



Lifelong Learning Programme

PROTOCOL

3rd MEETING / ST. PÖLTEN (AUT)



“European CNC-Network – Moulding for Europe“

Date: 24th June, 2009

Written by: Wieland Matthias (AUT – STP)

Protocol from 5th to 9th June, 2009

Friday 5th of June

Was the travelling day of all participants.

The arrival was between 17:00 to 19:30.

In the evening was the welcome and opening speech from Mr. Johann Wiedlack, headmaster of the HTL in St. Pölten.

After the speech we had a dinner in the hotel “Hauser – Eck”

Saturday 6th of June

Hard working day at school

Start with the presentations:

❖ Austria – STP

1. Concept

Consists of 3 different parts, works like a puzzle, the logos and the ensigns are variable. The assembly works with a click system with holes and burlings)

The first prototype was made by rapid prototyping.

2. Concept

Works with 2 racks and 6 equal boards. The boards are also variable for designing and turnable. The dimensions are about 32 x 32 x 32 mm.

A short discussion about the concept comes to the conclusion that it is to complicated.

3. Concept

Consists of 2 top – plates and 4 wedge faces. It is variable to assembly and different logos are possible too. The dimensions of the top – plate are about 30 x 30 x 1.5 and the wedge faces 27 x 27 x 3.

❖ Germany

1. Concept

Works with holes and burlings, nearly the same system like Austria's first one.

2. Concept

Dimensions 30 x 30 and not turnable.

3. Concept

Works also with pins and holes, but it is much too big, if the cube gets smaller the click system will be too small to produce and it isn't able to work.

❖ Austria Fulpmes

1. Concept

2 top parts and 4 side parts, made by the Fachschule.

2. Concept

Was made of the HTL, 6 same parts, works with holes and burlings too, but placed at the inside, so that is impossible to turn. On each corner is a hole, this is essential for assembly. This concept is without moving parts.

❖ Turkey

1. Concept

It works like a puzzle. Concept was known as a toy for children.

❖ Spain

1. Concept

3 different parts, 2 top and 4 side faces. A blot through the cube fixes the parts. There are just 2 possibilities of assembly.

2. Concept

Also 3 different kinds of parts, 2 parts of every system clicks in the holes with burlings. The problem is that 2 wedge faces are bigger than the other ones. Is nearly the same system like Austria's 3rd concept.

❖ Portugal

1. Concept

One cross in the middle which fixes the six parts, all of them are equal. There is no chance to turn the plates. They made a mould and tried to produce it out of plastic. A short video presentation how the mould assembles.

The disadvantage is, that the edges are sharp and the cube is instable.

Discussion: How to vote

The solution was:

- we vote 5 parts out of 12
- each school votes for 5 parts with 5 points
- the points are splitted, it is not allowed to give all points to one school
- and it is allowed to vote for the own concept

First Voting:

Country	Concept No.	Points
AT - STP	1	4
AT - STP	2	3
AT - STP	3	4
AT - FUL	1	5
AT - FUL	2	2
DE	1	1
DE	2	1
DE	3	0
POR	1	4
SP	1	1
SP	2	3
TR	1	2

Discussion:

AT – STP 1

- How to place ejectors to make it look able, because on the inside will be the marks of the ejectors.
- A suggestion is to place the 4 ejectors so, that the marks will be a part of the logo
- Inside will be the logo of the school, outside the country
- Outside is the main side

AT – STP 3

- AT – STP 3 and SP 2 are pretty similar, but the faces of the AT – STP 2 are all the same and have got the same size
- SP 2 have got 2 small, 2 big and 2 top – faces, so it is more difficult.

AT – FUL 1

- The disadvantage is that the blades are not turnable
- It's the same system like Austria's

Second Voting:

- Voting for the best 2
- Each school gets 2 points
- Voting for the own is allowed

Country	Concept No.	Points
AT – STP	1	5
AT – STP	3	2
AT – FUL	1	4
SP	2	0
POR	1	1

Third Voting:

- 1 vote for each school
- Voting for the own is allowed again

Country	Concept No.	Points
AT – STP	1	4
AT – FUL	1	2

→ After the voting's, we choose AT – STP 1 out of 12 concepts.

Sunday 7th of June

Culture day at the famous world Heritage “Wachau”

- Travelling to Melk and visit the famous abbey (www.stiftmelk.at)
- Lunch in the city
- Trip with a Danube – boat (www.ddsg-blue-danube.at) to Dürnstein with a following dinner in an original restaurant, also called as “Heuriger”



Group photo in the front of the abbey “Melk”

Monday 8th of June

Company and School day

- Travelling to our partner company GEBERIT (www.geberit.com)



Group photo in front of the Geberit factory

- Travel back to school
- School visit of the CAD – rooms, classes and the factory
- Work conclusion, homework and review of the meeting
- Farewell evening in the small pub “Villa”

Homework:

Things to do to the next meeting in Germany:

1. Get member in the forum (<http://mould.cnc-network.eu>)
Username: - national ID: [AT STP], [DE], [POR],...
- then first name and last name
2. Collect all pictures also from Gaziantep, but eliminate unusable pictures.
Bring the pictures from Gaziantep to the next meeting in Germany or send them on DVD to Germany.
Also collect the CAD documents (step, dxf, PDF files) on DVD.
3. Moulding Dictionary:
 - 20 words for every school in English and in an excel – file.
 - Define in a category (CAD, CNC, ...)
 - 6 languages
 - Describe it with max. 25 words
 - Examples: injection machine, terminology,...

Homework for Portugal: Compare “final exams” to the meeting in Portugal in January 2010

4. Drawing of the plastic parts, which we have to produce:
This is the task of AT – STP.
What we need to the next meeting:
 - drawing of the plastic part
 - drawing of inserts, drawing from the electrodes and for the whole mould

Decision of the material:

- ABS easier for injection
- POM better for the click system, because its more slippery
- Both are possible to colourize

Whole group chooses POM (Polyoxymethylen)

The drawings of the plastic parts should be finished before the holidays.

Mould:

- No. 237175 (Hasco Catalog)
- 2 form – inserts (measurement 140 x 250 x 32)
- The different blades will be bought (Cavity, Ejector, Bolster)

5. Ask HASCO – office in your country for discount. Order just after the meeting in Germany, we will look, which school gets the highest discount.
6. Suggestion for the logo:
The logo will be discussed in Germany.

Thursday 9th of June

Travelling day: Departure of all participants

Participants:

Heinz	WILDGRUBE	BBS-TGHS	55543	Bad Kreuznach	Germany
Frank	ZIELKE	BBS-TGHS	55543	Bad Kreuznach	Germany
Niclas	SCHMIDT	BBS-TGHS	55543	Bad Kreuznach	Germany
Alexander	KREIS	BBS-TGHS	55543	Bad Kreuznach	Germany
Daniel	RUSS	BBS-TGHS	55543	Bad Kreuznach	Germany
Gerhard	JANK	HTBLA	6166	Fulpmes	Austria
Kurt	GREMINGER	HTBLA	6166	Fulpmes	Austria
Patrick	FISCHER	HTBLA	6166	Fulpmes	Austria
Claus	KOBALD	HTBLA	6166	Fulpmes	Austria
Jaume	COLL	Salesians de Sarriá	08017	Barcelona	Spain
Joan Maria	ANDREU	Salesians de Sarriá	08017	Barcelona	Spain
Fernado	RODRIGES	CENFIM	4785-141	Trofa	Portugal
Sergio	COSTA	CENFIM	4785-141	Trofa	Portugal
Loenel	PEREIRA DA SILVA	CENFIM	4785-141	Trofa	Portugal
Miguel	JOAQUIM SOUSA	CENFIM	4785-141	Trofa	Portugal
Tiago	MIGUEL SILVA	CENFIM	4785-141	Trofa	Portugal
Türkan	ÇIL	Mehmet Rüstü UZEL	27650	Gaziantep	Turkey
Mehmet Yavuz	ERBUDAK	Mehmet Rüstü UZEL	27650	Gaziantep	Turkey
Erkan	BOSTAN	Mehmet Rüstü UZEL	27650	Gaziantep	Turkey
Yusuf	KOÇAKGÖL	Mehmet Rüstü UZEL	27650	Gaziantep	Turkey
Emine	AYIK	Mehmet Rüstü UZEL	27650	Gaziantep	Turkey
Onur	YAMAN	Mehmet Rüstü UZEL	27650	Gaziantep	Turkey
Ahmet	GÜLEÇ	Mehmet Rüstü UZEL	27650	Gaziantep	Turkey
Günter	AMSTÄTTER-ZÖCHBAUER	HTBL u. VA	3100	St. Pölten	Austria
Bernd	GUTMANN	HTBL u. VA	3100	St. Pölten	Austria
Martin	PFANNHAUSER	HTBL u. VA	3100	St. Pölten	Austria
Matthias	WIELAND	HTBL u. VA	3100	St. Pölten	Austria
Markus	WALZER	HTBL u. VA	3100	St. Pölten	Austria
Michael	WINKLER	HTBL u. VA	3100	St. Pölten	Austria

Malta is not included in the project because they didn't get the foundation, so all the terms and venues were changed.