

#### OUR PRODUCT

SECON Sonic Technology is changing the game with a faster, more efficient and cost-effective sonic drill head that can be used to drill in various types of geological formations. Whether its rock, sand or clay. The SECON Sonic Drill Head delivers an unique combination of vibration frequency 160 Hz "more than any of its competitors", sonic force 150 kN and rotation torque in the mid sonic range.

Due to its hollow shaft design there is no need for an extra expensive water swivel. With a spare head that is always on stock, the service and support rendered is world class to any drilling company. SECON Sonic Technology use products from the best manufacturers with just under a decade of experience in sonic drilling and products. The benefits of using the best quality provides for high quality soil samples, good drilling results in almost all formations, less drilling wastes and less contamination of the drilling sample.

#### OUR GOAL!

The goal was to make a sonic drilling head that can be built on almost all drilling rigs with the right technical specifications. Our unique combination of frequency, torque and rotation gives us more capacity to drill deeper and take better samples. Together with it's strategic partnership with TALPA Sonic Drilling Products and ROVD RSA to ensure a unique cost of ownership model, distribution and aftersales model will enhance the customer experience second to none.

#### WHAT IS SONIC DRILLING?

Sonic is an advanced form of drilling that uses high frequency resonance energy that is generated in the Sonic head to drive a drill string/core cylinder into geological formations. During drilling the resonance energy with high frequencies is transmitted to the drill surface via the drill string. By simultaneously rotating the drill string, energy and impact are evenly distributed over the drilling surface.

#### WHY SONIC DRILLING?

The high vibration ensures minimal disturbance of the sample due to the physical law of inertia. The mass of the sample simply does not have the time to react to the vibrations of the sampling casing. The SECON Sonic drill head can vibrate up to 160 Hertz. This means that the drill string moves up and down 160 times per second, and the drill bit will hit the formation 160 times a second while also rotating at the same time.

By this vibration and simultaneously rotating the drill string, energy and impact are evenly distributed over the drilling surface. This special combination of blows and rotation ensures optimal energy transfer, thus ensures that almost all formations can be drilled with maximum productivity.

### "SECON A SPECIALIST IN MECHANICAL ENGINEERING"

#### THE PEOPLE BEHIND THE PRODUCT

Over the last 7 years we have specialized in the construction of sonic drilling heads, for a select number of customers. Now that we have proved the reliability of our sonic drilling heads, we want to introduce it to the market

Established in Africa, in 1964, ROVD is a company that provides turnkey industrial automation solutions to customers globally. These systems are designed, manufactured and installed to meet the customers specific requirements. ROVD is trusted by global automotive manufacturers and high quality materials handling equipment for the mining industry since 1968.

TALPA Sonic Drilling Products is a supplier of, but not limited to, sonic drilling tooling that also delivers a state of the art casing handling arm. Talpa products come from the best manufacturers in the world who have vast experience in making Sonic products.

#### Here's what they had to say:

Craig Craill Director of SECON Maschinenbau, has worked for many years with TALPA Sonic Drilling Products on the development of a sonic drill head,



WE completed this project together with Iwan from TALPA, Volker(Designer/Partner at SECON) and the R&D team at Kirschenhofer Machinen. This was really a team effort and we will keep it this way.

#### Iwan van der Geer Director of TALPA Sonic Drilling Products



Our goal is to offer clients an excellent fast service and to minimize the down time. For this purpose. we always have an exchange drilling head at our disposal. You can choose which machine the sonic drilling head is to be built onto, and we will help you with the technical realization by providing technical information or building the drilling head onto the rig for you. In the long run we can also supply our customers with our own Sonic drilling rig as an option.

#### Athi Lupondwana Business Development Director



We work a lot for the mining industry and see a growing need for high quality sampling, this is what sonic drilling offers. ROVD RSA and SECON have been working together for many years and we look forward to bringing their product to the market.







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Together with the partners at TALPA Sonic Drilling Products and ROVD RSA, the customer experience offering will be second to none.

> TALPA SONIC DRILLING PRODUCTS | Furope talpadrillingproducts.eu

# CHANGE THE GAME



SECON RSS150 SONIC DRILL HEAD - Frequency max, 0 - 160 Hz Sonic vibration oscillator output force 150 kN / 33,7 lbs - 2 eccentrics, mechanically synchronized Rotation torque: clockwise 0-185 rpm 2.820 Nm @ 210 bar /2.080 ft-lb @ 3046 psi Rotation torque: counter clockwise 3.500Nm @ 250 bar / 2.581 ft-lb @ 3626 psi - Head tilt max. 60° - Type of damper / buffer rubber 8x - Max. hydraulic pressure on sonic 250 bar/3626 psi - Mass of head 620 kg / 1366 lbf

- Advised power from rig engine min. 100 kW / 136 HP

## **SECON** SONIC TECHNOLOGY JOINING ARMS IN CREATING A WORLD CLASS SONIC DRILLING HEAD

#### For more information, contact:

**ROVD ENGINEERING GROUP** l Africa rovdgroup.com