

— ATHANASSIOS KALIUDIS

Musical Material made of Sheet Metal

At the completion of her apprenticeship as an industrial mechanic at TRUMPF, Annabelle Pichl presented a truly special test piece in the form of a violin made of sheet metal.

Sheet metal is a fascinating material with a host of possible applications. It plays a ubiquitous role in the lives of each and every person and can be found in everything from car, plane and train travel to communication and work, household and leisure activities. The fascinating qualities of sheet metal also served as inspiration for Annabelle Pichl's final examination. The 21-year-old — who underwent three years of training as an industrial mechanic at TRUMPF in Ditzingen — wanted to avoid the beaten path of standard customer parts for her test piece. "I've been playing the violin since I was four, and I've been in the apprentice band since I started my apprenticeship at TRUMPF," says Pichl. "The idea behind the sheet metal violin came up during a conversation about the band."

For Pichl, it was important to be able to construct an exact replica of a classical violin — the sheet metal instrument corresponds to the wooden standard in nearly every detail. Save for the material. The violin body is made completely of stainless steel, and the chinrest (made of plastic) was produced using a 3D printer in the training workshop. The neck — a milled part — is a test piece created by Nick Rampf, an apprentice from the prototype trials department.



As Annabelle Pichl plays John Lennon's "Image" on her sheet metal violin, it becomes apparent just how versatile and fascinating the material is.



The strings were spares from Pichl's own violin. Whether the sheet metal violin would actually be playable and produce sound (it does!) remained uncertain until the end of production. Everyone involved in the project are all the more thrilled with the results. "It'll soon be time for the next group of apprentices to produce their own test pieces. Who knows — maybe soon we'll see an entire orchestra perform at TRUMPF using sheet metal instruments," says Markus Werteneuer, a trainer at TRUMPF who assisted the project.

Annabelle Pichl — meanwhile a successful graduate of the apprenticeship program — has been employed at TRUMPF since the end of June as a mechanic in the demonstration center in Ditzingen. The violin has been honored with a display in the 3th floor reception area where all visitors can see the unquestionable versatility of sheet metal for themselves.



