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Foro 3000 Deep Ice Drill

Content

In May of 2017, the U.S. Ice Drilling Program (IDP) completed a Conceptual Overview document outlining necessary changes to the Foro 1650 Drill design, which was used on the SPICEcore project at the South Pole, to enable drilling to 3000 m. In 2018, the detailed design was completed and, based on community consensus and support, the National Science Foundation (NSF) directed IDP to proceed with the fabrication of the Foro 3000 Drill in advance of the next U.S. deep drilling project, tentatively anticipated to occur at Hercules Dome, Antarctica. Major design changes included a larger winch and cable, new tower base design, extending the core capacity from 2 to 3 m, and development of a new downhole electronics package. Drill system fabrication and testing is nearing completion, and IDP plans to have the system packed and ready to ship by fall of 2022.

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