



Work Order - WO0303346
Product Design Assessment (PDA)
Girder Clamps, Type AF, AAF, LR & CF
PDA No. 25-0303346-PDA

Attention: Mr. Louise Foster, LINDAPTER INTERNATIONAL (WCN: 780032)

The documents shown in the attached list are reviewed in accordance with the applicable requirements indicated in the PDA along with the service restrictions and comments.

We recommend that you monitor the ABS Rules, Guides and other standards used in the Assessment. These Rules, Guides and standards often change on an annual basis, and you must comply with the new Rules, Guides and standards in order for the product to be used on an ABS classed vessel or facility contracted under the new Rules, Guides or specifications.

Additionally, we acknowledge the PDA request form warranting that the materials used in the product(s) are free from asbestos.

For any clarifications, contact Ms. Ziyang Zhang at +1(281)877-5831 or (ZiZhang@eagle.org).

Very truly yours,

Leile Froufe
Vice President of Engineering

Electronically Signed by: Mohamed Boukamcha

Documents List

Drawing No.	Rev. No.	Title	Status
SW20777-AR	0	Conection of W8x15 to W8x21 [Higher Loads]	Approved
LTSD - 3503	2	M12 Type AAF	Reviewed
LTSD - 3506	2	M12 Rocking Washer	Reviewed
LTSD - 3505	2	M16 Type AAF	Reviewed
LTSD - 3504	2	M16 Rocking Washer	Reviewed
LTSD - 3802	2	M20 Type AAF	Reviewed
LTSD - 3803	0	M20 Rocking Washer	Reviewed
SW19301-AR	0	GC001-8 W16x100 to W14x53 Connection Details	Approved
LTSD - 2105	3	M12 Type AF Short Tail	Reviewed
LTSD - 2106	3	M12 Type AF Medium tail	Reviewed
LTSD - 1754	5	M16 Type AF Short tail	Reviewed
LTSD - 1826	6	M16 Type AF Medium tail	Reviewed
LTSD - 1783	7	M20 Type AF Short tail	Reviewed
LTSD - 1827	6	M20 Type AF Medium tail	Reviewed
LTSD - 2756	3	M24 Type AF Short tail	Reviewed
LTSD - 2757	3	M24 Type AF Medium tail	Reviewed
SW19370-AR	0	Connection of Plate to W14x43 Column (1-side)	Approved
LTSD - 3751	0	M12 Type CF -New supplier	Reviewed
LTSD - 3752	0	M16 Type CF -New supplier	Reviewed
LTSD - 3753	0	M20 Type CF - New supplier	Reviewed
SW25709-AR	0	Connection of W6x9 Beam to W6x9 Beam	Reviewed
LTSD - 0571	2	M10 LR Clip and Saddle	Reviewed
LTSD - 0957	1	M12 Type LR Clip	Reviewed
LTSD - 0958	1	M12 Type LR Saddle	Reviewed
LTSD - 0181	6	M16 LR Clip & Saddle	Reviewed
LTSD - 0959	4	M24 Type LR Clip	Reviewed
LTSD - 0960	2	M24 Type LR Saddle	Reviewed
LTSD - 2235	1	M20 Type LR Clip	Reviewed
LTSD - 2236	2	M20 Type LR Saddle	Reviewed
HLB 14229	4	Batch Test Compression AAF12	Reviewed
HLB 14296	4	Batch Test Compression AAF16	Reviewed
HLB 14147	4	Batch Test Compression AAF20	Reviewed
HLB 14324	4	Batch Test Compression AF12M	Reviewed
HLB 14323	4	Batch Test Compression AF16S	Reviewed
HLB 14321	4	Batch Test Compression AF20M	Reviewed
HLB 14060	4	Batch Test Compression AF24M	Reviewed
HLB 14227	4	Batch Test Tensile Pairs CF12	Reviewed
HLB 14379	4	Batch Test Tensile Pairs CF16	Reviewed
HLB 14309	4	Batch Test Tensile Pairs CF20	Reviewed
HLB 13623	4	Batch Test Tensile Pairs Test LR10	Reviewed
HLB 14319	4	Batch Test Tensile Pairs Test LR12	Reviewed
HLB 14372	4	Batch Test Tensile Pairs Test LR16HDG	Reviewed
HLB 14100	4	Batch Test Tensile Pairs Test LR20HDG	Reviewed
HLB 13989	4	Batch Test Tensile Pairs Test LR24	Reviewed
LindUSAMar25	-	Product Datasheets	Reviewed

ESR-3976	April 2024	ICC-ES Evaluation Report TYPE AF AND AAF GIRDER CLAMP ASSEMBLIES	Filed by ABS for Reference Only
ETA 20/0918 of 30/05/2025	03	European Technical Assessment Lindapter High Slip Resistance & Girder Clamps – Type AF, Type AAF, Type A and Type B	Filed by ABS for Reference Only
ETA 20/0921 of 03/12/2020	01	European Technical ETA 20/0921 Assessment Lindapter Adjustable Clamps – Type LR, Type D2, Type LS, Type LSG, Type F9, Type CF, and Flush clamp	Filed by ABS for Reference Only

Electronic copies of the documents, appropriately stamped, are available in the ABS Client Portal.

Include: PDA Certificates



CERTIFICATE NUMBER
EFFECTIVE DATE
EXPIRY DATE
ABS TECHNICAL OFFICE

25-0303346-PDA
10-Jul-2025
09-Jul-2030
Houston ESD - Offshore
Equipment

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

LINDAPTER INTERNATIONAL

located at

LINDSAY HOUSE BRACKENBECK ROAD, , United Kingdom

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: Clamp Connector
Model: Type AF, AAF, LR & CF
Endorsements:
Tier: 2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 09/Jul/2030 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

Mohamed C Boukamcha

Mohamed C Boukamcha,Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

LINDAPTER INTERNATIONAL

LINDSAY HOUSE BRACKENBECK ROAD

United Kingdom

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Fax:

Email: louise.foster@lindapter.com

Web: <https://www.lindapter.com/>

Tier: 2 - PDA Issued

Product: Clamp Connector
Model: Type AF, AAF, LR & CF
Endorsements:

Intended Service:
Marine and Offshore Applications

Description:
Lindapter Girder Clamps are designed to connect steel sections together as an alternative to through bolting and welding.

Rating:
Load ratings, temperature ratings and material grades are per attached data sheets.

Service Restriction:
1. Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
2. The Girder Clamps are to be designed, installed, tested, in accordance with manufacturer's specifications and instructions.

Comments:
The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:
Drawing No. SW20777-AR, Connection of W8x15 to W8x21 [Higher Loads], Revision: 0;
Drawing No. LTSD - 3503, M12 Type AAF, Revision: 2;
Drawing No. LTSD - 3506, M12 Rocking Washer, Revision: 2;
Drawing No. LTSD - 3505, M16 Type AAF, Revision: 2;
Drawing No. LTSD - 3504, M16 Rocking Washer, Revision: 2;
Drawing No. LTSD - 3802, M20 Type AAF, Revision: 2;
Drawing No. LTSD - 3803, M20 Rocking Washer, Revision: 0;
Drawing No. SW19301-AR, GC001-8 W16x100 to W14x53 Connection Details, Revision: 0;
Drawing No. LTSD - 2105, M12 Type AF Short Tail, Revision: 3;
Drawing No. LTSD - 2106, M12 Type AF Medium tail, Revision: 3;
Drawing No. LTSD - 1754, M16 Type AF Short tail, Revision: 5;
Drawing No. LTSD - 1826, M16 Type AF Medium tail, Revision: 6;
Drawing No. LTSD - 1783, M20 Type AF Short tail, Revision: 7;
Drawing No. LTSD - 1827, M20 Type AF Medium tail, Revision: 6;
Drawing No. LTSD - 2756, M24 Type AF Short tail, Revision: 3;
Drawing No. LTSD - 2757, M24 Type AF Medium tail, Revision: 3;
Drawing No. SW19370-AR, Connection of Plate to W14x43 Column (1-side), Revision: 0;
Drawing No. LTSD - 3751, M12 Type CF -New supplier, Revision: 0;
Drawing No. LTSD - 3752, M16 Type CF -New supplier, Revision: 0;
Drawing No. LTSD - 3753, M20 Type CF - New supplier, Revision: 0;
Drawing No. SW25709-AR, Connection of W6x9 Beam to W6x9 Beam, Revision: 0;
Drawing No. LTSD - 0571, M10 LR Clip and Saddle, Revision: 2;
Drawing No. LTSD - 0957, M12 Type LR Clip, Revision: 1;
Drawing No. LTSD - 0958, M12 Type LR Saddle, Revision: 1;
Drawing No. LTSD - 0181, M16 LR Clip & Saddle, Revision: 6;
Drawing No. LTSD - 0959, M24 Type LR Clip, Revision: 4;
Drawing No. LTSD - 0960, M24 Type LR Saddle, Revision: 2;
Drawing No. LTSD - 2235, M20 Type LR Clip, Revision: 1;
Drawing No. LTSD - 2236, M20 Type LR Saddle, Revision: 2;

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Tier: 2 - PDA Issued

Drawing No. HLB 14229, Batch Test Compression AAF12, Revision: 4;
Drawing No. HLB 14296, Batch Test Compression AAF16, Revision: 4;
Drawing No. HLB 14147, Batch Test Compression AAF20, Revision: 4;
Drawing No. HLB 14324, Batch Test Compression AF12M, Revision: 4;
Drawing No. HLB 14323, Batch Test Compression AF16S, Revision: 4;
Drawing No. HLB 14321, Batch Test Compression AF20M, Revision: 4;
Drawing No. HLB 14060, Batch Test Compression AF24M, Revision: 4;
Drawing No. HLB 14227, Batch Test Tensile Pairs CF12, Revision: 4;
Drawing No. HLB 14379, Batch Test Tensile Pairs CF16, Revision: 4;
Drawing No. HLB 14309, Batch Test Tensile Pairs CF20, Revision: 4;
Drawing No. HLB 13623, Batch Test Tensile Pairs Test LR10, Revision: 4;
Drawing No. HLB 14319, Batch Test Tensile Pairs Test LR12, Revision: 4;
Drawing No. HLB 14372, Batch Test Tensile Pairs Test LR16HDG, Revision: 4;
Drawing No. HLB 14100, Batch Test Tensile Pairs Test LR20HDG, Revision: 4;
Drawing No. HLB 13989, Batch Test Tensile Pairs Test LR24, Revision: 4;
Drawing No. LindUSAMar25, Product Datasheets, Revision: -;
Drawing No. ESR-3976, ICC-ES Evaluation Report TYPE AF AND AAF GIRDER CLAMP ASSEMBLIES, Revision: April 2024;
Drawing No. ETA 20/0918 of 30/05/2025, European Technical Assessment Lindapter High Slip Resistance & Girder Clamps – Type AF, Type AAF, Type A and Type B, Revision: 03;
Drawing No. ETA 20/0921 of 03/12/2020, European Technical ETA 20/0921 Assessment Lindapter Adjustable Clamps – Type LR, Type D2, Type LS, Type LSG, Type F9, Type CF, and Flush clamp, Revision: 01.

Terms of Validity:

This Product Design Assessment (PDA) Certificate remains valid until 09/Jul/2030 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

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STANDARDS

ABS Rules:

Rules for Conditions of Classification, 2025 Marine Vessels Rules 1A-1-4/7.7, 1A-1-A3, 1A-1-A4

Rules for Conditions of Classification - Offshore Units, 2025 Offshore Units Rules 1B-1-4/9.7, 1B-1-A2, 1B-1-A3

National:

NA

International:

NA

Government:

NA

EUMED:

NA

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Tier: 2 - PDA Issued

OTHERS:

NA