

SANDVIK ROCK TOOLS

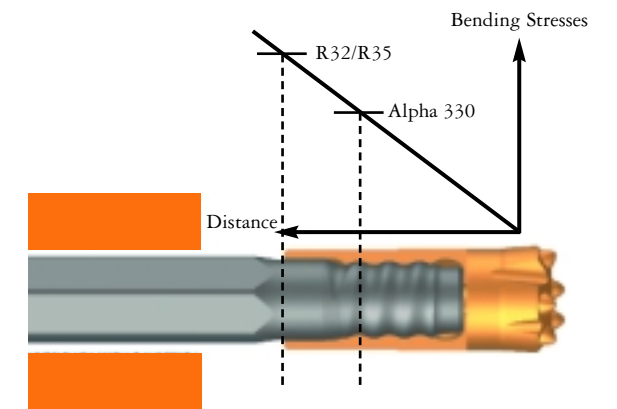
## **SANDVIK ALPHA 330: DRIFTING AND TUNNELLING**



**A completely new tool concept  
for high-power Ø 45 mm drilling**



# Another first from Sandvik – Alpha 330



Collaring is a critical moment in the drilling cycle. In most cases, the rock surface is uneven which causes high bending stresses. By balancing the critical point of stress into the short Sandvik Alpha 330 thread – well guided and surrounded by the bit skirt – rod breakage can be significantly reduced.



As a rock drilling professional, you have

already invested in the most advanced and powerful drill rigs available to gain maximum productivity in your drifting and tunnelling projects. To ensure maximum return on your capital investment, you also need drilling tools up front which really capitalize on your potential.

Tool failures in drifting and tunnelling seriously effects productivity. So much so that they might add up to the entire cost for the drilling tools. To match the increased energy output from modern high-power rock drills (offering 20 kW and more), we are proud to present yet another major Sandvik innovation – the Sandvik Alpha 330 drilling tool system.

Sandvik Alpha 330 is a completely new tool concept for Ø 45 mm drilling, designed and optimized to have a much higher stiffness and longer service life than R32 (also a Sandvik innovation) which has been the dominating Ø 45 mm system so far.

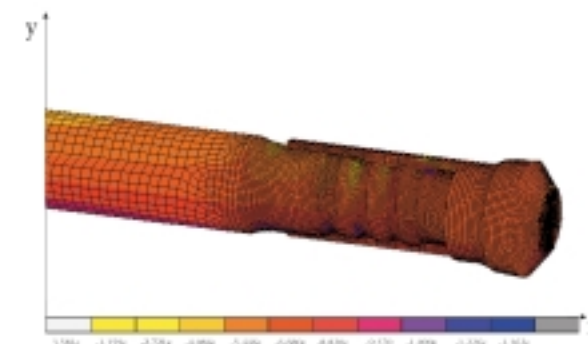
### Another Sandvik challenge

Sandvik's unique metallurgy resources for making the steel, rolling it and machining it to perfect



State-of-the-art CAD/CAM techniques have been used for evaluating the stresses in the rod connection and to obtain maximum bending stiffness by optimized geometries of the Sandvik α330 thread.

tolerances give us the leading edge from the start. In parallel, our advanced CAD/CAM programs and FEM analysis give us the ability to simulate the application of our designs long before the solution touches rock. The result this time: The Sandvik Alpha 330 system, featuring a unique rod/bit



Advanced FEM analysis have been used to simulate and locate the critical bending stresses of various designs to arrive at an optimally dimensioned rod/bit connection.

connection with a short sturdy thread. The design offers better resistance to bending stresses, improved bit guidance and perfect transfer of energy.

### Far more drilled meters for the money

When using Sandvik Alpha 330 customers will note the following advantages:

- Longer rod life (30-80% increase at tests in Australia, Canada, Finland and Sweden)
- More energy efficient drilling
- Better precision in collaring
- Better hole accuracy
- Faster and easier uncoupling of bits
- Increased intervals between bit grinding
- Less machinery standstills

All in all, a tool system taking drifter drilling productivity to a new level!

# **SANDVIK ALPHA 330:** **For high-power rock drills**



**1** The new, short thread design and hexagonal rods in the Sandvik Alpha 330 tool concept result in a rigid, integrated powerpack drill string optimized for Ø 45 mm drifter drilling.



**2** The short Sandvik Alpha 330 thread is well guided inside the kirt offering increased precision in collaring even in complex rock formations and inclined surfaces.



**3** The rigid drill string results in straighter hole, permitting optimum drilling patterns and higher degree of advance.



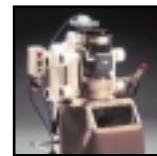
**4** Exact collaring and straighter holes are prerequisites for productive drilling with less overbreak and lower overall costs.



**5** The tailored Sandvik CAPP drill bits ensure optimal return on your capital investment by really making full use of the Sandvik Alpha 330 drilling potential.



**6** More efficient energy transmission in the Sandvik Alpha 330 tool package minimizes wear on all components in the drilling system.



**7** Sandvik grinding equipment plays a significant economic role by optimizing the service life of the easily detached drill bits.



**8** Welcome to a test drive with the Sandvik Alpha 330 drilling tool system. Our Sandvik Teams are always within easy reach to offer prompt support.



[www.rocktools.sandvik.com](http://www.rocktools.sandvik.com)

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