and up-to-date information about the technology, the various applications of the torbo system and current trade fairs at our website:**

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