

## ABOUT US

With more than **25 years of experience** in **special purpose machine design** and more than 40 qualified employees, we develop **efficient methods** for your requirements that lead to **economically lucrative solutions**. All important aspects are located at **Kirschenhofer Maschinen GmbH** in-house. **From design to assembly**, but also in the areas of training and service you will receive comprehensive support from us. We only work together with **absolutely reliable**, selected suppliers. When looking for solutions to **complex requirements**, the focus is always on **high accuracy and punctuality**.

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# RSS 190 SONIC DRILLING HEAD





Sonic is an advanced form of drilling that uses **high frequency resonance energy** that is generated in the **Sonic head**, to drive a drilling string 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.



## TECHNICAL SPECIFICATIONS

General data	metric	imperial
Sonichead tilt max.	90°	90°
Quantity of oil drill rig	260 l	68,68 gal
Engine power from drill rig	140 KW	190 HP
Weight sonichead	1000 kg	2204 lbs
Drilling depth	ca. 160 m	ca. 520 ft
Drilling diameter	ca. 160 mm	ca. 6,3 inch

Vibration	metric	imperial
Frequency max.	0 – 150 Hz	0 – 150 Hz
Centrifugal force	190 kN	42,71 k lbf
Quantity of oil max.	108 l	28,53 gal
Oil pressure max.	300 bar	4351 psi

Rotary drive	metric	imperial
Torque	4450 Nm / 300 bar	3293 lb-ft / 4351 psi
Rotation max.	100 rpm	100 rpm
Quantity of oil max.	150 l	39,62 gal
Oil pressure max.	300 bar	4351 psi

## DESIGN

- **Compact design** requires small mounting space
- **Strong bearing** system off the main shaft
- Due to its **hollow shaft design** there is no need for an extra expensive water swivel
- All mechanical components and bearing with **time lubrication and cooling**
- Compatible to drill rigs of **all manufacturers**