

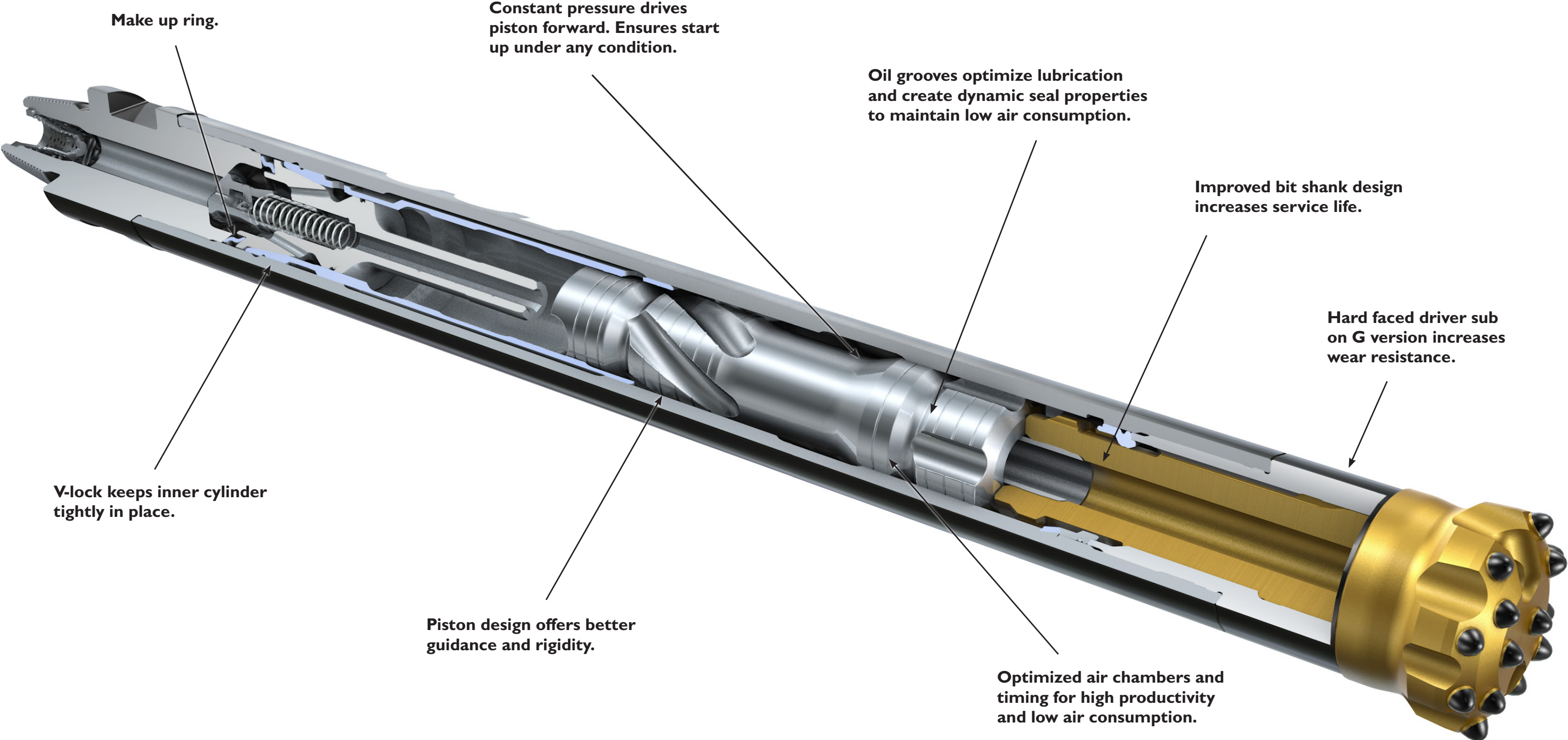
A dramatic black and white photograph showing a rhinoceros's head and front legs trapped inside a large, dark metal pipe. The pipe is being crushed by a large, golden, industrial DTH hammer. The hammer has several black, circular wear indicators on its side. The scene is set against a dark, rocky background, with a bright light source illuminating the rhinoceros from the left.

**MORE POWER.  
LESS DOWNTIME.  
THIS WAY!**

THE ALL-NEW SANDVIK RH460 DTH HAMMER



# THE ALL-NEW SANDVIK RH460 SERIES OF DTH HAMMERS





# HIGHER PERFORMANCE BRINGS GREATER PRODUCTIVITY

The new Sandvik RH460 hammer takes DTH drilling to higher levels. It has been developed for superior productivity in variable ground conditions. Higher impact energy is achieved at lower air consumption, maximizing productivity and lowering costs. RH460 hammers are available industry standard shanks for greater product flexibility.

The main focus in the new design and development process have been to:

- ▶ Decrease air consumption to reduce fuel costs
- ▶ Increase power level for higher productivity
- ▶ Optimize lubrication capabilities to increase piston and hammer life
- ▶ Improve piston bearing design to reduce failures due to galling

The design of the RH460 hammer makes it easy to service and offers a good balance between cost and performance. The V-lock mount system ensures reliability and eliminates the need for wear shims and special assembly tools. The piston design is optimized with oil grooves in the guide surface to ensure constant and consistent lubrication with dynamic sealing properties. The result, high performance and cost effective hammer for use in almost all ground conditions.

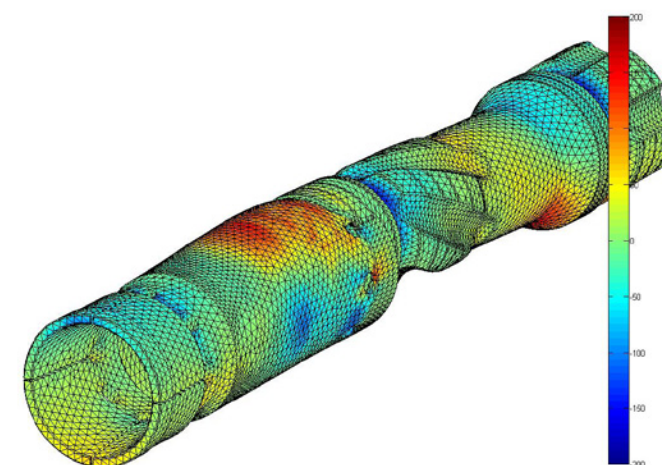
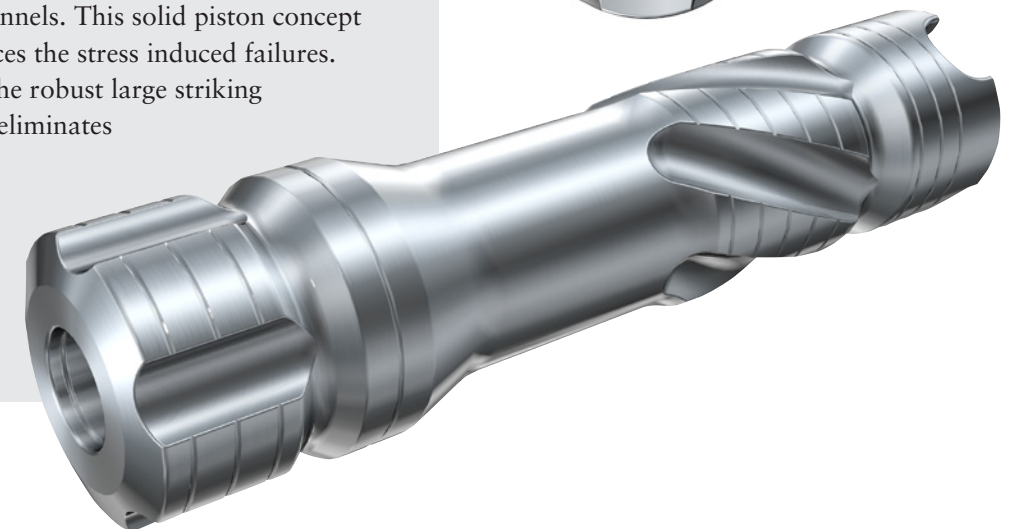
# DESIGN AND DEVELOPMENT THE ALL-NEW RH460 HAMMER LINE

## PISTON

### FEATURES AND BENEFITS

The RH460 hammer is developed with a solid piston and inner cylinder concept. Since the porting is done externally, the piston is free from air channels. This solid piston concept without any cross-holes reduces the stress induced failures.

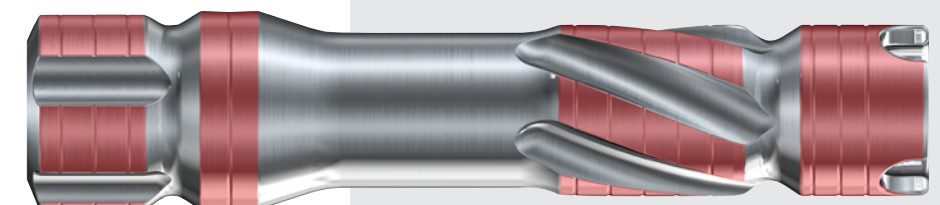
This in combination with the robust large striking end increases service life and eliminates premature failures related to fatigue stress.



## PISTON – BEARING AREA

### FEATURES AND BENEFITS

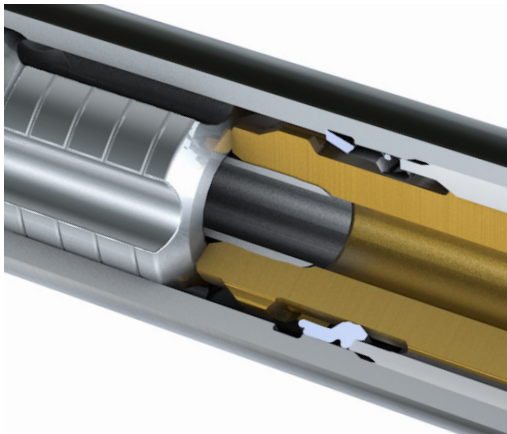
The piston bearing surface design and location optimizes bearing capabilities and eliminate bending vibrations. Bending vibrations in the piston will cause heavy pressure contact between the internal parts during the striking mode. This will cause galling and subsequently failure. The RH460 piston design eliminates this issue and provides reliability and longer service life.





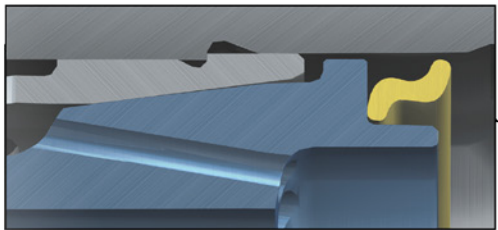
# AT SANDVIK WE PUT SAFETY FIRST

With continued demand from mining companies to ensure safety and increase productivity, Sandvik rock tools are committed to providing the support needed – through safe products and product information.



## LOW AIR FLOW FEATURES AND BENEFITS

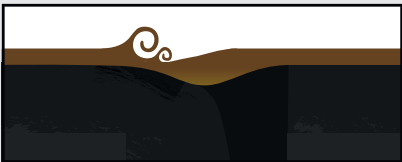
Rising fuel prices have a large economic impact on DTH drilling operations. Lower air consumption in a DTH hammer is key in curbing these costs. The air cycle of the RH460 hammer has been designed to optimize the expansion and compression rate. This results in more power with less air.



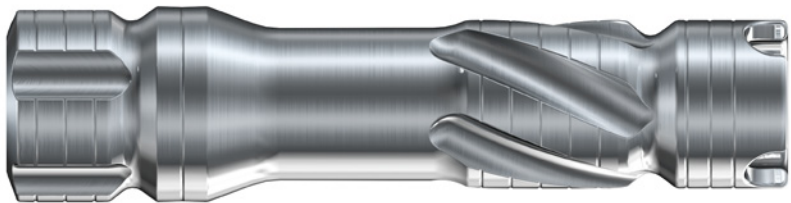
## V-LOCK SYSTEM FEATURES AND BENEFITS

The unique V-lock system used in the RH460 hammer is designed to prevent the movement of the inner cylinder and air distributor. This simple design ensures that no special tools are required for assembly or disassembly. By preventing movement of the components, it reduces galling related failures. The steel make up ring creates a constant make up force, independent of temperature and time compared to other elastic material often used for the same purpose

## LUBRICATION FEATURES AND BENEFITS



Lubrication plays a crucial role in the hammer service life. The oil film creates an air seal between components in the hammer and reduces friction wear as well as heat generation between moving parts. This results in reduced failures due to galling.



The RH460 piston has oil grooves incorporated in its design, the oil grooves serve two main purposes,

1. It ensures constant and consistent lubrication between the piston and internal parts to reduce galling related failures.
2. When air and oil mix pass the oil groove it creates a turbulence, which acts as a dynamic seal. This ensures minimal air leakage.





## PRODUCT RANGE

The 5" and 5" G begin the introduction of the new RH460 with the 4" becoming available during the second half of 2013. Then to be followed by the remaining sizes. The complete RH460 family will consist of 5 standard size of hammers from 3 1/2" – 8".

All versions of hammers are designed to utilize bits with industry standard shanks.

4"	5"
S	S
–	G
DHD 340 QLX 40	QL 50



The Future of Mining. It's This Way:  
[sandvik.com/RH460](http://sandvik.com/RH460)