

What it is and what it does

For companies who are dissatisfied with the current time consuming processes used to align a drill rig, the **Azimuth Aligner®** provides the industry's first autonomous driller operated, drill rig alignment system.







By using the latest in military grade north seeking gyro technology, drill rig operators can use the Azimuth Aligner®'s real time display to **accurately align a rig in under 5 minutes** and replace the need for GPS, compass, foresight/back sight markers, pegs or flagging tape.

Geologists and surveyors are no longer required to supervise surface or underground drill rig alignment setups.

By automating what is traditionally a manual and labour intensive process the **Azimuth Aligner®** significantly improves 'bit on bottom' time, safety, efficiency and overall drilling productivity.



FEATURES

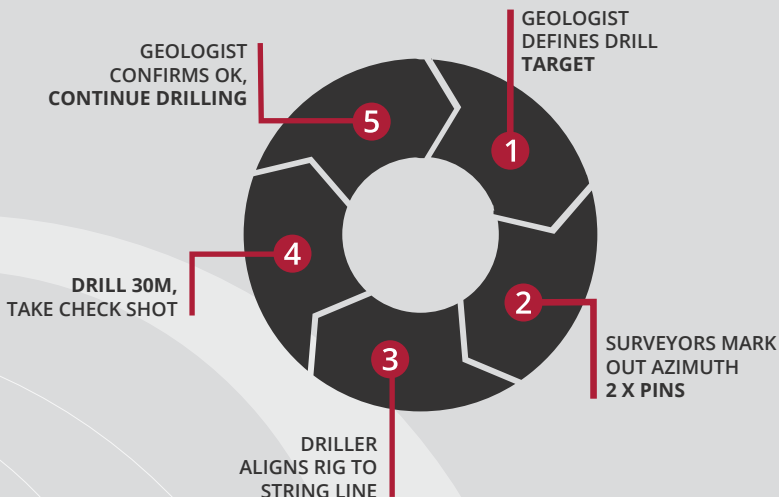
-  REDUCED RIG SET UP COST
-  ELIMINATION OF LABOUR
-  INCREASED DRILL PROGRAM PRODUCTIVITY
-  INCREASED REVENUE FOR DRILLING SERVICE PROVIDERS
-  REDUCED PRODUCTION COST FOR MINING COMPANIES
-  INCREASED ACCURACY, SAFETY & REDUCED RISK

RIG ALIGNMENT PROCESS IN MINING

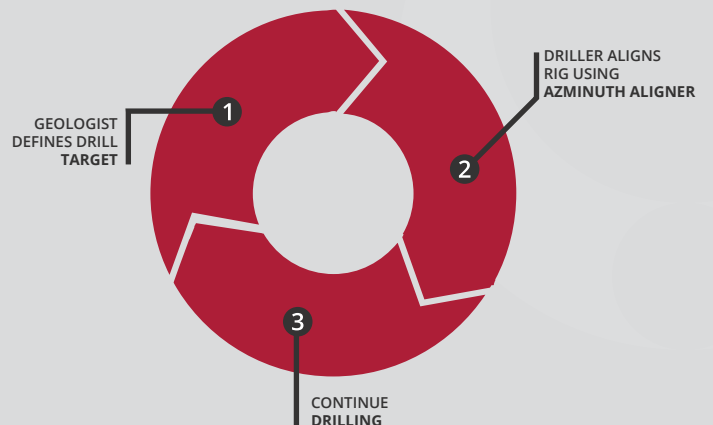
The Azimuth Aligner® simplifies the process of aligning drill rigs to a planned heading (Azimuth) and dip. The figure below compares the process time for traditional rig alignment techniques versus the Azimuth Aligner®.

Two process steps are eliminated. This results in a process time saving of 11 hours and reduced input from skilled personnel, with the physical rig alignment taking only 5 minutes.

TRADITIONAL ALIGNMENT 15 hrs + Wait Time



AZIMUTH ALIGNER PROCESS 4 Hrs + Zero Wait Time



TECHNICAL SPECIFICATION

-  OPERATES ON SURFACE AND UNDERGROUND WITHOUT THE NEED FOR GPS
-  FLEXIBLE AND PORTABLE - CAN SERVICE SEVERAL RIGS PER SITE (SURFACE, UNDERGROUND, PRODUCTION AND EXPLORATION)
-  SEEKS TRUE NORTH IN 15 MINUTES (AZ = +/- 0.1 DEGREES)
-  REAL TIME AZIMUTH AND DIP VIA HIGH CONTRAST DISPLAY
-  NOT AFFECTED BY MAGNETICS
-  LIVE MOVEMENT TRACKING
-  24 HOUR BATTERY LIFE (WHEN USED IN CONJUNCTION WITH A BATTERY BOOSTER PACK)
-  ABILITY TO SAVE AND RECALL ALIGNMENT DATA ENABLING FULL TRACEABILITY / AUDITABILITY
-  CLAMPS TO BQ TO PQ ROD SIZES
-  HIGHLY ROBUST SENSOR AND DISPLAY UNIT
-  SIMPLE, INTUITIVE OPERATION

 AZIMUTH[®]
ALIGNER



DISPLAY UNIT

The 6.5" full colour touch screen provides the driller with live high quality numerical and pictorial representation of the azimuth and dip angles, as the drill rig is maneuvered.



WHAT OUR CLIENTS SAY

"Previous hole alignments could be up to 1.5 hours, with the Azimuth Aligner® it now takes no longer than 5 minutes.

Prior to the Azimuth Aligner® our Surveying staff were required to set-out and drill in tens of backsight pins into the back wall, the Azimuth Aligner® negates the need for this process.

Both instances have an obvious financial saving and production boost as were seen in our increased metre rates per shift."

"This saves us time and money by not replicating pierce points due to alignment error, and the resulting digital geological interpretation much more closely resembles reality"

SOFTWARE CAPABILITIES

The Azimuth Aligner® software is activated by selecting an icon located on the devices home screen, with a series of simple prompts ensuring all relevant alignment data is captured.

SHARE THE RESULT WITH OTHERS

The Trimble's inbuilt GPS can provide an accurate Latitude to within 2m which can be automatically input into the Azimuth Aligner® software.

All alignment data including final setup azimuth and dip, drillhole ID and personnel details are saved to the on-board database.

The data can then be exported via csv to link with drill plods, mine planning software, or emailed directly to the client, ensuring 100% auditability and QC of all rig setups.



Azimuth Aligner® wins the category "Innovative Mining Solution" at the 2013 Australian Mining Prospect Awards in Sydney, Australia