Certificate Number: 15-LD1429435-PDA 20/NOV/2015



Confirmation of Product Type Approval

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product.

This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 04/NOV/2020. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until 04/OCT/2020 subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Product Name: Mounting Devices for PCs and Monitors Model Name(s): MS3050 and MS3060

Presented to:

MARINER SYSTEMS UK LTD OAKLANDS PARK United Kingdom

Intended Service: For use on ABS classed Vessels and Offshore Facilities in accordance with the

listed ABS Rules and International Standards.

Description: The mounting devices are environmentally tested for use with the HP Z440

workstation for general purpose computer applications in marine and offshore environment. The HP Z440 workstation are suitable for the marine and offshore environment and are part of the scope of this PDA. HP Z440, which consists of keyboard, mouse, graphics card and internal network interface card. Two variants are available MS 3050 and 3050. The CPU used for these machines are all Intel processors up to and include Xeon E5-2600 & E5-1600 V3 eries with 3.76 GHz clock speed. Memory is 128 GB 2133 MHz DDR4 ECC. Hard Disk drives, SAS 300GB to 1.2TB, SATA from 500 GB to 3 TB, SSD 128GB to 1TB and Z Turbo SSD 256 and 512 GB, could be mounted internally. Either optical or Blu-Ray writers could be fitted as standard. Various operating systems may be installed including Microsoft Windows 7/8/8.1 or SUSE and Red Hat Linux Enterprise or

Ubuntu 14.04. These machines could be cooled by air.

Tier:

Ratings: Rated Supply for HP Z440 workstation: 100-240 VAC, 50–60 Hz

Service Restrictions: Unit certification is not required for the mounting device. Test and approval for this

product are for hardware only and no functionality is covered on this PDA. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection

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standards and tolerances, must be clearly defined.

Comments: The Manufacturer has provided a declaration about the control of, or the lack of

Asbestos in this product.

Notes / Documentation: Drawing No. MS3050 assembly drawing, MS3050 assembly drawing, Revision: 0,

Pages: 0 Drawing No. MS3060 assembly drawing, MS3060 assembly drawing, Revision: 0, Pages: 0 Drawing No. TL15039, TL15039 Z440 Workstation Unit B, Revision: 0, Pages: 0 Drawing No. TL15041, TL15041 Z440 Workstation Unit A, Revision: 1, Pages: 0 Drawing No. TL15042, TL15042 Z440 Workstation Unit C, Revision: 1, Pages: 0 Drawing No. UKAS Schedule Iss 15, UKAS Schedule Iss 15, Revision: 0, Pages: 0 Drawing No. Z440 components list, Z440 components list, Revision: 0, Pages: 0 Drawing No. HP QuickSpec v8, HP Z440 Workstation

QuickSpec v8, Revision: 0, Pages: 0

Term of Validity: This Product Design Assessment (PDA) Certificate 15-LD1429435-PDA, dated

05/Oct/2015 remains valid until 04/Oct/2020 or until the Rules or specifications used in the assessment are revised (whichever occurs first). This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product. Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA. Use of the Product for non ABS classed vessels, MODUs or facilities is to be

to an agreement between the manufacturer and intended client.

ABS Rules: - Steel Vessels rules (2015): 1-1-4/7.7, 1-1-A3&A4; 4-8-3/1.7, 4-8-3/1.11,

4-9-8/Table 1 and 4-9-8/Table 2 - Steel Vessels Under 90 Meters (295 Feet) in Length (2015): 1-1-4/7.7, 1-1-A3&A4; 4-6-1/11, 4-6-1/15, 4-7-2/Table 1 - Mobile Offshore Drilling Units (2015): 1-1-4/9.7, 1-1-A2&A3, 6-1-1/9, 6-1-1/13; 4-3-1/15 - Offshore Support Vessels (2015): 1-1-4/7.7, 1-1-A3&A4; 4-8-3/1.7, 4-8-3/1.11, 4-9-8/Table 1 and 4-9-8/Table 2 - Facilities on Offshore Installations (2015): 1-1-4/9.7, 1-1-A2&A3 - Steel Vessels for Service on Rivers and Intracoastal Waterways (2015): 1-1-4/7.7, 1-1-A3&A4 - High-Speed Craft (2015): 1-1-4/11.9, 1-1-A2&A3; 4-6-3/1.7, 4-6-3/3.1, 4-7-9/Table 9 and 4-7-9/Table 10 - Steel Barge

Rules (2015): 1-1-4/7.9, 1-1-A3&A4

National Standards: International Standards:

IACS UR E10:2014 and IEC 60945:2002 + Corrigendum:2008

Government Authority:

EUMED: Others:

Model CertificateModel Certificate NoIssue DateExpiry DatePDA15-LD1429435-PDA05/OCT/201504/OCT/2020

ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.