

REPORT OF A THOROUGH EXAMINATION OF LIFTING EQUIPMENT inc. PROOF TEST DETAILS

EMM019 Rev12

Name & address for whom the examination was made

BLUE MANTA
5 KIRKTON AVENUE, PITMEDDEN ROAD
DYCE, ABERDEEN

Location where the examination was carried out

EMM Corporation Ltd.
Howe Moss Place
Kirkhill Industrial Estate
Aberdeen

European Management and Marine Corporation
Howe Moss Place
Kirkhill Industrial Estate
Aberdeen AB21 0GS

Tel : +44(0) 1224 775151



UNITED KINGDOM AB21 0BF

Fax : +44(0) 1224 775252 Part of the  usha martin group of companies

Customer Order No	33737	Date of report:	06/02/2020	Works No	191175	Report number:	191175-1
-------------------	-------	-----------------	------------	----------	--------	----------------	----------

Identification Mark	Qty	Description sufficient to identify the equipment	Test Details where appropriate	SWL	Date of Last Examination	Date of this Examination	Defects	Date Next Examination Due
191175/1	1	FOUR LEG WIRE ROPE SLING ASSY TO BSEN13414-1 MEETS THE PERFORMANCE REQUIREMENTS OF DNVGL-ST-E271 & NORSOK R-002 4 LEGS 2.20MTR X 26MM 6 X 36 IWRC RHOL GALV 1960 GRADE TERM WITH HA36QA QUAD ASSY TOP END, THIMBLE EYES EACH END BY TAPERED ALUMINIUM TURNBACKS WITH INSPECTION HOLE. BOTTOM EYES TO SUIT 8.5 TONNE SHACKLES	17.4 TONNE PER LEG @ 0 DEG USHA MARTIN CERT NO: E A971570002 DATE: 26.10.2019 HACKETT CERT NO: L073873 DATE: 31.01.2020	10 TONNE OFFSHORE / 15.01 TONNE ONSHORE PER SET @ 0-45 DEG. DNVGL-ST-E271, 26MM 1960, 8.5 TONNE, EMM	FIRST EXAM	06/02/2020	None	04/08/2020
S818/1-4	4	G5163 GD8 POLAR GREEN PIN SAFETY BOW SHACKLES TO BSEN13889	VAN BEEST CERT NO: 80170682 DATE: 08.08.2018	8.5 TONNE	FIRST EXAM	06/02/2020	None	04/08/2020

MBL OF WIRE: 48.1 TONNE

Name & Qualification of person making this report

C SEY
Company Approved & Qualified Examiner

Note: Before using this equipment the duty holder shall ensure that the relevant correct use and care instructions are issued to the end user or operator. Copies are available on request or from www.emmcorp.com

Authenticating Signature



Declaration: This is a report of Thorough Examination made in accordance with the Lifting Operations Lifting Equipment Regulations 1998, Regulation 9(3)(a) and that the equipment listed above is safe to operate subject to rectification of any defects noted. Where LOLER98 is not applicable next examination date due may be taken as the period stated within the relevant geographic international, national or local regulation or standard.

Where the equipment is new supplied details may be derived from manufacturers original EC Declaration of Conformity held by EMM. Copies available on request.

EC Declaration of Conformity/Manufacturers Certificate

Name and Address of Manufacturer

European Management and Marine Corporation

Howe Moss Place

Kirkhill Industrial Estate

Aberdeen AB21 0GS

Tel : +44(0) 1224 775151

Fax : +44(0) 1224 775252



Part of the usha martin Group of companies

Client

BLUE MANTA
5 KIRKTON AVENUE, PITMEDDEN ROAD
DYCE, ABERDEEN

GB

Customer Order No 33737

Works No 191175

Report number: 191175-1

Test Details

Description and
Identification of the
Equipment

191175/1

FOUR LEG WIRE ROPE SLING ASSY TO BSEN13414-1 MEETS THE
PERFORMANCE REQUIREMENTS OF DNVGL-ST-E271 & NORSOK R-
002
4 LEGS 2.20MTR X 26MM X 36 IWRC RHOL GALV 1960 GRADE TERM
WITH HA36QA QUAD ASSY TOP END, THIMBLE EYES EACH END BY
TAPERED ALUMINIUM TURNBACKS WITH INSPECTION HOLE.
BOTTOM EYES TO SUIT 8.5 TONNE SHACKLES

MBL OF WIRE: 48.1 TONNE

Qty

SWL

10 TONNE
OFFSHORE / 15.01
TONNE ONSHORE
PER SET @ 0.45
DEG, DNVGL-ST-
E271, 26MM 1960, 8.5
TONNE, EMM

17.4 TONNE PER
LEG @ 0 DEG
USHA MARTIN
CERT NO: E
A971570002
DATE: 26.10.2019
HACKETT
CERT NO: L073873
DATE: 31.01.2020

Standard and Specification are as detailed in

description above.

Standards and Specification Used

European Management and Marine Corp declare that the supplied equipment, as detailed above, complies with the

Authorised Signature

Date

06/02/2020

Note: Before using this equipment the duty holder shall ensure that the relevant correct use and care instructions are issued to the end user or operator. Copies are available on request or from www.emmcorp.com



CERTIFICATE FOR DNVGL2.7-1 OFFSHORE CONTAINER LIFTING SLINGS

Client: BLUE MANTA	PO Nr: 33737	Cert No: 191175
---------------------------	---------------------	------------------------

Manufacturer: EUROPEAN MANAGEMENT & MARINE CORP	Address: Howe Moss Place, Kirkhill Industrial Estate Dyce, Aberdeen, AB21 0GS
Det Norske Veritas Type Approval No: TAS00001DB	Type Designation: Wire Rope Slings for Offshore Containers

Working Load Limit (WLL) 10 TONNE OFFSHORE / 15.01 TONNE ONSHORE PER SET	Angle of legs (to vertical): 0-45 DEG	Dia of slings: 26MM	Length of legs: 4 LEGS @ 2.20MTRS
---	--	--------------------------------	--

Description of the Sling: 1 X FOUR LEG WIRE ROPE SLING ASSY TO BSEN13414-1 MEETS THE PERFORMANCE REQUIREMENTS OF DNVGL-ST-E271 & NORSOK R-002 4 LEGS 2.20MTR X 26MM 6 X 36 IWRC RHOL GALV 1960 GRADE TERM WITH HA36QA QUAD ASSY TOP END, THIMBLE EYES EACH END BY TAPERED ALUMINIUM TURNBACKS WITH INSPECTION HOLE. BOTTOM EYES TO SUIT 8.5 TONNE SHACKLES	MBL OF WIRE: 48.1 TONNE
---	--------------------------------

Wire Rope Slings	
Reference Standard: BSEN13414-1	Grade of wire rope: 1960
Grade if terminal fittings: min Gr8	Test report No: 191175-1
Tests carried out on sling:	

Lifting set components (shackles to be included only if assembly secured)
(If new components are installed before re-certification, reference to previous certificate number and the new components unique identification mark):

Description:	Supplier/Manufacturer:	Identification Mark:	DNV TA No.:
26MM 6 X 36 HA36QA QUAD ASSY 8.5 TONNE POLAR GREEN PIN SHACKLES	USHA MARTIN (E A971570002) HACKETT (L073873) VAN BEEST (80170682)	R11593 19K AV-BD	N/A TAS000013Z TAS000011V

This lifting set has been designed, approved and tested, where appropriate, in accordance with DNVGL standard DNVGL-ST-E271 – 2.7-1 Offshore Containers

The sling also conforms to the following standard(s):
- BS EN13414-1

This certificate is issued based on DNV Type Approval Certificate No. TAS00001DB

Date: 06.02.2020 Place: EMM Aberdeen	EMM Corp. For and on behalf of Authorised Signatory
---	--

EMM114 rev 2 03/19

Howe Moss Place, Kirkhill Industrial Estate
Aberdeen AB21 0GS

www.emmcorp.com

A Division Of Usha Martin UK Limited

Telephone
+44 (0) 1224 775151
Facsimile
+44 (0) 1224 775252

Form No. UM-L4-QA-61C Issue:02 Rev:02
TEST REPORT (Type 3.1 EN 10204:2004) No: E A971570002 ULR - TC501619040017379P Date of Issue : 26-10-2019
Customer : USHA MARTIN UK LIMITED,

Customer Order Ref : 13588
Sales Order Number : 5130003004/70
Reel Number : A971570002
Date of Sample Receipt : 26-10-2019
Manufacturer : USHA MARTIN LIMITED, INDIA
Date of Test : 26-10-2019

SPECIFICATION

Applied Standard : EN12385/4/2002+A1 2008(E)

Item : Steel Wire Rope

Nominal Diameter of rope : 26 mm

Construction : 6X36 , Preformed

Strand Construction : 14-7+7-7-1

Grade : 1960

Wire Finish : Galvanized

Type of Core/Lay Direction : IWRC / RHO

Length of Rope : 1000 m

Mass/Unit Length (Approx) : 2.805 kg/mtr

Lubrication : A2 / PETROLEUM LUBE

Minimum Breaking Force : 472.0 KN

Prestretching : N.A.

RESULTS OF TEST & EXAMINATION

Dia. Off-tension : 26.450 mm

Lay Off-tension : 165.000 mm

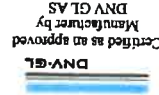
Breaking Force : 508.800 kN

This is to certify that the above tests have been carried out in accordance with the Specification and the results relate to the item tested.

Authorized Signatory

Munna Singh Yadav
Dy Manager (QA)
Usha Martin Limited
Ranchi, Jharkhand

Page 1 of 2



Form No. UM-L4-QA-61C Issue:02 Rev:02
TEST REPORT (Type 3.1 EN 10204:2004) No: E A971570002 ULR - TC501619040017379P Date of issue : 26-10-2019
Customer : USHA MARTIN UK LIMITED,

Customer Order Ref : 13588
Sales Order Number : 5130003004/70
Reel Number : A971570002
Date of Sample Receipt : 26-10-2019
Manufacturer : USHA MARTIN LIMITED, INDIA
Date of Test : 26-10-2019

INDIVIDUAL WIRE TESTS

Sl.	Wire Dia	Tensile Strength (Avg)	Band (Avg)	Torsion (Avg)	Knot Test	Wt. of Zinc Coating (Avg)
1	1.670 mm	2034 N/mm ²	13	33	NA	87 gm/m ²
2	1.240 mm	1980 N/mm ²	17	32	NA	102 gm/m ²
3	1.190 mm	2022 N/mm ²	16	36	NA	87 gm/m ²
4	0.920 mm	2121 N/mm ²	15	34	NA	84 gm/m ²
5	1.460 mm	2127 N/mm ²	17	32	NA	109 gm/m ²
Sl.	Wire Dia	Carbon%	Manganese%	Silicon%	Sulphur%	Phosphorus%
1	1.670 mm	0.77	0.74	0.220	0.010	0.011
2	1.240 mm	0.77	0.68	0.220	0.009	0.018
3	1.190 mm	0.78	0.72	0.210	0.010	0.016
4	0.920 mm	0.77	0.75	0.200	0.009	0.012
5	1.460 mm	0.78	0.76	0.230	0.009	0.014

CHEMICAL ANALYSIS OF WIRE ROD

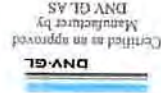
This is to certify that the above tests have been carried out in accordance with the Specification and the results relate to the item tested.

Note: This test report shall not be reproduced except in full without approval of the laboratory.

Scope of NABL: The following tests are not covered under NABL Scope of Accreditation.

- a) Any test of wire diameter < 1.0 mm and > 5.0 mm
- b) Knot test result of wires
- c) Chemical analysis of wire rod

Authorized Signatory
Munna Singh Yadav
Dy. Manager (QA)
Usha Martin Limited
Ranchi, Jharkhand





William Hackett
Lifting Products Limited



DUAL PURPOSE DOCUMENT

EC DECLARATION OF CONFORMITY

A

DECLARATION

I DECLARE THAT THE ITEMS DESCRIBED ON THIS DOCUMENT COMPLY WITH THE REQUIREMENTS OF THE MACHINERY DIRECTIVE 2006/42/EC

Delivery Address

EMM CORP LIMITED
USHA MARTIN UK LIMITED
HOWE MOSS PLACE,
KIRKHILL INDUSTRIAL ESTATE
DYCE, ABERDEEN AB21 0GS

Supplied To: EMM001

Certificate Number: L073873

Customer Order No: 109731

Date Received: 31/01/2020

PRODUCTS REQUIRING A DECLARATION OF CONFORMITY

ARE INDICATED BY (A)

THOSE REQUIRING JUST A MANUFACTURER'S

CERTIFICATE BY (B)

MANUFACTURER'S CERTIFICATE

B

CERTIFIED ON BEHALF OF THE COMPANY

T.J. Burgess

T.J. BURGESS 31/01/2020

Authorised person for the configuration of the declaration documents: Tim Burgess, William Hackett Lifting Products, Alnwick, UK

A/B	Batch	Lot No / Serial No	Product	Description	Qty	Working Load Limit	Proof Load	Min Breaking Load
B	Q61243	19B	HN350.250+	HA-250QA Quad Assembly Conforming to BSEN 1677-4 and DNV2.7-1 & DNV2.7-3. Temperature Range -40° C to +200° C	20	9.3 TONNE @ 45° TO VERTICAL	229.0 kN	456.0 kN
B	Q61441	19K	HN350.360+	HA-360QA Quad Assembly Conforming to BSEN1677-4 and DNV2.7-1, DNV2.7-3. Temperature Range -40° C to +200° C	10	26.0 TONNE @ 45° TO VERTICAL	638.0 kN	1275.0 kN

Test Certificate for Oblong Master Links/Sub-assemblies according to EN 10204 2.2 & ISO 10474 2.2
Declaration of conformity according to Directive 2006/42/EC, Annex II 1. B

CC19 0469

Certificate number

William Hackett Lifting Products Limited

Supplied To:

Customer Order No.:

601874

Scaw Order No.:

907369

Order date:

21 November 2019

Dispatch date:

22 November 2019

Commodity No.:

OSA360DNV

Product Description:

HA-36QA OS+ Oblong Sub-Assembly to DNV 2.7-1 - Orange Powder Coated

Total Quantity:

437 Each

Batch number:

19K

Drum number:

14-20,39-46

Quantity per batch:

437

Date of manufacture:

Date tested:

Markings:

HA-36QA OS+ & Batch Number

Intended for:

Lifting slings

Mechanical properties:

Metric:

26 tonne at 45° to the vertical

Proof Force:

638 kN

Break Force Exceeds:

1275 kN

5 : 1

242 Joule at -40°C

34-36 HRC

Typical Hardness:

Charpy V-notch Impact value:

Safety Factor:

Break Force Minimum:

Proof Force Minimum:

Working Load Limit:

Chemical analysis of steel:

Max

Min

Specification

C

0.20

0.25

Si

0.15

0.25

Mn

1.10

1.30

P

0

0.025

S

0

0.020

Ni

0.90

1.10

Cr

0.40

0.60

Mo

0.28

0.32

Al

0.025

0.080

Notes:

100% of components are proof tested in accordance with EN1677-4 and in addition the products are also 100% MPI tested.

100% of DNV GL components are then heat treated post proof testing and MPI to minimize the risk of hydrogen embrittlement and stress corrosion cracking.

Typical grain size 26 in accordance to ASTM E112 and ISO 643.

Manufacturer's certificate refers to EN 1677-4.

ISO 9001:2015 approval by SGS (Certificate ZA17208870) - Address: Harrowdene Office Park, Building 1, Western Service Road, Woodmead, Johannesburg, 2191, South Africa

Company Representative: S. Ledgerwood (General Manager - McKinnon Chain a division of Scaw South Africa (PTY) Ltd)

Technical file compiled and certificate signed off by: F. Strydom (Technical Manager) - Use company address above

After treatment of chain: This certificate is only applicable to goods properly used in the condition supplied by McKinnon Chain a division of Scaw South Africa (PTY) Ltd. Further processing by, or on behalf of, the user (involving: cold working, heating, electroplating, hot-dip galvanizing or other treatments) is entirely the user's responsibility and invalidates this certificate and the manufacturer's product warranty obligations. This certificate is invalidated by any alterations and/or deletion to the content of the original certificate.

The components are designed, approved, tested and certified in accordance with the following specification / standard:

DNV GL 2.7-1 and DNV GL 2.7-3

This certificate is based on DNV GL type approval no. TAS0000132 Revision 3.



Vereeniging, Gauteng, RSA

Signature

F. Strydom (Technical Manager)

Authorized Person

2019-12-05

GEN-TST-001 F-02-00

P.O. Box 57, 3360 AB Sliedrecht
Industrieweg 6, 3361 HJ Sliedrecht
The Netherlands

Telephone : +31 184 413300

Fax : +31 184 414959

E-mail : sales@vanbeest.com

Website : www.vanbeest.com

VAN BEEST



EMM Corporation Ltd
Howe Moss Place, Kirkhill Ind. Est.
DYCE-ABERDEEN
AB21 0GS
UNITED KINGDOM

WORKS CERTIFICATE TO EN 10204 - TYPE 2.2

Number	80170682	Date	29.11.2018
Customer no.	30318	Page	1 / 1
Our order no.	237473	In compliance with	Your ref. no.

Quantity	60
Article	POGHMB25
Description	G-5163, Green Pin Polar® Bow Shackle BN, Grade 8 bow shackle with safety bolt for use under low temperatures, to EN13889, hot dipped galvanized, grade 8, diameter bow 25 mm, diameter pin 28 mm, WLL 8.5 ton
Properties	PL: 17 t MBL: 68 t HT: Quenched and tempered
Traceability	Bow AV Pin BD

We herewith confirm that the products above are released for shipment after inspection and approval by our QC-department.

P. Oostlander (QC-Manager)

Van Beest B.V., manufacturer and supplier of wire rope and chain fittings.
Registered trade marks 'Green Pin' and 'Excel'. Member of Van Beest Group B.V.
Rabobank: account no. 35 93 43 155, IBAN code: NL86RABO0359343155, SWIFT/BIC code: RABONL2U.
VAT no. NL0091.33.835.B01, Chamber of Commerce Rotterdam - no. 23009317. All our offers and contracts are subject to our General Terms & Conditions of Supply as registered with the District Court of Rotterdam on October 25, 2016 under number 48/2016.

Form : KF-10-430C

Issue : 02.01.2017

P.O. Box 57, 3360 AB Sliedrecht
Industrieweg 6, 3361 HJ Sliedrecht
The Netherlands

Telephone : +31 184 413300
Fax : +31 184 414959
E-mail : sales@vanbeest.com
Website : www.vanbeest.com



EMM Corporation Ltd
Howe Moss Place, Kirkhill Ind. Est.
DYCE-ABERDEEN
AB21 0GS
UNITED KINGDOM

INSPECTION CERTIFICATE TO EN 10204 - TYPE 3.1

Number	80170682	Date	29.11.2018
Customer no.	30318	Page	1 / 1
Our order no.	237473	In compliance with	Your ref. no. 103228

Quantity	60
Article	POGHMB25
Description	G-5163, Green Pin Polar® Bow Shackle BN, Grade 8 bow shackle with safety bolt for use under low temperatures, to EN13889, hot dipped galvanized, grade 8, diameter bow 25 mm, diameter pin 28 mm, WLL 8.5 ton

Properties

Item	Charge no.	Yield Point (N/mm ²)	Tensile Strength (N/mm ²)	A5	Impact test: Charpy-V (J)	Traceability
				Temp (°C)		
				1	2	3
				55	53	60
Bow	016080331	920	1001	17.7	40	56
Pin	016090441	882	969	16.5	40	107

Chemical composition

Item	% C	% Si	% Mn	% P	% S	% Cr	% Ni	% Mo	% Cu	% Al
Bow	0.35	0.23	0.58	0.006	0.005	0.99	0.01	0.18	0.01	0.044
Pin	0.35	0.22	0.57	0.01	0.003	0.98		0.19		0.042

We herewith confirm that the products above are released for shipment after inspection and approval by our QC-department.

P. Oostlander (QC-Manager)

Van Beest B.V., manufacturer and supplier of wire rope and chain fittings.
Registered trade marks 'Green Pin' and 'Excel'. Member of Van Beest Group B.V.
Rabobank: account no. 35 93 43 155, IBAN code: NL66RABO0359343155, SWIFT/BIC code: RABONL2U.
VAT no. NL0091.33.835.B01, Chamber of Commerce Rotterdam - no. 23009317. All our offers and contracts are subject to our General Terms & Conditions of Supply as registered with the District Court of Rotterdam on October 25, 2016 under number 48/2016.

Form : KF-10-440C

Issue : 02.01.2017

P.O. Box 57, 3360 AB Sliedrecht
Industrieweg 6, 3361 HJ Sliedrecht
The Netherlands

Telephone : +31 184 413300
Fax : +31 184 414959
E-mail : sales@vanbeest.com
Website : www.vanbeest.com



EMM Corporation Ltd
Howe Moss Place, Kirkhill Ind. Est.
DYCE-ABERDEEN
AB21 0GS
UNITED KINGDOM

MANUFACTURER TEST CERTIFICATE

Number	80170682	Date	29.11.2018
Customer no.	30318	Page	1 / 1
Our order no.	237473	In compliance with	Your ref. no.
			103228

Quantity	60
Article	POGHMB25
Description	G-5163, Green Pin Polar® Bow Shackle BN, Grade 8 bow shackle with safety bolt for use under low temperatures, to EN13889, hot dipped galvanized, grade 8, diameter bow 25 mm, diameter pin 28 mm, WLL 8.5 ton

Properties	
Item	Traceability
Bow	AV
Pin	BD
Date of test and examination	08.08.2018
Working Load Limit (t)	8.5
Min. Proof Load (t)	17

We herewith confirm that the products above are released for shipment after inspection and approval by our QC-department. We certify that the items described herein were tested and thereafter examined and were found to be free from cracks, flaws or other defects. The above mentioned products have not been individually Proof Load tested.

P. Oostlander (QC-Manager)

Van Beest B.V., manufacturer and supplier of wire rope and chain fittings.
Registered trade marks 'Green Pin' and 'Excel'. Member of Van Beest Group B.V.
Rabobank: account no. 35 93 43 155, IBAN code: NL66RABO0359343155, SWIFT/BIC code: RABONL2U.
VAT no. NL0081.33.835.B01, Chamber of Commerce Rotterdam - no. 23009317. All our offers and contracts are subject to our General Terms & Conditions of Supply as registered with the District Court of Rotterdam on October 25, 2016 under number 48/2016.

Form : KF-10-460C

Issue : 02.01.2017

P.O. Box 57, 3360 AB Sliedrecht
Industrieweg 6, 3361 HJ Sliedrecht
The Netherlands

Telephone : +31 184 413300
Fax : +31 184 414959
E-mail : sales@vanbeest.com
Website : www.vanbeest.com



EMM Corporation Ltd
Howe Moss Place, Kirkhill Ind. Est.
DYCE-ABERDEEN
AB21 0GS
ENGLAND

WORKS CERTIFICATE TO EN 10204 - TYPE 2.1

Number	80170682	Date	29.11.2018
Customer no.	30318	Page	1 / 1
Our order no.	237473	In compliance with	Your ref. no.

Quantity	60		
Article	POGHMB25		
Description	G-5163, Green Pin Polar® Bow Shackle BN, Grade 8 bow shackle with safety bolt for use under low temperatures, to EN13889, hot dipped galvanized, grade 8, diameter bow 25 mm, diameter pin 28 mm, WLL 8.5 ton		
Traceability	Bow	AV	
	Pin	BD	

We herewith confirm that the products above are released for shipment after inspection and approval by our QC-department.

P. Oostlander (QC-Manager)

Van Beest B.V., manufacturer and supplier of wire rope and chain fittings.
Registered trade marks 'Green Pin' and 'Excel'. Member of Van Beest Group B.V.

Rabobank: account no. 35 93 43 155, IBAN code: NL66RABO0359343155, SWIFT/BIC code: RABONL2U.

VAT no. NL0091.33.835.B01, Chamber of Commerce Rotterdam - no. 23009317. All our offers and contracts are subject to our General Terms & Conditions of Supply as registered with the District Court of Rotterdam on October 25, 2016 under number 48/2016.

Form : KF-10-420C

Issue : 02.01.2017