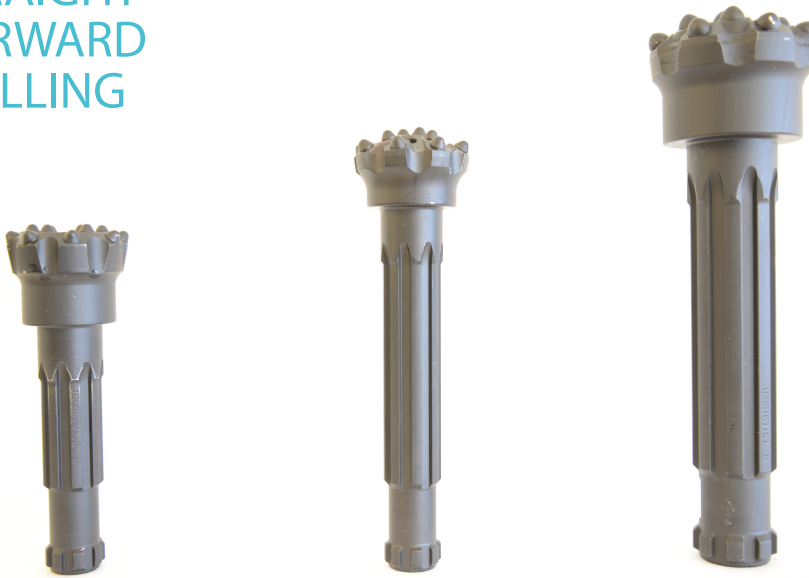


STRAIGHT FORWARD DRILLING



WASSARA DRILL BITS FOR OPTIMAL DRILLING

LKAB Wassara is offering drill bits optimized for water-powered drilling technology, built to ensure a long hammer life. Our drill bits cover our full range Hammer-sizes, as well as a unique and patented W-bit-design for our W70 Hammer.

Why choose a Wassara Drill Bit?

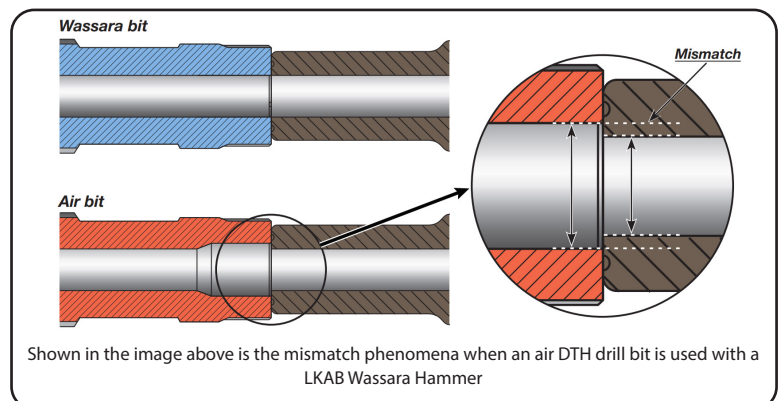
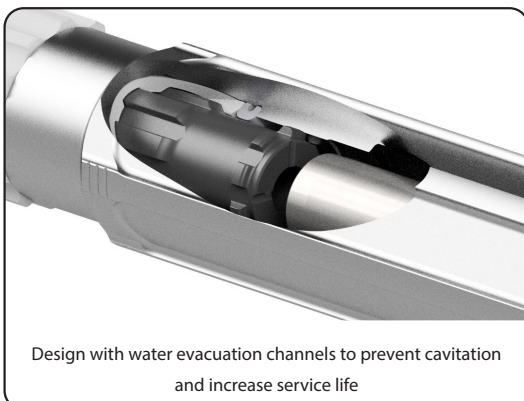
When drilling with a LKAB Wassara Hammer, it is important to use a drill bit that is designed specifically for water-powered DTH drilling.

A mismatch between the hole size in the Wassara Hammer piston and the hole size in, for example an air hammer bit, may cause substantial damage. Both the striking surface of the piston and the top of the bit shank might be affected by such a mismatch.

The LKAB Wassara drill bits also have multiple water evacuation channels incorporated in the design on top of the shank to prevent cavitation damages, which can occur while using an air DTH drill bit.

Wassara drill bit design features

- **Open front spacing** - Allows drill cuttings to evacuate gently and efficiently
- **Semi ballistic inserts** - High-quality inserts for effective drilling and clearing of drill cuttings
- **Matching striking surfaces** - Optimized matching of piston and drill bit
- **High quality steel** - Allows for a more sustainable drilling operation and longer service intervals



WATER-POWERED DRILLING

TECHNICAL SPECIFICATION: W-BIT FOR W70 HAMMER



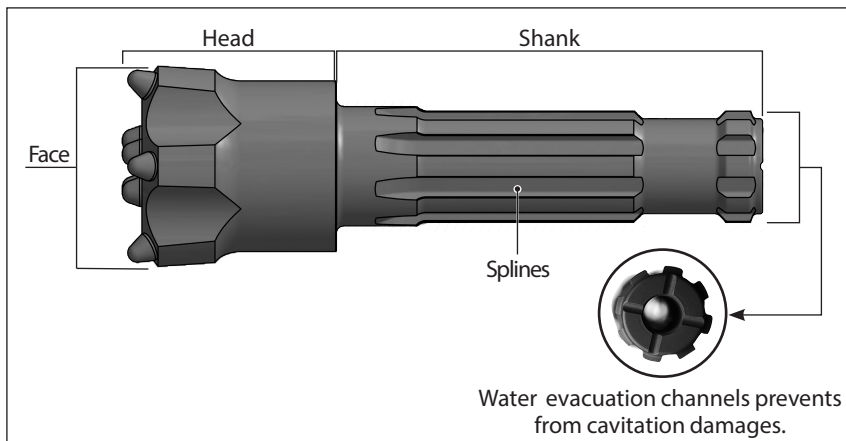
The Wassara W-bit is a unique and patented drill bit from LKAB Wassara, designed for water-powered drilling together with our W70 and W80 Hammer.

With roughly a 10 % higher efficiency of the shockwave transfer from Hammer to drill bit, the W-bit stands out as the optimal choice during water-powered drilling operations.

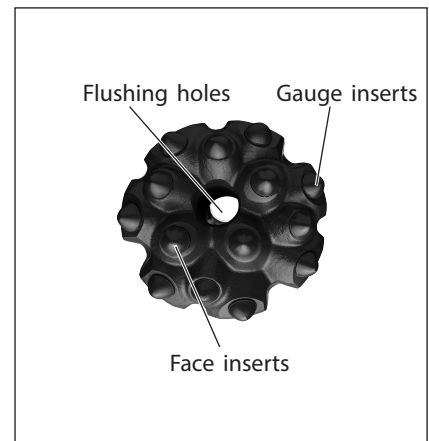
What enables this increased efficiency is a longer-than-average shank design, but with a weight similar to that of a standard bit.

The longer shank also gives a 43% larger spline area which increases the service intervals and the straightness of the boreholes.

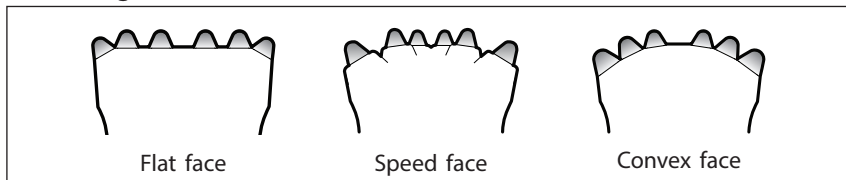
Bit design



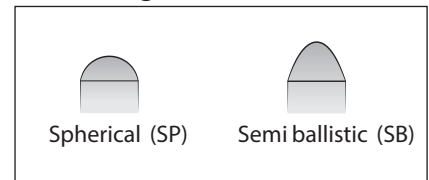
Head design



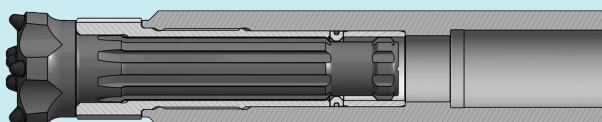
Face design



Insert design



Wassara W-bit (currently available for W70 and W80)



The unique and patented W-bit incorporates a longer shank design, but with a similar weight as a standard bit. This gives a more efficient energy transfer, reduced spline wear and straighter boreholes.