

Continuous miner navigation: keeping roadway development on track and to plan

CSIRO has delivered a step change improvement to underground mining roadway development operations by introducing an innovative inertial navigation solution.

Staying on the straight and narrow

CSIRO's Coal Mining Research group has developed an innovative navigation system designed for integration into underground mining equipment. The navigation system provides real-time path and orientation information that gives operators an unprecedented level of insight to maintain mining activity according to the mine plan. The system has been successfully demonstrated to accurately monitor the path of a roadway development mining machine under mining production conditions.

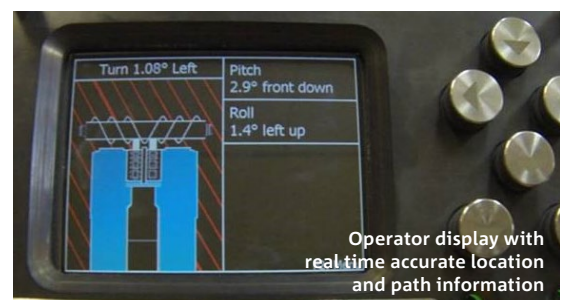
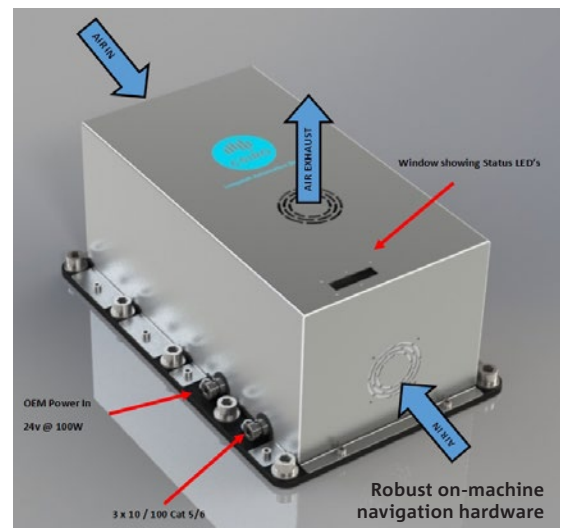
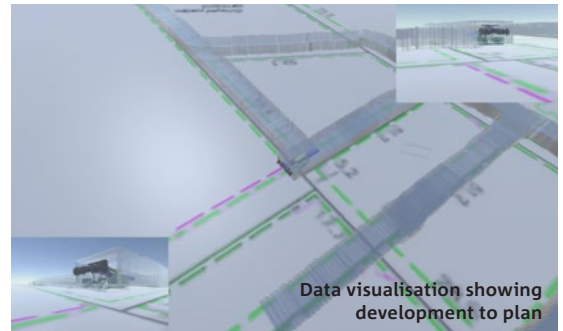
KEY SPECIFICATIONS

- Robust reliable path, position and orientation measurement of underground mining machinery
- Provides critical information necessary to maintain longwall roadway development according to the mine plan
- Real-time guidance information available the operator locally and remotely
- Uses an open communications specification to rapidly facilitate OEM integration
- Highly robust solution based on a custom designed, industry-proven hardware platform

Commercialisation opportunities

CSIRO is inviting interest from vendors, mining OEMs and minesite to further develop and commercialise the navigation technology for continuous miner applications. We are looking for commercial and research collaborators that have the technical know-how, manufacturing, marketing and financial capacity to further develop, sell and support the technology. Scope includes development for specific applications, market segments and territories across the world.

This is a two-stage process where an initial expression of interest is sought (Stage 1), followed by a more detailed discussion with interested parties to determine where they see value in deploying the technology and how this could be achieved. We will use the information provided to explore potential development and commercialisation opportunities with selected interested parties.



For more information, please see www.csiro.au/NavigationEol or email NavigationEol@csiro.au

CONTACT US

t 1300 363 400
+61 3 9545 2176
e csiroenquiries@csiro.au
w www.csiro.au

WE DO THE EXTRAORDINARY EVERY DAY

We innovate for tomorrow and help improve today – for our customers, all Australians and the world.

WE IMAGINE. WE COLLABORATE. WE INNOVATE.

FOR FURTHER INFORMATION

CSIRO ENERGY
Daniel Rowe
t +61 7 3327 4164
e daniel.rowe@csiro.au
w www.csiro.au/energy