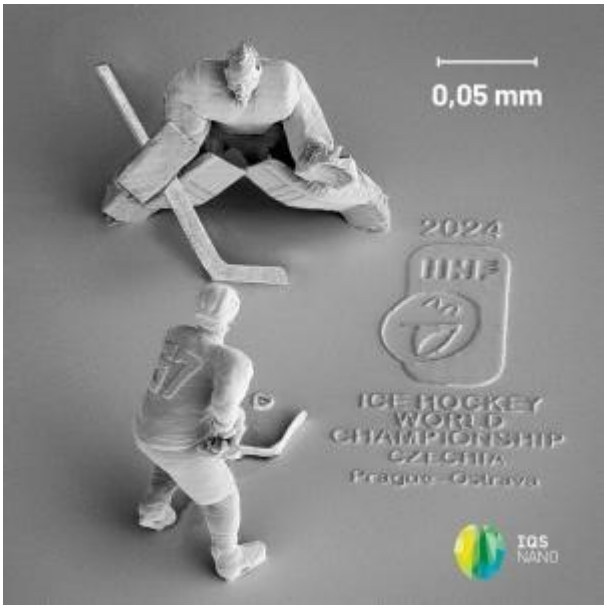
Unique 3D Nano Model Celebrates Czech Republic's Victory at Ice Hockey World Championship 2024



3D nano model of ice hockey players printed on the first Czech IQnano3D printer

Nanoprinter invested and operated by IQS Nano

Czech nanotechnology company IQS nano has created a unique 3D nano model of ice hockey players printed on the first Czech IQnano3D printer.

BRNO, CZECH REPUBLIC, May 30, 2024 /EINPresswire.com/ -- To honour of the Czech national ice hockey team—freshly-crowned world champions—the Czech nanotechnology company IQS nano s.r.o. has created a unique 3D nano model of ice

hockey players printed on the first Czech IQnano3D printer. The model's size is comparable to the thickness of a human hair (about 0.1 mm). In addition, the situation shown in the model bears a striking resemblance to a move by the Czech forward Lukáš Sedlák, whose two almost identical goals in the semifinal against Sweden sent the Czechs to the World Championship final.

As proof, using our 3D nano printing technology we composed a microscopic ice hockey duel that is so miniature it cannot be observed by the human eye, only with an electron microscope."
— Milan Matejka, director of IQS Nano

The total dimensions of the nano model, called "In the Heart of the Game: a Microscopic Ice Hockey Duel," are 0.325 mm x 0.175 mm x 0.153 mm. The size of the forward is approximately 0.125 mm x 0.090 mm x 0.153 mm.

"What does the world of ice hockey and in the world of nanotechnology have in common in the Czech Republic? We excel in both thanks to Czechs' incredible diligence and skill," said Milan Matějka, director at IQS nano. "As proof, using our 3D nano printing technology we composed a microscopic ice hockey duel that is so miniature it cannot be observed by the human eye, only with an electron microscope. By creating a sophisticated 3D nano model, we wanted to celebrate the incredible journey of the Czech ice hockey team at the World Championship, which ended in triumphant victory," added Matějka.

The model was printed on the first Czech 3D nano printer, the IQnano3D, using two-photon polymerisation technology. This technology allows 3D objects to be rendered with unprecedented accuracy with details smaller than 150 nanometres. The 3D nano printer is not only very precise, but also very fast—it managed to print the ice hockey model in less than 1 hour. ResIQ Hybrid-one material was used for production. The photo of the nano model was taken by Filip Mika from the Institute of Scientific Instruments of the Czech Academy of Sciences.

"Our 'IQnano3D' printer, which was completely developed in the Czech Republic in collaboration with scientists and engineers from academia (the Institute of Scientific Instruments of the Czech Academy of Sciences), is proof of effective cooperation

between business and academia," concluded Matějka.

Thanks to its performance, the IQnano3D ranks among the absolute world leaders and is used in particular in biomedicine, micromechanics, electrical engineering and precision optics.

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