

# TSS Launches Orion Inertial Navigation System



The new high performance Orion INS (Inertial Navigation System) from TSS is shown for the first time on the company's stand at the Ocean Business Conference in Southampton (Stand No. 47; 27-29 March). The Orion supersedes the company's successful Marinus.

The Orion is aimed at meeting the needs of users in the offshore subsea construction and survey industries who need a dependable and competitively priced reference system. It can provide precise attitude, heading and heave data and is suitable for a wide range of applications such as supporting multi-beam sonar surveys or the construction of major seabed installations. The sub-sea version is available rated to 6000 metres while the surface model can be used in the most extreme sea conditions to provide users with the

valuable benefit of minimal downtime.

The Orion is the first INS to be designed entirely by TSS and will be assembled at the Company's HQ in Watford, UK. It will enable users to benefit from the company's long-established reputation for quality and service support.

Dependability has been built-in by TSS with the painstaking selection of components and software developed to meet the demands and expectations of its users. TSS engineers have dedicated the past two years to the creation of a software algorithm that will exceed industry expectations for performance and reliability. It is a development of an existing marine algorithm that has been refined by TSS over 20 years of use in demanding applications offshore.

The performance of the Orion's components and software means that users will benefit from heading accurate to 0.1° sec lat and roll and pitch measurements to within 0.025° through a range of  $\pm 90^\circ$ . Heave measurements are accurate to 5 cm or 5 per cent over ranges to  $\pm 99$  m and free inertial positioning remains accurate to 5 NM/hour. The new Orion INS is backed by TSS' global support network provided by offices in Aberdeen and Houston.

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