

Our Game-Changing Products:

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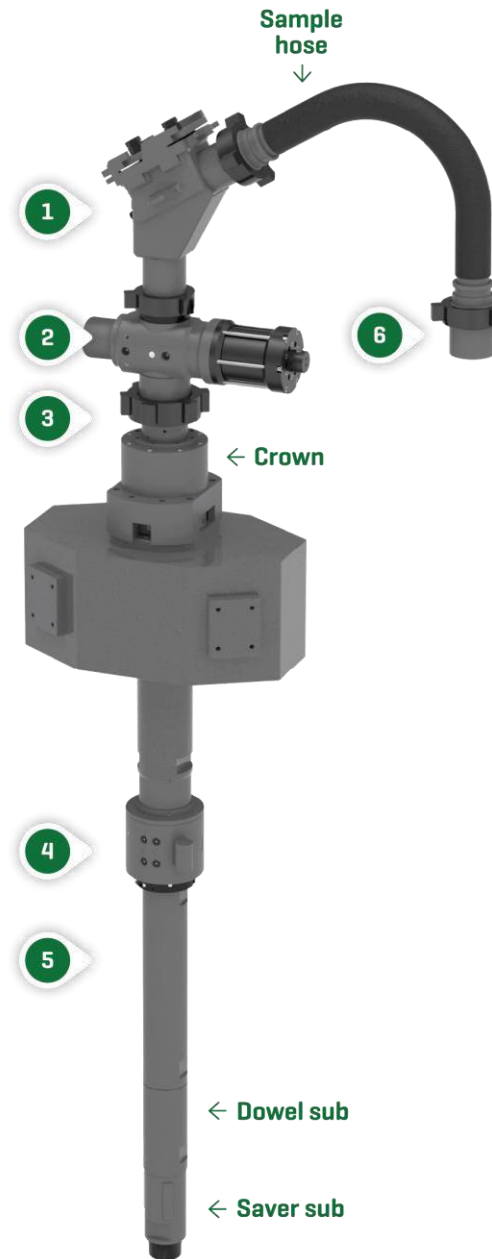
Global Leaders In The Manufacture of
Premium RC and DTH Drilling Equipment

Members of



The Harlsan Setup

- Drill Rods/Pipes
- Inner Tubes
- Inlok™ System
- Subs
- Spiral Stabilizer Subs
- Wear bends/Deflectors
- Hydraulic Blow Down Systems
- Air Inlet Swivels
- Sample Swivels
- Seal Plates
- Head Wear Tubes
- Underground RC
- Hose Tails & Knock-on Nuts
- Air Core Drill Bits



1
Wearlok®
wear bend



2
Flotec®
hydraulic
blow down



3
Top swivel/
seal plate



4
Bottom
swivel



5
Subs



6
Hose tail,
Diffuser,
Knock-on nuts



RC Rods/Pipes

Drawing on our years of experience in the design and manufacture of **tough and wear-resistant** RC drill rods, every aspect of material and production management is optimized.

- consist of European hardened 4140 **alloy steel** tool joints with **heavy-duty seamless** drill pipe
 - Australia's **toughest** RC drill pipe
 - **longer wear-life** than others on the market.
 - Harlsan 4½" drill rods have been independently certified at the Class 1 pressure vessel rating [AS1210-2010] for **weld quality**.
 - RC drill pipe or rods using **high specification austenitic stainless steel** for down-hole surveying are also available.
 - high tensile API 5CT rated **wear-resistant inner tubes**
 - inner tubes for RC Drilling feature material and design advances to increase wear resistance and **extend drill string life**.
 - inner tube couplings are engineered to **extend coupling life spans** beyond those of standard designs.



These rods keep RC drill rigs **producing efficiently, worldwide.**

Inlok™ RC Drill Rod System

A breakthrough RC drill rod design that combines safe handling for inner tubes with a leap forward in RC drill pipe performance.

- provides a **safe and controlled solution** to remove an inner tube from a drill rod/pipe.
- INLOK™ product range includes **specifically engineered RC drill rods, inner tubes and safe handling equipment.**
- the safe handling equipment is used to install and extract inner tubes from reverse circulation drill pipe and **can be used on the slips table** during normal drilling operations to **avoid the unnecessary handling of heavy RC drill rods** that can weigh up to 170kgs each.
- inner tubes are “**locked**” preventing movement or spinning inside rods, which inhibits **O-ring and urethane seal grooving** of the inner tube ends.
- **reduced wear** to the inside rod shoulder.
- circlip breakages are **virtually eliminated.**
- **only requires 100psi [689.5 kPa]** of rig air to operate.
- comes **contained in a hard case** with all attachments for **safe operation.**
- will **reduce maintenance & increase the life** of your reverse circulation drill string.



Subs

When choosing Harlsan RC subs & adapters you will premium quality subs every time, with threads that are always “spot on”.

- a large range of subs available in stock & ready for shipping.
- Harlsan saver subs and adapters are made using European quality hardened 4140 alloy steel
- manufactured using state of the art machining.
- thread quality and compatibility every time.
- designed & manufactured for the toughest drilling conditions
 - ✓ Saver Subs
 - ✓ Adapter Subs
 - ✓ Dig-out Subs
 - ✓ Bleed-off Subs
 - ✓ Vacuum Subs
 - ✓ Stabiliser Subs



Spiral Stabilizer Subs

Harlsan's tough Stabilizer Subs are built to last & are making a difference to rigs around the world. This unique sub has enabled many of our customers to achieve exceptional drilling results otherwise unobtainable using conventional RC dig-out or stabilizer subs.

- **dramatically improves accuracy**, enabling crews to keep holes within 1-2 degrees.
- tough and **reliable**
- made utilizing **cutting-edge** manufacturing technology, to **perfectly combine** the role of dig-out & stabilizer subs.
- The spiralling hard faced wear pads **track an exact curve** around the body of the sub, giving **unprecedented performance**.
- Results show how precisely this spiral **enables levels of stability and accuracy** during drilling operations, that **aren't obtainable with other subs**.
- extends the **lifespan of the drill string** by significantly reducing drill string chatter.



Wearlok® Wear Bend / Deflector

Built to withstand the **most abrasive** reverse circulation drilling conditions.

- **heavy duty** & built to last
- available in **60° & 90°**
- main wear components can be **modified** to suit rig & drilling conditions.
- designed to support field maintenance through **replacement parts**.
- **2-Bolt Wear Plate Access**.
- new plates provide **simple** in field maintenance.
- reduces maintenance times from 30 to **just 5 minutes**.
- less time working at height for crews, making maintenance **safer**.
- game-changing wear sleeve design for **easy replacement**.
- built tough with rock-solid lifting points for **ease of installation**.
- worn wear plates & the tungsten carbide discharge inlet can be **replaced in the field**.
- high wear parts use premium European grade 4140 alloy steel for **superior wear resistance**.
- **wear plates and surfaces** can be supplied in hard faced Bisalloy, hard faced plating, tungsten carbide and other wear inhibiting substrates to maximize wear resistance & service life.



Flotec® Hydraulic Blow Down

Clear RC drill string blockages, back flush holes, improve sample purity and clear bit face blockages with the flick of a switch.

- helps crews **drill more meters every day**, regardless of ground conditions.
- represents **years of development** and is reflected in its **reputation** within the RC drilling industry.
- available in **single port** design for blow down function only, as well as **double port** for blow up and blow down operation.
- designed to eliminate the need for manual blockage clearing, **reducing potential safety issues**.
- independent **hydraulic actuator** system
- **increased wear life** and durability
- improved **sample purity**
- **lower cost** of maintenance and **extended service life cycle**
- **threaded recesses** for integrated anchor point
- **replaceable wear sleeves** throughout
- **standard connections**
- **adapter kits** to suit different rigs
- **bore sizes:** 40, 50 and 60mm.
- **coupling types:** 6" ACME to 4½" Harlsan flange to 4½" ACME
- **in-field servicing** and full range of parts & **service kits** available for field servicing in any location.
- when the time comes, complete in-house **rebuids**



Swivels

Harlsan's top inlet, bottom inlet or bearing swivels (for new or existing RC rigs) will improve performance & reduce downtime.

- tough, durable & made to the high standard demanded by the industry.
- years of experience in precision manufacturing ensures uncompromising quality.
- Harlsan Swivels consistently drill longer between reseals than others available.
- adapter flanges & plates available, to suit different rigs.
- field servicing dramatically reduces down time.
- complete range of bearings, shafts, O-ring & seal kits available for field servicing.
- the sealing system ensures longer drilling between resealing.
- when the time comes, maximise Swivel performance with expert in-house rebuild.
- if drilling deep RC holes, the Harlsan 4" & 4 1/2" bottom inlet swivels are designed & engineered to handle the high air pressure required for these drilling operations.

- ✓ top inlet swivel: made to suit 48mm & 54mm diameter head wear tubes.
- ✓ bottom inlet swivel: available in: Metzke, Remet, RRE & other threads from 3 1/2" to 5" diameter



Underground RC

As global market leader in manufacturing premium quality RC equipment, we work closely with underground RC drillers & their clients to ensure smooth continuity of their mining operations. We provide a suite of tough underground RC drilling supplies & consumables, **specifically designed for underground mining.**

- Robot Welding Technology - **Independently tested & certified** to exceed welding standard AS3992
- Harlsan RC Inner Tubes come with a choice of **Urethane** or **O-rings** sealing options.
- rods are available **with or without spanner flats** (two or four flats, as required).
- drill rod/pipe standard lengths from 1 to 6m in:
 - ✓ 3"
 - ✓ 3 1/2"
 - ✓ 4"
 - ✓ 4 1/2"
 - ✓ 75mm & 78mm
- the most popular threads we support:
 - ✓ Remet
 - ✓ Metzke
 - ✓ RRE
 - ✓ Drillstar
 - ✓ LW
 - ✓ TS
 - ✓ & other threads



A rig isn't limited to just the drill string

- neither is our manufacturing:

- **Knock-On Nuts**, produced from premium hardened European 4140 alloy steel to guarantee extended life and high wear performance in RC drilling rig applications. The size range includes barbs from 2" up to 4" in diameter. Metric and other sizes are available.
- **Hose tails**, available with specialized hard facing for extreme wear environments. They can be adapted to suit Knock-on Nuts in a range of threads, including: 2 1/2", 4" & 4 1/2" NPT, 4 1/2" & 6" ACME.
- **Lifting plugs & caps**, tested & rated in API Reg, Cubex, Remet, Metzke, RRE and other thread types.
- **Cyclone wear sleeves**: hard wearing outer sleeve & replaceable inner sleeve reduces downtime.
- **Head wear tubes**
- **Hammer tubes**
- **Threaded nipples & sockets**



Air Core Bits

- + Superb **sample** return
- + Proven design over 20 years in the field
- + **Effective, robust & reliable**, even in the toughest drilling conditions

- built for **superior cutting ability** and **hard band penetration**.
- feature **heavy-duty tungsten carbide** blades, designed to balance cutting power with an open bit face.
- withstand the **shocks of high speed** air core drilling.
- **more metres drilled** every day
- **sample return increase**
- **modified** to suit your needs
- **immediate supply**
- **wide stock range**
- **reduced down-time**
- we can **customize** to suit your rig
- we already support the drilling industry's most **popular threads**:
 - ✓ Remet, Metzke, RRE, TS
- **bit sizes**:
 - ✓ 75mm - 78mm - 3" to 4½" - options for oversize shells & heads.
- **we also customize**:
 - ✓ **Vacuum Bits** [ideal for overcoming face discharge drilling problems such as air loss in loose sands or fractured clays].
 - ✓ 2,3 and 4 blade types
 - ✓ Specialised wing bits



"I've used Harlsan Air Core Bits for 15 years. The tungstens survive in ground where other bits fail and I can rely on Harlsan for modifications to suit any drilling conditions."

DTH Rods/Pipes and Subs

- extensive selection of DTH drill rods/pipes
- RAB, Cubex & API rods, manufactured to meet your requirements.
- tailored for demanding surface drilling
- prioritize production efficiency, incorporating durable design elements for enhanced wear resistance and seamless handling.
- Focus on extending drill rod lifespan, ultimately reducing production costs in drill and blast initiatives.
- Superior thread craftsmanship and robust high tensile steel construction further bolster drill rod longevity.



Why Our Customers Choose Harlsan Every Time

The exceptional quality & design of the Harlsan setup means:

- ✓ **Longer wear-life** of the drill string
- ✓ Maintenance is **quicker, simpler, easier**
- ✓ **Improved safety** for crews working at height
- ✓ **Compatibility** with other components already on the rig
- ✓ **Reduced hours lost** to maintenance
- ✓ **Cost savings**
- ✓ **Greater productivity**
- ✓ Support from a team who **knows the industry, understands the issues** and how to address them.

Your Trusted Partner In Drilling Excellence



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