

COMENIUS School Partnership Project: **European CNC Network** project with the “Train for Europe”

Europe is Growing Together—How Trade-School Students Put the European Spirit into Practice



A vision became reality. Over 1000 vocational school students and their teachers from 24 schools in 21 countries worked on a common project. This was the largest school project ever supported by the European Union. After two years, the impressive result was presented in the European Parliament in Brussels, Belgium.

The rolling result of the school project, named COMENIUS, is a “train for Europe.” And it really moved. Pulled by three locomotives, a total of 25 individually designed cars got traveling: everything was designed by the students and the many individual parts were manufactured on NC-controlled machine tools. The project depended on intensive teamwork, which—thanks to the “European CNC Network”—met with outstanding success.

Enthusiasm was the passenger

Communication between the students of the various countries was the key for the project’s strong start. And HEIDENHAIN, too, was pulling vigorously. As a partner of industry, HEIDENHAIN participated with programming training at the conferences and a cost-free TNC programming course in Traunreut for participants from Malta, Hungary and Croatia. HEIDENHAIN provided the programming station software and training documentation. It also equipped the coordinating schools with altogether four cost-free programming stations. HEIDENHAIN was in fact so excited, that it hitched on its own car so that a group of its own apprentices could par-

ticipate. Like all the other participating students, the apprentices designed and manufactured the car entirely by themselves. They made the drawings, wrote the CNC programs and made all the parts on their own TNC-controlled machine tools. So the “HEIDENHAIN car” was created from the astonishing number of 261 components, which was entirely intentional, because the railroad passenger car was supposed to be a close to the original as possible.

Will the train keep rolling?

The course for continuing the project has already been set (Train for Europe—Reloaded), and HEIDENHAIN is on board. The project resulted in a great number of contacts for advancing the cause of CNC training all over Europe. Perhaps we’ll see other countries pick up on the “Train for Europe” idea, for example as a “Train for China,” “Train for India” or “Train for Russia.” A bon voyage for CNC basic and advanced training, and not only for Europe.

HEIDENHAIN’s contribution

In September 2007, HEIDENHAIN joined the multilateral school project as a partner from the industry. Right from the first international meeting, the cost-free programming software met with great interest. All participants had already received the HEIDENHAIN e-learning program “TNC Training.” Programming courses offered at the regular meetings dealt with programming questions, new control features as well as documentation and support. HEIDENHAIN’s technical support was active throughout the entire project. During the final results presentation in Brussels in April 2009, the invited guests and EU representatives marveled at the Train for Europe.

Project conclusion

HEIDENHAIN was able to provide full support to the goal of improving the methods and contents of CNC vocational training. And the students, who created more than 60 plain-language programs (even turning programs and one 5-axis program) clearly showed that qualification is fun—as additional homework and a thank you to HEIDENHAIN.

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*Precision from the very start—
an apprentice assembling the
HEIDENHAIN car...*

*... that rolled with the others in the
“Train for Europe.”*

