



CHAMP NAVIGATOR

Align your rig. Survey the hole.

The world's first, truly multifunctional North Seeking solid state Gyro...

The Champ Navigator is a multifunctional North Seeking solid state gyro system allowing users to both align a drill rig and survey the drill hole - with one tool.

Capable of survey speeds of up to 200m (656ft) per minute utilising Axis' proprietary onPoint™ Adaptive Roll Technology, the next generation Champ Navigator offers un-paralleled productivity and precision across a wider range of applications.

As with all Axis' solid state technology the Champ Navigator is tough, reliable and with North Seeking capability it can establish its own starting azimuth.

- Memory North Seeking
- ☑ Singleshot, Multishot & Orientation
- High Speed Continuous Operation
- ✓ onPoint™ Adaptive Roll Technology
- ✓ Survey with Champ OSA™
- ✓ Align a Drill Rig in 5 Minutes
- ✓ Tough Rugged & Reliable

Visit us at www.axisminetech.com

Upgrade your existing technology today.



After powering up the Champ Navigator the user can elect to align the drill rig or survey the hole.

TO ALIGN YOUR DRILL RIG

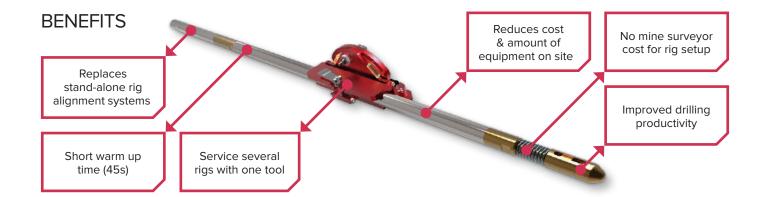
Simply snap the Champ Navigator into the alignment clamp, select rig alignment mode and start the alignment process. The alignment of the drill is wirelessly communicated to the handheld tablet whilst the rig is moved onto the planned heading.

- Reduce rig setup time by aligning rig to correct inclination and azimuth in real time.
- ✓ No requirement for mine surveyor, geologist or GPS for rig setup.
- Save time, no lengthy pre-alignment calibration routine.
- Champ Navigator is ready to align the rig in 5 minutes.

TO SURVEY THE HOLE

The Champ Navigator offers a range of survey modes including North Seeking singleshot, multishot or orientation and continuous operation.

- Z Survey every time you pull core with the Champ OSA™, saving valuable rig downtime by eliminating the need for a separate survey run.
- Pump in to perform a continuous in-run and/or out-run rod pull survey at bit change or at the end of hole, avoiding rig standby time associated with a conventional survey.
- Connect to drill rods to take an in-run and out-run survey as the rods are run into or out of hole.
- Survey at high speed in continuous mode at 200m (656ft) per min on cable.
- Survey blast holes efficiently and accurately.



SPECIFICATIONS

Accuracy & Precision

Azimuth: +/- 0.75°* Inclination: +/- 0.15°

Precision: <0.1% of measured depth (continuous mode)**

Gravity Toolface : +/- 0.2° Gyro Toolface : +/- 0.75°

Range

Operating: -90° to +90°**

Wireless Communication: 10m (32ft) (with long range communication module option)

Surface Setup

Warm Up Time : 45 sec Rig Alignment : 5 min

Downhole Travel (continuous mode)

Angular Rate: 200° per second rotation

Velocity (continuous survey) : 200m/min (656ft/min)

Depth Assignment

Manual depth input

Wireless depth integration (AMT Electronic Depth Counter)

Battery

Re-chargeable Li-ion, 5000mAh or standard c-cell 15 hours continuous operation Two battery modules supplied

Temperature, Shock & Pressure Rating

Temperature : -10°c to +70°c (14°F to 158°F)

Shock : 1000g Axial, $\frac{1}{2}$ sine, 1ms Pressure Rating : 4000psi

Dimensions & Weight

Downhole Probe in Running Gear Outside Diameter : 36mm (1.41") Length : 1640mm (64.56") Weight : 7kg (15.43lbs)

Measurements & Communication

Continuous data acquisition every 3m at 180m/min (9.8ft at 590ft/min)

North Seeking singleshot, multishot & orientation

2 min gyrocompass shot time (higher accuracy modes available) Wireless data communication between tablet and probe Wireless depth transfer via AMT's Electronic Depth Counter

Technical specifications are subject to change without notification.

*Gyrocompass shot time azimuth accuracy is latitude dependent and quoted at 1 sigma at inclinations between -20° to -90° & +20° to +90°.

**Continuous operation range at inclinations -80° to $+80^{\circ}$.