Piece-Part Quality Assurance and the Importance of Purchasing Original Piece Parts and Kits

UJ, UC and UQJ Performance Requirements

Universal Joints (UJ) Universal Couplings (UC) and Universal Quick Joints (UQJ) may be constructed on ships located thousands of miles from the original place of manufacture. Cable deployment and recovery and the marine environment into which joints and couplings are installed place extreme demands upon them. Each joint and coupling is required to be as compact as possible, whilst having the capacity to withstand extreme tension, twist, pressure and HV stress whilst maintaining the integrity of the optical path. It must be relatively easy to assemble but survive arduous seabed conditions whilst maintaining a low-loss optical fibre path for transmission and full electrical integrity.

In the event of a joint or coupling failing in service or proving impossible to assemble during a shipboard operation, the resultant cost incurred by the failure of a single joint component may be huge compared to the component price itself.

Piece Part and Kit Quality Assurance

The quality management systems of all of the UJC Consortium suppliers are accredited against the relevant standards (i.e. ISO 9001) and they apply rigorous measures to ensure that only components of the highest quality are incorporated in UJ, UC and UQJ kits. Manufacturers of assured quality are utilised for piece part production, working from UJC approved and controlled drawings, using certified material and calibrated measuring equipment. Inspection of joint and coupling components is carried out using instruments calibrated against traceable standards for all critical inspection procedures.

Packaging and Labelling for Storage Life

Joint and Coupling piece parts are packaged to preserve them in operational readiness for 25 years. Kit and component labelling and batch numbering enables traceability from an individual component, back through inspection, manufacture and even to the raw material used in its production.

The UJC suppliers also provide some adhesives and sealants that have a limited shelf life. Labels are applied to these kits giving the date of manufacture, the shelf life and the shelf life expiry date. They are packed in separate kits so that they are easier to manage and replace without breaking the seals on piece part kit cases.

Purchase of Original UJC Components and Kits

For the safe and reliable construction of joints, the UJ Consortium strongly recommends that

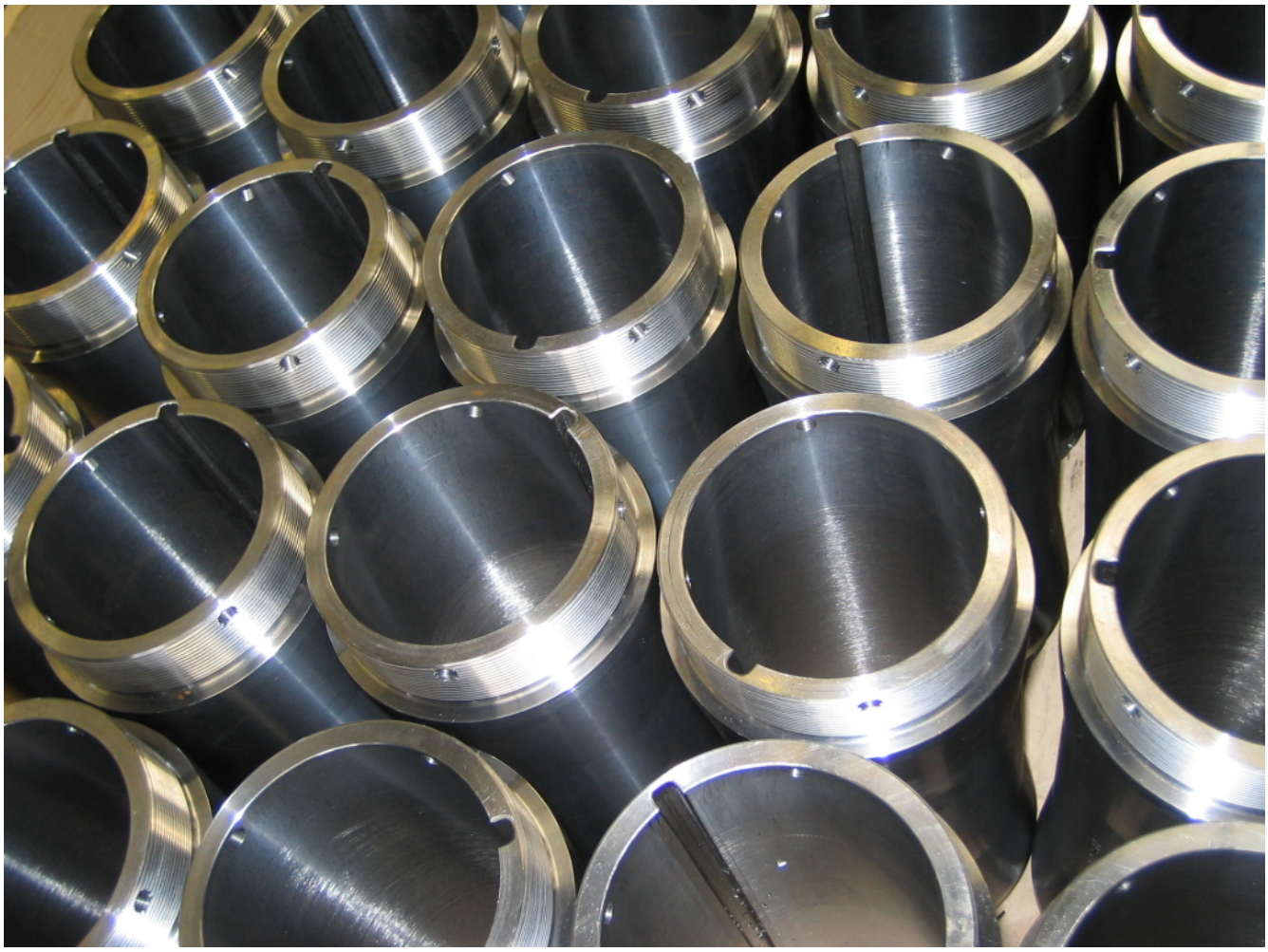
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Cable Owners check that all piece-part kits held for maintenance of their systems are purchased from UJC suppliers and that they have UJC seals in place. Only by doing this can cable owners be sure that the kits are of the highest quality, are ready for immediate use and will perform in accordance with the original design and testing regime.

UJ products can be purchased from any Consortium Member. Contact details of each Consortium Member can be found on the Contacts Page of this website.



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