



Field tests show good results!

Field testing began last fall on Sandvik's upgrade to the "H" head with five very different customers from around the world. The head was subjected to a number of different environments and climates with excellent results. One customer, Swedish drilling contractor Styrud Arctic, was so impressed with the results they have retrofitted part of their fleet with the new unit.



UPGRADE OFFERS INCREASED RELIABILITY AND PRODUCTIVITY

The upgraded head was fitted onto one of Styrud Arctic's DE140 rigs which were in operation in various locations in the northern part of Sweden and later on relocated to operate around the Luossavaara-Kiirunavaara mine (owned by LKAB in Sweden) in northern Sweden. Styrud Arctic has been operating their machines around the clock, seven days a week, in some very demanding conditions. The only break was for a short period of time when temperatures fell to -37°C this winter.

A number of short holes were drilled between 30 to 150 m (100 to 490 ft) with a HQ drill string. Longer holes were started with a NQ string and then switched over to a BMO drill string with the longest hole almost reaching 1500 m (5000 ft). Jan Touma, project manager for Styrud Arctic, has been monitoring the field test of the rotation unit. When asked to comment on the status he said; "So far the field test has gone very smoothly, and I personally am very pleased with the upgraded design, in fact I've recently upgraded two of our "H" rotation units to the new design and I'm thinking of buying this particular test unit from Sandvik as well". He continues to say that this is the unit best suited for their applications, and that it will be used from now on, or at least until an even better one is introduced.

The operators were also pleased with the performance of the test unit, commenting that everything has worked well with no problems at all and that it seems to run much quieter compared to others. Furthermore, they have not had to replace any chuck jaws. Regardless of manufacturer, jaws quickly wear out and must be replaced, which causes unnecessary down time. ■

Field test facts

- Retrofitted to Sandvik's DE140 surface drill currently in use at customer's mine site in northern Sweden
- Duration of test was from October 2010 to March 2011
- Subjected to extreme conditions, lowest recorded temperature was -37°C
- Ground conditions included hard, fine grained porphyry
- A number of holes drilled with "N" and "H", deepest hole was close to 1500 m (5000 ft)

Background

As part of Sandvik's constant product improvement program, the "H" rotation head underwent revisions in 2010 to increase both reliability and performance. All changes to the design are internal so the new unit will easily replace previous models.

Upgrade kit available

An upgrade kit is available for quick and easy upgrade of older units. The new upgraded design is now part of the standard offering for Sandvik's DE130, DE140 and DE150 core drills.



Jan Touma, project manager for Styrud Arctic (left), discusses the performance of the "H" rotation unit with Bengt Lindh from Sandvik's product management group – it has definitely proven itself!



Field tested in extreme conditions!