

Exchange program Italy – Germany

Visit of the German delegation in San Bonifacio/Verona, Italy April 2018.

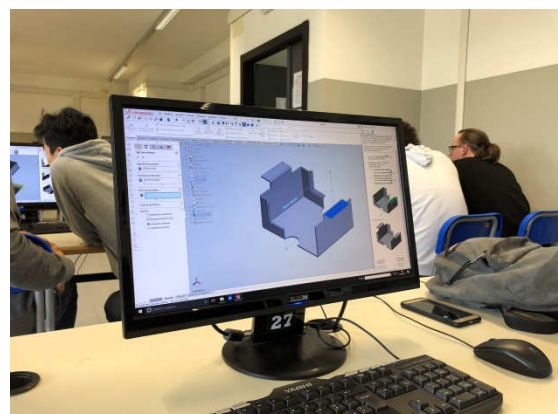


Finally we could realize the first step into cooperation with the Italian Technical College 'Luciano Dal Cero'. Four teachers of the mechatronic department visited the small town San Bonifacio in the region of Verona. We had the chance to become acquainted with the Technical College of 'Luciano Dal Cero'. We got an insight into the educational background, the organizational structure and the students of the college. Furthermore, we could visit companies in the field of mechatronic engineering.

The broad-minded Italian teachers gave us an outstanding warm welcome in their school. We appreciated the visit a lot and came back with a whole lot of interesting impressions as well as we are very motivated to work on sending our students to Italy in October/November 2018!

Attending classes, work shadowing

We had a lot of opportunities to join classes in the field of mechatronic and mechanical engineering. The classes were as listed below:





- Design a bended sheet metal workpiece with 3D-CAD-Software. A class of the 5th year used CAD-Software to determine the flat projection of a bended workpiece. After the designing process they had the possibility of three-dimensional printing of the flat projection. In such a way the college integrate additional digitalized manufacturing methods.

- Technical Math. A class of the 4th year presented different tasks of calculating pressure in pneumatic equipment. Students presented the solutions in English and documented them on an electronic blackboard.

- Automation. Students of the 5th year simulated a pneumatic control of two cylinders initially with Festo FluidSim software. Thereafter they assembled the control with pneumatic devices.

We were introduced to teaching methods, objectives and didactic concepts. We could access the capability of the mechatronic engineering department to provide knowledge and hands-on experience to their students. In many conversations we got to know the motivation, abilities and future prospects of the students.

Visiting companies cooperating with 'Dal Cero' in the field of mechatronic engineering

We visited two more exemplary companies in the area of San Bonifacio:

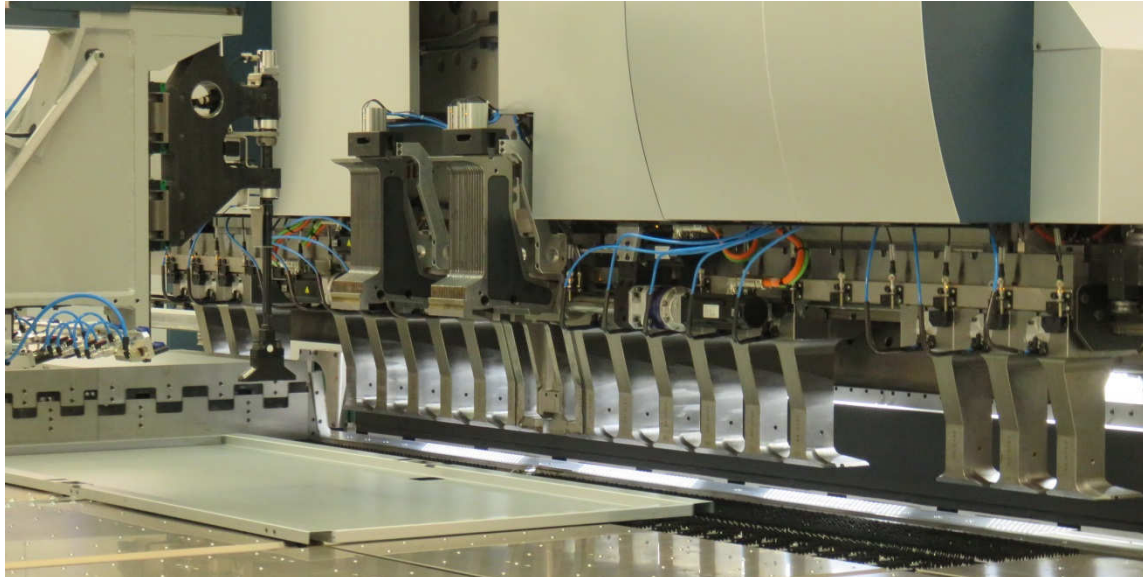
- Salvagnini. Together with two classes of 'Dal Cero' we visited a company that has a high level production line with products that are definitely state of the art and conform to the standards of 'Industry 4.0.' We got an extended behind-the-scenes tour from the head of production and logistics. The products are manufacturing facilities for sheet metal processing. These facilities contain automated storage systems, CNC-punching machines, laser cutting equipment as well as bending machines. Due to their high-quality standards of their products we could see a comprehensive production line with a high vertical range of manufacturing. Salvagnini carries out the development of hardware and software for automation itself.



- Bertolaso. We visited a manufacturer of industrial filling and processing of glass bottles. In their production line we could see advanced technology: assembly with a large scale of different mechanical parts and the automation with various industrial bus systems. Industrial ethernet, ASI-bus and Profi-Net were integrated in one control system.

Researching the state of digitalization and 'Industrie 4.0'

Both companies and school have integrated technologies from industrial digitalization.



Presenting our school to department levels

We gave a presentation of our school and basics of dual vocational training to students and teaching staff of 'Dal Cero'. The presentation was followed up by an extensive discussion of vocational training in Italy and Germany.



Preparing the future student exchange program for German and Italian students and the return visit of the Italian Delegation in Hamburg

We prepared the return visit of the Italian delegation for the next summer. We found out about the expectations of the Italian colleagues. We agreed on the conditions of the visit of the German students in October / November 2018: We will send six students to San Bonifacio for a overall duration of two weeks. In the first week our students will attend school and in the second week they will visit a cooperating company.

