

# CNC4you

The Shopfloor Magazine

## Four competitions – 100 % Sinumerik

CNC competitions at  
WorldSkills Leipzig 2013

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The clearly structured Sinumerik Operate user interface simplifies the work for the participants

CNC competitions at WorldSkills Leipzig 2013

# Four competitions – 100 percent Sinumerik

Only the best was good enough for the best young CNC turners and millers from all over the world. In July this year at the WorldSkills Leipzig 2013 professional world championships, Sinumerik CNCs spurred the national champions of their disciplines to peak performances on more than 30 machine tools by DMG / MORI SEIKI.

The atmosphere in Hall 2 of Leipzig's trade show site was electric. Those visiting the stands were immediately aware of the intense levels of concentration along with the general hustle and bustle. While young hairdressers from all over the world were bending over heads, and up-and-coming confectioners were producing the finest chocolates in record-breaking time, 22 CNC millers and as many CNC turners were sharing 11 machines next door. One was using the Mastercam CAM system to convert the geometric contours of a highly complex imaginary part drawn on paper into a program. Another was already setting up "his" machine tool in order to manufacture the workpiece he had been tasked with.

In three heats on three competition days, the national champions of their disciplines – all no more than 22 years old – machined their parts once in aluminum and twice in steel. Particularly challenged were the millers who had to manufacture a complex three-sided machining task in the third heat. For all participants it was important to select the best tools for fast and effective machining and finishing within the time specified – and getting an impressive result. "That would be pretty challenging even for an experienced skilled worker," stresses Bernd Barthelmann, turning expert at the Technology and Applications Center (TAC) of "Skills Presenter" Siemens in Erlangen, Germany, who, together with his TAC colleagues,

provided the participants with intensive coaching before and during the competition.

## Intensive preparation with Sinutrain

Each of the machines by DMG / MORI SEIKI was fitted with Sinumerik 840D sl and the Sinumerik Operate user interface. In the run-up to the competition,

The champions had to give their all for the demanding tasks (here the Finnish CNC miller)





WorldSkills International

The winners in the CNC milling competition are proud of their success

participants could take part in two-and-a-half-day trainings held at various locations by the DMG / MORI SEIKI Academy with the support of TAC Erlangen. Training courses at the TACs in Taiwan, Korea, and China also provided preparation for the big task ahead. And all “athletes” were given access to a version of the Sinutrain training software, adapted specifically to the competition machines.

Robert Wolbers, a participant from the Netherlands, explains, “I had never had anything to do with a Sinumerik CNC before, but with Sinutrain I was able to prepare myself perfectly at home. In the end, the real Sinumerik behaved in exactly the same way during operation and programming as the training software.” Johannes Rudolf, German champion in CNC milling, had already familiarized himself in the training workshop with the Sinumerik Operate software. “I think the familiar Windows style of the interface is very user-friendly, with all its diagrams and colored graphics,” he says. This experience was a great help to him at WorldSkills, and he was extremely pleased with his experience there, even if he didn’t quite manage to get into the top group, being pitted against some strong Asian contenders.

### From lone wolf to team member

For the first time, the CNC turning and milling competitions at WorldSkills were complemented by the demonstration skill Plastic Die Engineering, as well as the team competition Manufacturing Team Challenge – also equipped and supervised by DMG / MORI SEIKI and Siemens. The plastic die engineers had to construct an injection mold within a certain time frame, set up the respective programs in the CAM system, and mill the molded part with the MILLTAP 700 CNC milling machine. The production engineers had to show teamwork: a team of three had to manufacture a box for shredding cans. Also in this competition, the

participants were impressed by of the high quality and easy handling of the CNC equipment.

### Brazil in sight

The first thing anyone thinks of upon hearing “Brazil” and “world championship” is probably football. After all, the biggest and most popular of all sporting events has already been marked on the 2014 calendar by most people. Not so the ambitious up-and-coming CNC operators and young skilled workers from other industrial skilled trades and services – because Brazil will also host the next WorldSkills competition just one year later (more precisely, in São Paulo, from August 11 to 16, 2015). More than a thousand competitors from more than 60 countries are expected to take part after the national qualifiers and EuroSkills in the French city of Lille in 2014. The reigning German champions in CNC milling and CNC milling encourage people to take part. Rudolf, a participant in the CNC turning competition, says: “The excellent preparation by Siemens and the intuitive Sinumerik CNC equipment gave me an enormous sense of security during the competition.” Tobias Brockfel confirms: “Despite the huge time pressure and the hustle and bustle, I thoroughly enjoyed WorldSkills, and it has helped me grow both personally and professionally.”



### MORE INFORMATION

Have we piqued your interest? You’ll find a photo gallery and infos on the winners and the free Sinutrain test version download at  
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