

Directional Surveying Specialists



Mining

Exploration

Oil and Gas

Civil Engineering

Introducing Downhole Surveys (DHS)



Provides directional surveying services to the mining, exploration, civil engineering, Oil and Gas industries utilising the most accurate and up-to-date Gyro downhole surveying equipment available.

- DHS has become a necessary part of many deep drilling programs exploring for Nickel, Gold, Platinum and other minerals within Australia and Africa.
- Established in 1989 Kalgoorlie Western Australia, DHS has grown from a single operator to employing more than 40 staff worldwide.
- In May 2006 Al Ghaith Oilfield Supplies & Services Co. of Abu Dhabi UAE were appointed the exclusive agent for DHS services providing a centre for growth into the Gulf Oil region.

> Utilising state of the art surveying instruments



Highlights

- > **1989** Established in Kalgoorlie, Australia. (single operator)
- > **1996** Winner - Goldfields Small Business Awards
- > **1998** Introduced oilfield North Seeking Gyro to mining industry
- > **2000** First overseas contract Tanzania
- > **2001** Established Digital Surveying CC, South Africa
- > **2003** Winner - Goldfields Small Business Awards & Business Person of the Year
- > **2003** Awarded FlexIt help centre - Australasia and Southern Africa
- > **2004** Introduced SEG - INS Target Gyro to mining industry
- > **2004** Established office in Orange, NSW, Australia
- > **2006** Began marketing FlexIt GyroSmart MEMS Gyro
- > **2006** Al Ghaith Oilfield Supplies and Services appointed exclusive agent in UAE
- > **2006** Employing more than 40 staff worldwide



Deep Hole Directional Surveying 3000m+



We utilise proven oilfield Inertia Gyro technology to accurately survey the trajectory of wells and deep drill holes from vertical to horizontal.



Navigate To A Target

We pride ourselves in providing accurate Gyro survey information allowing drillers to navigate to a target with precision.



Real time Gyro Toolface readout allows for accurate whipstock and motor orientation.

Products & Services

Gyro directional surveying services include:

- Deep hole directional surveying 3000m+
- Navigating to target
- Surveying inside RC drill rods
- Grade control surveying
- Surveying Raise Bore holes
- Blast hole surveying underground and surface
- Horizontal drill hole surveying.
- Extended reach surveying - tube drilling.

Others:

- Borehole Radar acquisition.

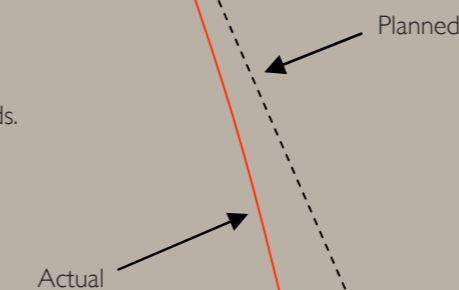
Products:

- Flexit Smart tools – Sales, Rental, Service and Support.
- Full range of running gear.



Survey Inside RC Rods

Our slim barrel Gyro is specially designed for directional surveying inside Reverse Circulation drill rods.



Horizontal Drillhole Surveying

Manual and mechanical methods are employed to push our precision Gyro surveying instruments horizontally.





Blast Hole Surveying

We measure deviation in blast holes, both up-hole and down-hole; improving blast efficiency and safety for underground and surface mining companies.



Extended Reach Surveying – Coil Tube Drilling

Coil tubing is utilised to push our Gyro in extended reach wells.

Surveying Raise Boreholes

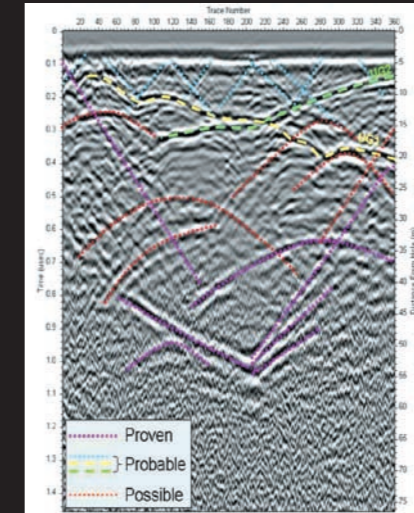
We position raise boreholes ensuring the pilot hole hits the target or can be found underground by surveying inside the rods or open hole as drilling progresses.



Borehole Radar Acquisition

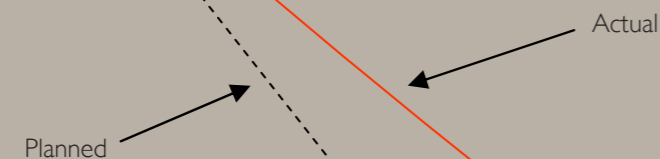
GeoMole, our borehole radar JV partner, have developed technology that delineates kimberlite diatremes and dykes, the Bushveld's UG2 and Merensky; up to 75metres from a drill hole.

DHS uses world class technology to accurately map the trajectory and give reference to borehole radar delineation.



Grade Control Surveying

We provide high precision Gyro directional survey information in real time for grade control drilling programs minimising rig down-time and providing onsite directional data.





Major Contracts - Current

	Value per Annum		Value per Annum
> St Barbara, Gwalia, Australia	USD 1,000,000	> Newcrest, Ridgeway, Australia	USD 325,000
> Western Areas, Forresteria, Australia	USD 1,085,000	> Barrick, Lake Cowal, Australia	USD 365,000
> Jubilee, Cosmos, Australia	USD 965,000	> BHP Billiton, Leinster, Australia	USD 845,000
> Debswana Jwaneng, Orapa, AK6 Botswana	USD 822,000	> Lion Ore, Tati Nickel, Botswana	USD 480,000
> De Beers, Venetia, South Africa	USD 144,000	> Anglo Plats, Various, South Africa	USD 420,000
> Anglo Gold, Ashanti Geita Gold Mine, Tanzania	USD 480,000	> Platinum Aust, Kalhari, South Africa	USD 432,000



Flexit Smart Tools

Authorised Help Centre in Africa and Australia for the Swedish Flexit products:
SingleSmart, MultiSmart and GyroSmart.
•Sales • Rental • Service • Support

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