Septentrio Delivers Machine Control GNSS Receivers for Brazilian Iron Ore Mine

Septentrio Americas has completed deliveries of over 40 GNSS machine control receivers, including the new AsteRx-U products, for deployment at the Vale S11D Iron Project in Carajás, Brazil. The Septentrio receivers will be installed on mining equipment from three different machine suppliers that will operate at the S11D mine site.

Vale's new S11D site is one of the largest iron ore projects in the world. It is set to produce more than 90 million tons of iron ore annually when it becomes operational in the second half of 2016. Vale is leveraging technology from Septentrio and other leading mining companies to implement a highly automated truckless transport system that will substantially reduce fuel consumption and emissions, as well as saving water.

The Vale S11D machine control project is being managed from Septentrio Americas in Torrance, CA, USA.

Accuracy and algorithms

Septentrio GNSS receivers and antennas will be deployed across a range of machines to provide highly accurate and reliable position and orientation. The AsteRx-U receiver family features built-in jamming detection and countermeasures, multi-path rejection and fast acquisition. With more than 500 channels to track all available constellations (GPS, GLONASS, Galileo, Beidou, IRNSS and QZSS), the receivers offer a built-in L-band receiver for PPP corrections as well as centimetre-level RTK positioning accuracy.

The AsteRx-U family also incorporates proprietary Septentrio algorithms, including LOCK+ technology to maintain tracking during heavy vibration from the machine and IONO+ technology to assure the accuracy of the position even in regions of elevated ionospheric activity. The receiver is configurable from any device with a Web browser, and includes advanced capabilities such as a built-in spectrum analyser.

 For more information visit www.septentrio.com.

https://www.gim-international.com/content/news/septentrio-delivers-machine-control-gnss-receivers-for-brazilian-iron-ore-mine