



Page 1 of 2  
Certificate No. OSL2400542  
First Date of Inspection 26 June 2024  
Final Date of Inspection 26 June 2024  
Office Oslo

## Certificate for Machinery Equipment

### Valves others

This is to certify that the undersigned Surveyor to LLOYD'S REGISTER did at the request of the below customer, attend the testing and examination of the product(s) described below in accordance with the relevant Rules and Regulations for the Classification of Ships and found it/them satisfactory.

### General information

Customer	Jotron Skipper AS
Purchase Order No	PWO 127130
Manufacturer	Jotron Skipper AS
Intended for	Warehouse
Customer Work Order No	PWO 127130
Date of issue	28 June 2024
Quantity	13 pcs

### Particulars

Description	8 off Valves and 5 off Combo tanks
Size	4 off ball valves ND100 , 2 off ball valves DN65, 2 off gate valves DN100, 5 off Combo Tanks.
Valve body material	Ball valves SS 1,4408, Gate valves Bronze RG5, Comp tanks S355
Test pressure body	5 bar
Test pressure seat	5 bar
Design pressure	2 bar
Set pressure if applicable	-
Quantity	8 valves and 5 Combo tanks

### Identification Marks On Product

I.D number	OSL2400542
Surveyors initials	SVU
Date of inspection	26/06/2024

### Remarks

All found to satisfaction

Svein Urbye  
Lloyd's Register EMEA  
A subsidiary of Lloyd's Register Group Limited



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Description	Manufacturer Designation	Serial Number	IMO Number
SB-100-SB		24378	0
SB-100-SB		24379	0
SB-100-SB		24380	0
SB-100-SB		24381	0
SB-100-SA		24374	0
SB-100-SA		24375	0
SB-60-SA		24376	0
SB-60-SA		24377	0
ETNSTCLF		N142X7HK	0
ETNSTCLF		N142X7HK-2	0
ETNSTCLF		N142X7HK-3	0
ETNSTCLF		N142X7HK-4	0
ETNSTCLF		N142X7HK-5	0

Sertifika No / Number of Cert.: :2024/068

Tarih/Date

1.04.2024

Firma Adı / Customer Name : :LANGTHON AS/ SKIPPER - PO 452476

Malzeme Kalitesi / Material Standard : CF8M / Stainless Steel Casting

Sıra Pos	Döküm No/Heat Number	Malzeme Adı / Material Name	Parça Adeti / Material Quantity	Kimyasal Kompozisyon / Chemical Composition									
				% C	% Si	% Mn	% P	% S	% Cr	%Mo	%Ni		
1	2319	DN65 PN16 INTERMEDIATE BODY	72	0.061	0.84	0.75	0.021	0.019	17.5	2.15	9.08		
2	2329	DN65 PN16 INTERMEDIATE BODY	66	0.055	0.82	0.73	0.017	0.021	17.6	2.08	9.12		
3	2339	DN65 PN16 INTERMEDIATE BODY	62	0.052	0.85	0.69	0.024	0.024	17.5	2.07	9.09		
4													
5													

**Mekanik Özellikler / Mechanical Properties**

Döküm No / Heat Number.	Akma Dayanımı N/mm <sup>2</sup> Yield Strength	Çekme Dayanımı N/mm <sup>2</sup> Tensile Strength	Uzama / Elongation %	Kesit Daralması / Reduction of Area %	Darbe Testi / Charpy Impact test J/0°C	Sertlik / Hardness HB
		180 Min.	440	30 Min.	-	-
2319	284.5	504.8	42	-	-	-
2329	291.4	511.6	41			
2339	295.4	498.7	41			

**Tahribatsız Testler / Non Destructive Tests**

Döküm No / Heat Number.	Parça Adeti / Material Quantity	MT	PT	UT	RT	VT	Microstructure Ranges
2319	72	-	-	-	-	OK	-
2329	66	-	-	-	-	OK	-
2339	62	-	-	-	-	OK	-

**Uygulanan Isıl İşlemler / Heat Treatment Applied**

Döküm No / Heat Number.	Parça Adeti / Material Quantity	Normalizing °C	Annealing °C	Stress Relieving °C	Quenching °C	Tempering °C
2319	72	1100°C/ 2 Hours	-	-	-	-
2329	66	1100°C/ 2 Hours	-	-	-	-
2339	62	1100°C/ 2 Hours	-	-	-	-

We hereby certify that the material has been made by an approval process and satisfactorily tested in accordance with the rules of BV,LR and DNV-GL.

Surface quality is suitable with eye examination of MSS SP55 Standard.

KONTROL / CONTROLLED BY		ONAY / APPROVED BY		GÖZETİM / WITNESS BODY (If necessary)	
Adı / Name	Tuncay SARAÇ	Hakan ÇALIŞKAN			
Ünvanı/ Title	Quality Control Engineer	Quality Manager			
İmza/ Signature		 VISVANA SAN. İTH. VE İHR. TİC. LTD. ŞTİ. Türkoiba Mh. Atatürk Cad. No:232 / B-1 Büyükcemecesi - Beşiktaş / İstanbul Tel: (0212) 859 03 24 / (0212) 859 03 24 Büyükcemecesi V.D. 925 006 3058			
Tarih/ Date	1.04.2024	1.04.2024			

**CERTIFICATES:(Validities:DD/MM/..YY)**

ASB Certification ISO 9001:2015 Cert No:01/14059/01 (29.12.2023 -28.12.2024)

DNV-GL : Certificate No:AMMM00002YE (05.04.2022-04.04.2025)

Bureau Veritas-Mode II Survey Scheme- Marine Division Cert No:SMS.W.II./57463/A.0 (09.11.2022-27.02.2026)

Lloyd's Register-Certificate No:LR2004266WA (03.07.2020-02.07.2023)



Sertifika No / Number of Cert.: :2024/069

Tarih/Date

1.04.2024

Firma Adı / Customer Name : :LANGTHON AS/ SKIPPER - PO 452475

Malzeme Kalitesi / Material Standard : CF8M / Stainless Steel Casting

Sıra Pos	Döküm No/Heat Number	Malzeme Adı / Material Name	Parça Adeti / Material Quantity	Kimyasal Kompozisyon / Chemical Composition							
				% C	% Si	% Mn	% P	% S	% Cr	%Mo	%Ni
				0.08 Max	1.5 Max.	1.5 Max.	0.040 Max	0.030 Max.	17.0-21.0	2.0-3.0	9.0-12.0
1	2349	DN100 PN16 INTERMEDIATE BODY	54	0.063	0.81	0.84	0.022	0.023	17.6	2.09	9.12
2	2359	DN100 PN16 INTERMEDIATE BODY	54	0.053	0.79	0.79	0.019	0.018	17.5	2.14	9.13
3	2369	DN100 PN16 INTERMEDIATE BODY	50	0.059	0.82	0.68	0.017	0.019	17.7	2.06	9.14
4	2379	DN100 PN16 INTERMEDIATE BODY	42	0.065	0.77	0.71	0.017	0.022	17.6	2.09	9.09
5											

**Mekanik Özellikler / Mechanical Properties**

Döküm No / Heat Number.	Akma Dayanımı N/mm <sup>2</sup> Yield Strength	Çekme Dayanımı N/mm <sup>2</sup> Tensile Strength	Uzama / Elongation %	Kesit Daralması / Reduction of Area %	Darbe Testi / Charpy Impact test J/0°C	Sertlik / Hardness HB
	180 Min.	440	30 Min.	-	-	-
2349	277.5	509.4	39	-	-	-
2359	279.5	498.4	40			
2369	291.4	491.5	39			
2379	287.1	487.2	41			

**Tahribatsız Testler / Non Destructive Tests**

Döküm No / Heat Number.	Parça Adeti / Material Quantity	MT	PT	UT	RT	VT	Microstructure Ranges
2349	54	-	-	-	-	OK	-
2359	54	-	-	-	-	OK	-
2369	50	-	-	-	-	OK	-
2379	42	-	-	-	-	OK	-

**Uygulanan Isıl İşlemler / Heat Treatment Applied**

Döküm No / Heat Number.	Parça Adeti / Material Quantity	Normalizing °C	Annealing °C	Stress Relieving °C	Quenching °C	Tempering °C
2349	54	1100°C/ 2 Hours	-	-	-	-
2359	54	1100°C/ 2 Hours	-	-	-	-
2369	50	1100°C/ 2 Hours	-	-	-	-
2379	42	1100°C/ 2 Hours	-	-	-	-

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Surface quality is suitable with eye examination of MSS SP55 Standard.

KONTROL / CONTROLLED BY		ONAY / APPROVED BY		GÖZETİM / WITNESS BODY (If necessary)	
Adı /Name	Tuncay SARAÇ	Hakan ÇALIŞKAN			
Ünvanı/ Title	Quality Control Engineer	Quality Manager			
İmza/ Signature					
Tarih/ Date	1.04.2024	1.04.2024			

CERTIFICATES:(Validities:DD/MM/..YY)

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Lloyd's Register-Certificate No:LR2004266WA (03.07.2020-02.07.2023)





## SAMSVARSERKLÆRING

Leverandør / produsent:  
Asen Dreierverksted AS

Sendt dato:  
Ski 29/04-24

SKIPPER bestillings nr:	SKIPPER varenummer:	Revisjon:	Antall levert:
106799	TC-2002	05	30

Stål produsentens Heat / Charge nr:

Batch nr (år-uke-løpenummer):

Eks på batch nr: **13353**

1. Gland CH-295155

24171

2. Topp lokk CH-481571

Hvis samme varenummer blir levert mer enn en gang i uken, skal løpenummer endres fra 1 til 2 o.s.v.

3. Tønne /Rør CH-T16253

4. Inner ring CH-481571

Produsenten/leverandøren erklærer herved at produktet er laget i henhold til SKIPPERs seneste godkjente tegning, og i samsvar med SKIPPERs bestilling.

**Dette skjemaet skal følge med varene som blir levert til SKIPPER, og evt. skannes og sendes til SKIPPER sammen med materialsertifikat.**

Produktet er målt, kontrollert og godkjent av:

Stempel / Sign: \_\_\_\_\_

 **ASEN DREIERVERKSTED AS**



# ASEN DREIERVERKSTED A.S

HAUGENVEIEN 4 - 1400 SKI

TLF: 64 94 67 87

FAX: 64 94 51 11

Jotron Skipper AS

Postboks 151, Manglerud

0612 OSLO

www.aasendv.no

post@aasendv.no

Foretaksreg.: NO 817 694 942 MVA

telefon

kontakttype

epost

invoice@skipper.no

## Følgeseddel.nr

10974

Dato

mandag 29. april 2024

postboks

Antall	Best.nr.	Tegningsnr.	Tittel	Art.nr.	Ch.nr.	Matkval.	Stk.pris	Pris
2	106799		Europall med karm				kr 675,00	1 350,00
1	106799		Retting av sveis				kr 6 500,00	6 500,00
30	106799	TC-2002 rev.05	Transducer Tank Combo		295155,48157	S355	kr 3 404,00	102 120,00

Pris eks Mva

109 970,00

	<b>CERTIFICATO DI COLLAUDO - INSPECTION CERTIFICATE</b> <b>CERTIFICAT DE RECEPTION - ABNAHMEPRÜFEUGNIS</b>		<b>N° 640766</b> <b>DATE: 29/03/2023</b>	Acciaierie Venete Spa S.p.A. e 63.000.000.000 s.r.l. c.f. e p. IVA 08224180281 R.L. di Tronco 00224180281 V.A.T. N° IT 00224180281 Sede Legale: 38051 Biadene Valsugana (TN) Via Pieve, 4 - Italy Direzione Amministrativa: 38122 Padova E. 1. - Via - Riviera Francosa, 9 - Italy Tel. 049 888.28.29 (r.a.)
	<b>EN 10204 3.1</b> <b>STENA STAL AB</b> <b>FISKAMNSGATAN 8 B</b> <b>40040 GÖTEBORG SVEZIA</b>		<b>ORDINE - ORDER</b> <b>COMMANDE - AUFTRAG</b> <b>7299755</b>	<b>168867 / 50</b>

<b>CLIENTE - CUSTOMER</b> <b>CLIENT - KUNDE</b> <b>ARTICOLI (ACCORD) - ITEM (STEEL) - ITEM (ACIER) - ART (EEL) (S TAHL)</b>	<b>COLATA - HEAT - COULÉE - SCHMELZE</b> <b>295155</b>	<b>MARCA ACCIAIO - STEEL GRADE - MARQUE ACIER - STAHLGÜTE</b> <b>S355J2 (S)+AR</b>
<b>PROFIL - PROFILE</b> <b>PROFIL - ABMESSUNG</b> <b>STATO DI FORNITURA - DELIVERY CONDITION</b> <b>CONDITION OF DELIVERY - LIEFERZUSTAND</b> <b>STATO DI ESECUZIONE - STATE OF EXECUTION</b> <b>CONDITION OF EXECUTION - AUSFÜHRUNG</b>	<b>EN 10025-2:2019 (S=0.020-0.035%)</b> <b>REDAZIONE - REDUCTION</b> <b>REDUCTION - DIMINUIZIONE</b> <b>EN 10020-2:2019 (S=0.020-0.035%)</b>	<b>ORDINE CLIENT - KUNDENAUFTRAG</b> <b>7299755</b>

<b>PRODOTTO - SAMPLE</b> <b>PRODOTTE - MUSTER</b> <b>mm</b>	<b>STATO - CONDITION</b> <b>STAT - ZUSTAND</b>	<b>TRATTAMENTO TERMICO - HEAT TREATMENT</b> <b>TRAITMENT TERMIQUE - WÄRMEBEHANDLUNG</b>	<b>REILIEVITÀ - IMPACT TEST - RESILIENCE - ZÄHHEIT</b> <b>EN ISO 148-1</b>	<b>DUREZZA - HARDNESS - DURITE - HARTE</b>
<b>COLATA - HEAT</b> <b>COULÉE - SCHMELZE</b>	<b>VALORI ALLO STATO DI FORNITURA - VALUES IN DELIVERY CONDITION - WERTE IN LIEFERZUSTAND</b> <b>517 362 29</b>	<b>MLT LIMS: ELECTRIC ARC FURNACE (EAF) - LADLE TREATMENT: LADLE REFINING (LF) - CASTING: CONTINUOUS CASTING (CC)</b>	<b>ANALISI GAS - GAS ANALYSIS - ANALYSE GAZ - GAS ANALYSE</b> <b>C 0.1600 SI 0.2450 Mn 1.2420 P 0.0140 S 0.0300 Cu 0.2350 Cr 0.1490 Ni 0.1610 Sn 0.0110 Al 0.0310 As 0.0060 Mo 0.0480</b> <b>CEV= 0.439%</b>	<b>CEV=C-(MnSi)/(Cr-Mo-V)/5+(Ni-Cu)/15</b> <b>D.I. (ASTM A255)</b>

PROVINO - SAMPLE	STATO - CONDITION	TRATTAMENTO TERMICO - HEAT TREATMENT	REILIEVITÀ - IMPACT TEST - RESILIENCE - ZÄHHEIT	DUREZZA - HARDNESS - DURITE - HARTE
mm	STAT - ZUSTAND	TRAITMENT TERMIQUE - WÄRMEBEHANDLUNG	EN ISO 148-1	
COLATA - HEAT	VALORI ALLO STATO DI FORNITURA - VALUES IN DELIVERY CONDITION - WERTE IN LIEFERZUSTAND	MLT LIMS: ELECTRIC ARC FURNACE (EAF) - LADLE TREATMENT: LADLE REFINING (LF) - CASTING: CONTINUOUS CASTING (CC)	ANALISI GAS - GAS ANALYSIS - ANALYSE GAZ - GAS ANALYSE	CEV=C-(MnSi)/(Cr-Mo-V)/5+(Ni-Cu)/15
COULÉE - SCHMELZE	517 362 29		CEV= 0.439%	D.I. (ASTM A255)

THE PRODUCT COMPLIES WITH THE REQUIREMENTS OF THE EUROPEAN DIRECTIVE 2000/52/EC  
 TEMPRABILITÀ - WÄRMESTABILITÄT  
 HEMPABILITE - WÄRMEDÄHRIGKEIT

<b>GRANO - GRAIN</b> <b>GRAN - KORNGRÖSSE</b>	<b>INCLUSIONI NON METALLICHE - NON METALLIC INCLUSIONS - INCLUSIONS NON METALLIQUES - NICHTMETALLISCHE EINSCHLÜSSE</b>	<b>MACRO - MACROETCHING</b> <b>MACRO - MAKROÄTZUNG</b>	<b>MACROINCLUSIONI - MACROINCLUSIONS</b> <b>MACRO INCLUSIONS - MAKRO EINSCHLÜSSE</b>
<b>A (SS)</b> Thin Heavy	<b>B (OA)</b> Thin Heavy	<b>C (OS)</b> Thin Heavy	<b>D (OC)</b> Thin Heavy

<b>ENTI COLLAUDATORI</b> <b>INSPECTION BODIES</b> <b>SERVICE DESAI</b> <b>ABNAHMEBEFÖRDERE</b>	<b>NOTE - NOTES - NOTES - ANMERKUNGEN</b>	<b>CONTROLLO QUALITÀ - QUALITY CONTROL - CONTROLLE QUALITE - QUALITÄTSTELLE</b> <b>100%</b>



**ACCIAIERIE BERTOLI SAFAU**  
ABSOLUTE STEEL QUALITY

**ACCIAIERIE BERTOLI SAFAU SpA**  
Via Buttrio n.28 - Frazione Cargnacco - 33050 Pozzuolo del Friuli (UD)  
Tel. +39 0432 613211 - Fax +39 0432 613209 - www.absacciai.it

## CERTIFICATO DI COLLAUDO

Inspection Certificate 3.1/Certificat de reception 3.1/  
Abnahmeprüfzeugnis 3.1

N. 381282 / 1  
Data 25.09.2023  
COLATA N. 481571  
Heat-Code-Schmelznr  
Pag. 1 / 2

<b>CLIENTE</b> Customer-Client-Besteller	STENA STAL AB	<b>ORDINE</b> Order-Commande-Bestellung	7311590
<b>PROFILO</b> Shape-Section-Profil	HOT ROLLED ROUND BARS , 200 MM -	<b>STATO DI FORNITURA</b> SupplyCondition-Etat de livraison	UNTREATED
<b>ACCIAIO</b> Steel-Acier-Stahl	S355J2+AR / ST52.3	<b>COMESSA/POS</b> Sales Order/Pos.	1095762/30
<b>CAPITOLATO ABS:</b> Technical Specification:	ABS	<b>MATERIALE CLIENTE</b> Customer Material Code	215436
<b>CAPITOLATO DI ANALISI:</b> Material Specification:	EN10025-2/DIN17100 (ASQ) REV.0 2022.03		
<b>CAPITOLATO DI FORNITURA:</b> Technical Delivery Requirements:			

### COMPOSIZIONE CHIMICA DI COLATA %

CAST ANALYSIS % - COMPOSITION CHIMIQUE DE COULEE % - SCHMELZE CHEMISCHE ANALYSE %

	C	Mn	Si	P	S	Cr	Ni	Mo	Al (T)	Cu	Sn	Ti
Min	0,160	0,60	0,15		0,020				0,015			
Max	0,200	1,35	0,30	0,025	0,035	0,29	0,42	0,11	0,050	0,55	0,030	0,0200
Colata/Heat	0,180	1,25	0,15	0,017	0,024	0,14	0,10	0,03	0,020	0,14	0,008	0,0023
	B (T)	V	Nb	As	Ca	Sb	Co	Pb	O/ppm	H/ppm	N/ppm	CEO. LONG FORMULA
Min												
Max	0,0008	0,080	0,020	0,020	0,0020	0,050	0,100	0,1000	20,00	2,00	120	0,450
Colata/Heat	0,0001	0,003	0,002	0,007	0,0002	0,001	0,008	0,0001	12,00	1,00	51	0,439

### CARATT. MECCANICHE

MECHANICAL PROPERTIES - CARACTERISTIQUES MECANIQUE - MECHANISCHE EIGENSCHAFTEN

TENSILE/IMPACT TEST ON PRODUCT	TRATTAMENTO TERMICO HEAT TREATMENT
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#### TRAZIONE

TENSILE TEST

	R LONG.	REH	A%5D LONG.									
Min	450Mpa	285Mpa	17%									
Max	600Mpa											
Colata/Heat	503Mpa	311Mpa	27,7%									

#### RESILIENZE

IMPACT TEST

	KV -20°C Long	KV -20°C Long	KV -20°C Long	KV 0°C Long	KV 0°C Long	KV 0°C Long						
Min	27J	27J	27J									
Max												
Colata/Heat	49J	50J	61J	90J	92J	95J						

#### DUREZZE

HARDNESS

	ON SURFACE	SURFACE HARDNESS					
Min							
Max	999HBW	237HB					
Colata/Heat	155HBW	155HB					

IMPACT TEST : ACC. TO EN ISO 148-1

TENSILE TEST : ACC. TO EN ISO 6892-1

### INCLUSIONI NON METALLICHE

NON METALLIC INCLUSION - INCLUSIONS NON METALLIQUES - PRUFUNG NICHTMETALLISCHE EINSCHLUSSE

	Tipo A Type A	Tipo B Type B	Tipo C Type C	Tipo D Type D
Fine Thin	2,5	1	0	1
Grosso Heavy	1,5	0,5	0	1

MICROINCLUSIONS : METHOD A

MICROINCLUSIONS: STANDARD ISO 4967/ASTM E45

### GRANO

GRAIN - GRAIN - KORNGROSSE

AUSTENITIC GRAIN : STANDARD EN ISO 643/ASTM E45

AUSTENITIC GRAIN: METHOD MC QUAI





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Abnahmeprufzeugnis 3.1

N. 381282 / 1  
Data 25.09.2023  
COLATA N. 481571  
Heat-Contée-Schmelze  
Pag. 2 / 2

TEMPERATURE AUSTENITIC GRAIN 920 °C

AUSTENITIC GRAIN SIZE 8

### NOTE

INTERNAL DEFECT METHOD UT 100%

INTERNAL DEFECTS EN10308 CL.4/SEP1920 CL.C

ANTIMIX 100 %

R/R = 6

TEST CERTIFICATE ISSUED ACCORDING TO: EN 10204/3.1

COUNTRY OF ORIGIN : ITALY

FULLY KILLED .

FINE GRAIN STEEL .

ELECTRIC ARC FURNACE STEEL .

VACUUM DEGASSED STEEL .

- Material free from lead, mercury, cadmium and hexavalent chromium (dir. 2000/53/CE - dir. 2011/65/UE as amended)

- Material with radioactivity not exceeding 0,1Bq/g (d.lgs. 230/1995 as amended)

### CONTROLLO QUALITA'

QUALITY CONTROL - CONTROLE DE QUALITE - QUALITATSSTEILE

Company with a management system certified by IGQ to  
ISO 9001 and IATF 16949

Verif.:Omar Tonetti



**TRINECKÉ ŽELEZÁRNY**  
**MORAVIA STEEL**

Sheet - Seite: 1/3

A03 Document No. - Bescheinigung-Nr.:  
A 2023/01/011750-BEN



2301664

A01, A05

Manufacturer: TRINECKÉ ŽELEZÁRNY, a.s. /Průmyslová 1000 /Staré Město /739 61 Třinec /Czech Republic  
Production mill: VT - VÁLCOVNA TRUB / Výtavní 1132 / 706 02 Ostrava - Vítkovice / Czech Republic

<b>A07</b> Purchaser's order No.: Kundenbestell-Nr.:	<b>A08</b> Works order No./ Contract No.: Werksauftrag-Nr./Kontrakt-Nr.:	<b>A06</b> Consignee: Empfänger:	
7128777	9700293099 0041679653 / 347	Salzgitter Mannesmann Stahlhandel GmbH Röhrenzentallager Pilgerstraße 19 45473 Mülheim an der Ruhr  Deutschland	
<b>A10</b> Advice-Note No. - Aviso-Nr. : 23/01/006279/06 30.01.2023			
<b>A02</b> Type of Inspection document - Art der Prüfbescheinigung: Inspection certificate 3.1- Abnahmeprüfzeugnis 3.1, EN 10204:2004			
<b>B01, B09-B11</b> Product, product dimensions, specification Erzeugnis, Masse des Erzeugnisses, Spezifikation	<b>B08, B13</b> Quantity Menge	<b>B02.1</b> Steel designation Stahlbezeichnung	<b>B02.2</b> Product / Dimensional standard Materialnorm/Abmessungsnorm
Seamless Steel Tubes Hot Rolled Nahtlose Stahlrohre wärmegewalzt  219,10 x 22,20 mm	6 pcs/stck 41,460 mtrs/m 4626 kgs/kg	P355N/TC1 S355J2H E355+N St 52.0	EN 10216-3 12/2013 EN 10210-1 04/2006 EN 10297-1 02/2003 DIN 1629 10/1984  EN 10210-2 05/2019
<b>B04</b> Product delivery condition - Lieferzustand des Erzeugnisses: normalized-normalisiert			
<b>B03</b> Supplementary requirements - Zusätzliche Anforderungen:  AD 2000-Merkblatt W4, VdTÜV-Werkstoffblatt 354/2 PED 2014/68/EU Manufacturer declares that is certified according to Article 4.3, Annex I of Directive 2014/68/EU and according to AD 2000-Merkblatt W0 by the notified body TÜV NORD reg. No. 0045 for grades stated in Annex to certificates No. 07/202/9190/WZ/0812/22 and 07/203/9190/WP/0812/22. Certificates are valid until March 2025. Der Hersteller erklärt, daß er nach Pkt. 4.3 Anhang I, der Richtlinie 2014/68/EU und nach AD 2000-Merkblatt W0 von der benannten Stelle TÜV NORD Reg. Nr. 0045 für die Güten gelistet in der Anlage zum Zertifikate Nr. 07/202/9190/WZ/0812/22 und 07/203/9190/WP/0812/22 zertifiziert ist. Die Zertifikate sind bis März 2025 gültig.  Conversion to Inspection certificate DIN EN 10204-3.1 acc. to AD 2000-Merkblatt W4; base on approval of TÜV NORD Systems from 20.04.2015. Übergang auf Abnahmeprüfzeugnis DIN EN 10204-3.1 gemäß AD 2000-Merkblatt W4; Zustimmungsschreiben der TÜV NORD Systems vom 20.04.2015.			

Z02 Confirmed - Bestätigt: Jana Jančová,  
Officer of Attestation, Releasing and External inspection VT, Independent authorized agent  
Der Sachbearbeiter die Attestierung, Freigabe und Agnahme VT, unabhängiger berechtigter Vertreter



**TRINECKÉ ŽELEZÁRNY, a.s.**  
Průmyslová 1000, Staré Město  
739 61 Třinec 110

Z02

Ostrava-Vitkovice :  
31.01.2023

tel.: 00420/59/580/2160

*[Handwritten signature]*

Z03 Independent authorized agent  
Unabhängiger berechtigter Vertreter



A01, A05

Manufacturer: TRINECKÉ ŽELEZÁRNY, a.s. /Průmyslová 1000 /Staré Město /739 61 Třinec /Czech Republic  
Production mill: VT - VALCOVNA TRUB / Vystavní 1132 / 706 02 Ostrava - Vítkovice / Czech Republic

Requirements - Vorschrift:																	
B07.1 Heat No. Schmelze Nr.	B07.2 Specimen No. Prüfung-Nr.	C10* Specimen shape Probenform	C11 Yield Strength Streckgrenze ReH MPa	C12 Tensile Strength Zugfestigkeit Rm MPa	C13 Elongation Dehnung A5 %	C14 Reduction of area Bruchdehnung Z %	C16 R/Rm										
			min 345	500-630	min 22												
		C02 Specimen direction: Probenrichtung:	L	C03 Test temperature(°C): Prüf temperatür(°C):	+21	C15 Test method: Prüfmethode:	ENISO 6892-1 A2										
T16216	39502/P	P	367	503	32,3	-	-										
T16253	39506/P	P	380	516	29,6	-	-										
* P - Flat specimen - Flachprobe K - Round specimen - Rundprobe																	
B07.1 Heat No. Schmelze Nr.	B07.2 Specimen No. Prüfung-Nr.	C40 Impact test Kerbschlagbiegeversuch KV2 min. 27 J 10x10 mm	C44 Lateral expandit Lateral Breitung mm	C45 Shear fracture area Scherbruchfläche %													
		C41 10x10 mm															
		C02 Specimen direction: Probenrichtung:	T	C03 Test temperature(°C): Prüf temperatür(°C):	-20	C46 Test method: Prüfmethode:	ISO 148-1										
		C42 Individual values Einzelwerte	C43 Mean value Mittelwert	C44.1 Individual values Einzelwerte	C44.2 Mean value Mittelwert	C45.1 Individual values Einzelwerte	C45.2 Mean value Mittelwert										
T16216	39502/P	209 209 217	212														
T16253	39506/P	160 180 203	181														
C70 Steelmaking process - Stahlerstellungsverfahren: Basic oxygen furnace-Sauerstoffaufblaskonverter Vacuum degassed-Vakuumentgast																	
C71-C92 Heat chemical analysis in % - Chemische Schmelze-Analyse % : <span style="float: right;">Ceq max.: 0,47</span>																	
B07.1 Heat No. Schmelze Nr.	C	Mn	Si	P	S	Cu	Ni	Cr	Mo	V	Ti	Al	Nb	N	Ceq		
T16216	0,17	1,15	0,20	0,014	0,002	0,03	0,03	0,18	0,010	0,039	0,001	0,036	0,001	0,0081	0,41		
T16253	0,17	1,14	0,20	0,018	0,003	0,03	0,03	0,19	0,011	0,039	0,001	0,032	0,001	0,0072	0,41		
C50, D01, D02-D50, D51 Other requirements - Weitere Anforderungen:																	
Visual and dimensional inspection Visuelle und Abmessungskontrolle													- satisfactory - hat entsprochen				
Ring tensile test Ringzugversuch bis zum Zerreißen										ENISO 8496			- satisfactory - hat entsprochen				

Z02 Confirmed - Bestätigt: Jana Jančová,  
Officer of Attestation, Releasing and External Inspection VT, Independent authorized agent  
Der Sachbearbeiter die Attestierung, Freigabe und Agnahme VT, unabhängiger berechtigter Vertreter



Průmyslová 1000, Staré Město  
739 61 Třinec 130

Z02

Ostrava-Vitkovice :  
31.01.2023


tel.: 00420/59/560/2160

Z03 Independent authorized agent  
Unabhängiger berechtigter Vertreter



A01, A05

Manufacturer: TRINECKÉ ŽELEZÁRNY, a.s. /Průmyslová 1000 /Staré Město /739 61 Třinec /Czech Republic  
Production mill : VT - VÁLCOVNA TRUB / Výstavní 1132 / 706 02 Ostrava - Vítkovice / Czech Republic

<p>Test on tightness by NDT - Flux leakage examination Zerstörungsfreie Dichtheitsprüfung - Streuflussprobe</p>	<p>ENISO 10893-1 ( 7 MPa )</p>	<p>- satisfactory - hat entsprochen</p>
<p><b>B05 Marking of the product - Kennzeichnung des Erzeugnisses:</b></p> <p>Hardstamping - Stempelung: -Manufacturer's logo EN 10210-1 EN 10297-1 EN 10216-3 S355J2H E355N P355N TC1 St52.0S Inspector's symbol  Tube number Heat number -Zeichen des Herstellers EN 10210-1 EN 10297-1 EN 10216-3 S355J2H E355N P355N TC1 St52.0S  Zeichen des Werksachverständigen Rohrnummer Schmelzenummer</p> <p><b>B15 Supplementary Information - Ergänzende Angaben:</b></p> <p>Heat No. - Schmelze Nr.: T16216 Tube No. - Rohre Nr.: 39501,39502,39505,39503,39504</p> <p>Heat No. - Schmelze Nr.: T16253 Tube No. - Rohre Nr.: 39506</p> <p>The Mass Activity value of Ionizing Radiation in the Heat Analysis doesn't exceed 100 Bq/kg. Der Wert der Gewichtsaktivität der ionisierenden Strahlung in der Schmelzanalyse übersteigt keine 100 Bq/kg.</p> <p><b>B16 Heat treatment report - Warmbehandlung Report:</b></p> <p>Minimum Temperature - Minimum Temperatur: 900 °C</p>		
<p>CE mark relates to the grades according to the standard EN 10210-1. Das CE-Zeichen bezieht sich auf die Güten gem. EN 10210-1. Declaration of Performance No. 24/2021/08, see here: Leistungserklärung Nr. 24/2021/08, siehe hier: <a href="http://www.trz.cz/modul_werk_certifikaty/certifikaty/Cert_TUV_CE.pdf">http://www.trz.cz/modul_werk_certifikaty/certifikaty/Cert_TUV_CE.pdf</a>.</p>	<p>Z04</p>  <p>10 0045-CPR-0812</p>	
<p><b>Z01</b> ALL PRODUCTS MEET REQUIREMENTS OF ABOVE MENTIONED STANDARDS AND REQUIREMENTS SPECIFIED IN ORDER. THE DECLARATION IS ISSUED UNDER THE SOLE RESPONSIBILITY OF THE SUPPLIER. ALLE PRODUKTE ENTSPRECHEN DEN O.A. NORMEN UND FORDERUNGEN IN DER BESTELLUNG. DIE ERKLÄRUNG WURDE AUSSCHLIESSLICH AUF EIGENE VERANTWORTUNG DES LIEFERANTEN HERAUSGEGEBEN.</p>	<p><b>A04 Manufacturer's mark - Zeichen des Herstellers:</b></p> 	
<p><b>Z06</b> Electronical version of this document is protected by the electronical signature according to Regulation (EU) No. 910/2014. Die elektronische Version dieses Dokuments ist mittels elektronischer Unterschrift entsprechend der Anordnung (EU) Nr. 910/2014 geschützt.</p>		

Z02 Confirmed - Bestätigt: Jana Jančová,  
Officer of Attestation, Releasing and External inspection VT, Independent authorized agent  
Der Sachbearbeiter die Attestierung, Freigabe und Agnahme VT, unabhängiger berechtigter Vertreter




**TRINECKÉ ŽELEZÁRNY, a.s.**  
Průmyslová 1000, Staré Město  
739 61 Třinec 130

Z02

Ostrava-Vitkovice :  
31.01.2023

tel.: 00420/59/560/2160



Z03 Independent authorized agent  
Unabhängiger berechtigter Vertreter



**ACCIAIERIE BERTOLI SAFAU**  
ABSOLUTE STEEL QUALITY

# CERTIFICATO DI COLLAUDO

N. 382820 / 1  
Data 06.10.2023  
COLATA N. Heat-Coulee-Schmelze 481571  
Pag. 1 / 2

**ACCIAIERIE BERTOLI SAFAU SpA**  
Via Buttrio n.28 - Frazione Cargnacco - 33050 Pozzuolo del Friuli (UD)  
Tel. +39 0432 613211 - Fax +39 0432 613209 - www.absacciai.it

Inspection Certificate 3.1/Certificat de reception 3.1/  
Abnahmeprufzeugnis 3.1

**CLIENTE** STENA STAL AB  
Customer-Client-Besteller

**ORDINE** 7311590  
Order-Commande-Bestellung

**PROFILO** HOT ROLLED ROUND BARS , 190 MM -  
Shape-Section-Profil

**STATO DI FORNITURA** UNTREATED  
Supply Condition-Etat de livraison

**ACCIAIO** S355J2+AR / ST52.3  
Steel-Acier-Stahl

**COMESSA/POS** 1095762/20  
Sales Order Pos.

**CAPITOLATO ABS:** ABS  
Technical Specification:

**MATERIALE CLIENTE** 215396  
Customer Material Code

**CAPITOLATO DI ANALISI:** EN10025-2/DIN17100 (ASQ) REV.0 2022.03  
Material Specification:

**CAPITOLATO DI FORNITURA:**  
Technical Delivery Requirements:

## COMPOSIZIONE CHIMICA DI COLATA %

CAST ANALYSIS % - COMPOSITION CHIMIQUE DE COULEE % - SCHMELZE CHEMISCHE ANALYSE %

	C	Mn	Si	P	S	Cr	Ni	Mo	Al (T)	Cu	Sn	Ti
Min	0,160	0,60	0,15		0,020				0,015			
Max	0,200	1,35	0,30	0,025	0,035	0,29	0,42	0,11	0,050	0,55	0,030	0,0200
Colata/Heat	0,180	1,25	0,15	0,017	0,024	0,14	0,10	0,03	0,020	0,14	0,008	0,0023
	B (T)	V	Nb	As	Ca	Sb	Co	Pb	O/ppm	H/ppm	N/ppm	C EQ. LONG FORMULA
Min												
Max	0,0008	0,080	0,020	0,020	0,0020	0,050	0,100	0,1000	20,00	2,00	120	0,450
Colata/Heat	0,0001	0,003	0,002	0,007	0,0002	0,001	0,008	0,0001	12,00	1,00	51	0,439

## CARATT. MECCANICHE

MECHANICAL PROPERTIES - CARACTERISTIQUES MECANIQUE - MECHANISCHE EIGENSCHAFTEN

TENSILE/IMPACT TEST ON PRODUCT

TRATTAMENTO TERMICO HEAT TREATMENT

### TRAZIONE TENSILE TEST

	R LONG.	REH	A%5D LONG.									
Min	450Mpa	285Mpa	17%									
Max	600Mpa											
Colata/Heat	509Mpa	322Mpa	25,1%									

### RESILIENZE IMPACT TEST

	KV -20°C Long	KV -20°C Long	KV -20°C Long	KV 0°C Long	KV 0°C Long	KV 0°C Long						
Min	27J	27J	27J									
Max												
Colata/Heat	37J	43J	58J	106J	116J	104J						

### DUREZZE HARDNESS

	ON SURFACE	SURFACE HARDNESS				
Min						
Max	999HBW	237HB				
Colata/Heat	153HBW	153HB				

IMPACT TEST ACC. TO EN ISO 148-1

TENSILE TEST ACC. TO EN ISO 6892-1

## INCLUSIONI NON METALLICHE

NON METALLIC INCLUSION - INCLUSIONS NON METALLIQUES - PRUFUNG NICHTMETALLISCHE EINSCHLUSSE

	Tipo A Type A	Tipo B Type B	Tipo C Type C	Tipo D Type D
Fine Thin	2,5	1	0	1
Grosso Heavy	1,5	0,5	0	1

MICROINCLUSIONS : METHOD A

MICROINCLUSIONS: STANDARD ISO 4967/ASTM E45

## GRANO

GRAIN - GRAIN - KORNGROSSE

AUSTENITIC GRAIN : STANDARD EN ISO 643/ASTM E45

AUSTENITIC GRAIN: METHOD MC QUAD



ACCIAIERIE BERTOLI SAFAU  
ABSOLUTE STEEL QUALITY

ACCIAIERIE BERTOLI SAFAU SpA  
Via Buttrio n.28 - Frazione Cargnacco - 33050 Pozzuolo del Friuli (UD)  
Tel. +39 0432 613211 - Fax +39 0432 613209 - www.absacciai.it

## CERTIFICATO DI COLLAUDO

Inspection Certificate 3.1/Certificat de reception 3.1/  
Abnahmeprufzeugnis 3.1

N. 382820 / 1  
Data 06.10.2023  
COLATA N. 481571  
HeiB/Coulee/Schmelze  
Pag. 2 / 2

TEMPERATURE AUSTENITIC GRAIN 920 °C

AUSTENITIC GRAIN SIZE 8

### NOTE

INTERNAL DEFECT METHOD UT 100%

INTERNAL DEFECTS EN10308 CL.4/SEP1920 CL.C

ANTIMIX 100 %

R/R = 7

TEST CERTIFICATE ISSUED ACCORDING TO: EN 10204/3.1

COUNTRY OF ORIGIN : ITALY

FULLY KILLED .

FINE GRAIN STEEL .

ELECTRIC ARC FURNACE STEEL .

VACUUM DEGASSED STEEL .

- Material free from lead, mercury, cadmium and hexavalent chromium (dir. 2000/53/CE - dir. 2011/65/UE as amended)  
- Material with radioactivity not exceeding 0,1Bq/g (d.lgs. 230/1995 as amended)

### CONTROLLO QUALITA'

QUALITY CONTROL - CONTROLE DE QUALITE - QUALITATSSTEILE

Company with a management system certified by IGQ to  
ISO 9001 and IATF 16949

Verif.:Omar Tonetti

# PICKING LIST

SKI-NO: PWO/124062



# SKIPPER

Printed: 21.06.2024 - 08:44

Operation number      Operation      Manufacturing area      Remaining quantity  
**PRODUCTION**      **2 stk**

Note

**SB-100-SA-LR**

Stockloc / Details	Assignment	Quantity	Product
<b>For operation number 200</b>			
<b>1-PALL-00</b> 1-PALL-00	<b>SSA/134238-1</b> 13 stk	<b>2 stk</b>	<b>DB-2051</b> Intermediate element for xB-100-xB casted
<b>1-PALL-03</b> 1-PALL-03	<b>SSA/133933-1</b> 1032 stk	<b>16 stk</b>	<b>ZOA-01075</b> Bolt M16x55 mm DIN933 A4-80
<b>1-PALL-06</b> 1-PALL-06	<b>SSA/134226-1</b> 5 stk	<b>2 stk</b>	<b>DB-2031</b> Top Flange for XB-100/200-XX
<b>1-PALL-06</b> 1-PALL-06	<b>SSA/134560-1</b> 20 stk	<b>2 stk</b>	<b>SB-2019</b> Bottom flange for SB-100-xx
<b>For operation number 100</b>			
<b>1-PALL-08</b> 1-PALL-08	<b>SSA/126734-1</b> 3 stk	<b>2 stk</b>	<b>ZCC-01011</b> Main element DN100 PN16/3.1.B RG5/Bronze, Gate valve, Certificat 3.1.B / TDC
<b>For operation number 200</b>			
<b>1-S-74</b> 1-S-74	<b>SSA/132430-1</b> 76 stk	<b>2 stk</b>	<b>DB-2040</b> Washer Ø46x2,5 Ø32,5 for XB-60/100/200-XX
<b>1-T-01</b> 1-T-01	<b>SSA/133605-1</b> 179 stk	<b>4 stk</b>	<b>DB-2035</b> Gasket Ø47/32,5 X 20mm for XB-60/100/200-XX
<b>1-T-01</b> 1-T-01	<b>SSA/134003-1</b> 1244 stk	<b>24 stk</b>	<b>ZOA-01036</b> Nut M16 DIN934 A4
<b>1-T-02</b> 1-T-02	<b>SSA/133932-1</b> 1010 stk	<b>24 stk</b>	<b>ZOA-01035</b> Spring washer M16 DIN127B A4
<b>1-T-02</b> 1-T-02	<b>SSA/134381-1</b> 16 stk	<b>2 stk</b>	<b>DB-2036</b> Nut M50 Brass for XB-60/100/200-XX
<b>3-A-04</b> 3-A-04	<b>SSA/131679-1</b> 1721.5 stk	<b>4 stk</b>	<b>ZZA-01127</b> Metallized, silver polyester label, on roll

## Additional parts

Product	Stockloc	Quantity
<b>GVA-LR</b> Sea Valve approval from Lloyds Register		<b>2 stk</b>

SKIPPER Electronics A/S  
 Enebakkveien 150  
 P.O.Box 151 Manglerud  
 N-0612 OSLO

Telephone: +47 23 30 22 70  
 Telefax: +47 23 30 22 71  
 E-mail: support@skipper.no  
 Web page: www.skipper.no



C.O. reg no: NO-965378847-MVA

## INSPECTION & TEST PROTOCOL FOR SEA VALVE

Document No: Q12-TI-0108-02 2023

<b>SKIPPER sea valve Serial No.:</b>	24375
<b>Class certificate no.:</b>	

Class stamp and certificate no. shall be stamped on main element and bottom flange (welding part)

Class: DNV  ABS  BV  LR  RINA  NK

### Sea valve Type:

		<u>-SA</u>	<u>-SB</u>	<u>-LA</u>	<u>-LB</u>	<u>-F1</u>	<u>SLB</u>	<u>SJB</u>
<u>SB-60</u>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
<u>DB-60</u>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
<u>SB-100</u>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<u>DB-100</u>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<u>ETN- 100mm</u>							<input type="checkbox"/>	<input type="checkbox"/>
<u>SB-200-Echo</u>	<input type="checkbox"/>							

### Assembly, Items Serial No. / Batch No. / Charge No.:

	<u>Heat no</u> <u>Body</u>	<u>Heat no</u> <u>Cap</u>	<u>Skipper Part</u> <u>No.</u>
Valve Element:	H190822	H0822	ZCC-01011
Intermediate Element:		2359	DB-2051
Bottom Flange:		568409	SB-2019
Intermediate flange (for DB valves)			

### Visual Inspection:

Performed without remarks:

### Pressure Test:

Working pressure 2 bar

Tested for 5 minutes with 5 bar pressure,

According to procedure no. 02-Q12\_Pressure testing Gate\_ball Valve

Performed without remarks:

Date: 24/6

Sign.:



SKIPPER Electronics A/S  
 Enebakkveien 150  
 P.O.Box 151 Manglerud  
 N-0612 OSLO

Telephone: +47 23 30 22 70  
 Telefax: +47 23 30 22 71  
 E-mail: support@skipper.no  
 Web page: www.skipper.no

**SKIPPER**  
 C.O. reg no: NO-965378847-MVA

## INSPECTION & TEST PROTOCOL FOR SEA VALVE

Document No: Q12-TI-0108-02 2023

<b>SKIPPER sea valve Serial No.:</b>	24374
<b>Class certificate no.:</b>	

Class stamp and certificate no. shall be stamped on main element and bottom flange (welding part)

Class: DNV  ABS  BV  LR  RINA  NK

### Sea valve Type:

		-SA	-SB	-LA	-LB	-F1	SLB	SJB
SB-60		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
DB-60		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
SB-100		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
DB-100		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
ETN- 100mm							<input type="checkbox"/>	<input type="checkbox"/>
SB-200-Echo	<input type="checkbox"/>							

### Assembly, Items Serial No. / Batch No. / Charge No.:

	<u>Heat no</u> <u>Body</u>	<u>Heat no</u> <u>Cap</u>	<u>Skipper Part</u> <u>No.</u>
Valve Element:	H190822	H0822	ZCC-01011
Intermediate Element:		2359	DB-2051
Bottom Flange:		568409	SB-2019
Intermediate flange (for DB valves)			

### Visual Inspection:


Performed without remarks:

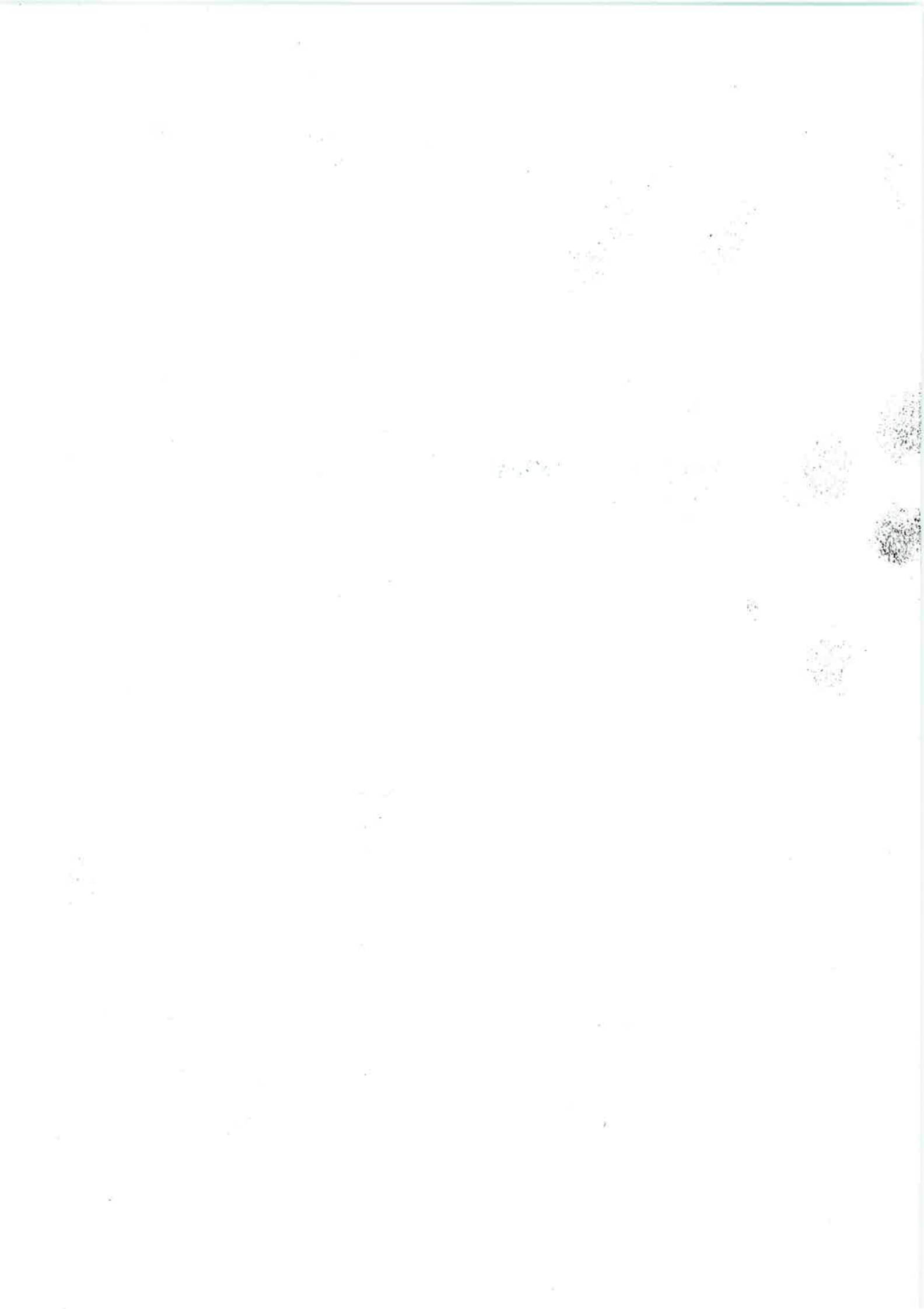
### Pressure Test:

Working pressure 2 bar  
 Tested for 5 minutes with 5 bar pressure,  
 According to procedure no. 02-Q12\_Pressure testing Gate\_ball Valve

Performed without remarks:

Date: 24/6

Sign.: 



# PICKING LIST

# SKIPPER

**SKI-NO: PWO/127130****CASE. 127123**

Printed: 21.06.2024 - 08:31

Operation number      Operation      Manufacturing area      Remaining quantity  
**PRODUCTION**      **4 stk**

Note

**SB-100-SB-LR**

Stockloc / Details	Assignment	Quantity	Product
<b>For operation number 200</b>			
<b>1-PALL-00</b> 1-PALL-00	<b>SSA/134238-1</b> 13 stk	<b>4 stk</b>	<b>DB-2051</b> Intermediate element for xB-100-xB casted
<b>For operation number 100</b>			
<b>1-PALL-00</b> 1-PALL-00	<b>SSA/134405-1</b> 10 stk	<b>4 stk</b>	<b>ZCC-01015</b> Main element, Ball Valve DN100 PN16/3.1.B
<b>For operation number 200</b>			
<b>1-PALL-03</b> 1-PALL-03	<b>SSA/133933-1</b> 1032 stk	<b>32 stk</b>	<b>ZOA-01075</b> Bolt M16x55 mm DIN933 A4-80
<b>1-PALL-06</b> 1-PALL-06	<b>SSA/134560-1</b> 20 stk	<b>4 stk</b>	<b>SB-2019</b> Bottom flange for SB-100-xx
<b>1-PALL-07</b> 1-PALL-07	<b>SSA/134205-1</b> 12 stk	<b>4 stk</b>	<b>DB-2031</b> Top Flange for XB-100/200-XX
<b>1-S-74</b> 1-S-74	<b>SSA/132430-1</b> 76 stk	<b>4 stk</b>	<b>DB-2040</b> Washer Ø46x2,5 Ø32,5 for XB-60/100/200-XX
<b>1-T-01</b> 1-T-01	<b>SSA/133605-1</b> 179 stk	<b>8 stk</b>	<b>DB-2035</b> Gasket Ø47/32,5 X 20mm for XB-60/100/200-XX
<b>1-T-01</b> 1-T-01	<b>SSA/134003-1</b> 1244 stk	<b>48 stk</b>	<b>ZOA-01036</b> Nut M16 DIN934 A4
<b>1-T-02</b> 1-T-02	<b>SSA/133932-1</b> 1010 stk	<b>48 stk</b>	<b>ZOA-01035</b> Spring washer M16 DIN127B A4
<b>1-T-02</b> 1-T-02	<b>SSA/134381-1</b> 16 stk	<b>4 stk</b>	<b>DB-2036</b> Nut M50 Brass for XB-60/100/200-XX
<b>3-A-04</b> 3-A-04	<b>SSA/131679-1</b> 1721.5 stk	<b>8 stk</b>	<b>ZZA-01127</b> Metallized, silver polyester label, on roll

## Additional parts

Product	Stockloc	Quantity
<b>GVA-LR</b> Sea Valve approval from Lloyds Register		<b>4 stk</b>

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**SKIPPER**  
 C.O. reg no: NO-965378847-MVA

## INSPECTION & TEST PROTOCOL FOR SEA VALVE

Document No: Q12-TI-0108-02 2023

<b>SKIPPER sea valve Serial No.:</b>	24378
<b>Class certificate no.:</b>	

Class stamp and certificate no. shall be stamped on main element and bottom flange (welding part)

Class: DNV  ABS  BV  LR  RINA  NK

### Sea valve Type:

		-SA	-SB	-LA	-LB	-F1	SLB	SJB
<b>SB-60</b>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
<b>DB-60</b>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
<b>SB-100</b>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<b>DB-100</b>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<b>ETN- 100mm</b>							<input type="checkbox"/>	<input type="checkbox"/>
<b>SB-200-Echo</b>	<input type="checkbox"/>							

### Assembly, Items Serial No. / Batch No. / Charge No.:

	<u>Heat no</u> <u>Body</u>	<u>Heat no</u> <u>Cap</u>	<u>Skipper Part</u> <u>No.</u>
Valve Element:	UM9A	UM9A	ZCC-01015
Intermediate Element:		2369	DB-2051
Bottom Flange:		568409	SB-2019
Intermediate flange (for DB valves)			

### Visual Inspection:

Performed without remarks:

### Pressure Test:

Working pressure 2 bar

Tested for 5 minutes with 5 bar pressure,

According to procedure no. 02-Q12\_Pressure testing Gate\_ball Valve

Performed without remarks:

Date: 24/6

Sign: 

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**SKIPPER**  
 C.O. reg no: NO-965378847-MVA

## INSPECTION & TEST PROTOCOL FOR SEA VALVE

Document No: Q12-TI-0108-02 2023

<b>SKIPPER sea valve Serial No.:</b>	24379
<b>Class certificate no.:</b>	

Class stamp and certificate no. shall be stamped on main element and bottom flange (welding part)

Class: DNV  ABS  BV  LR  RINA  NK

### Sea valve Type:

		-SA	-SB	-LA	-LB	-F1	SLB	SJB
SB-60		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
DB-60		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
SB-100		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
DB-100		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
ETN- 100mm							<input type="checkbox"/>	<input type="checkbox"/>
SB-200-Echo	<input type="checkbox"/>							

### Assembly, Items Serial No. / Batch No. / Charge No.:

	<u>Heat no</u> <u>Body</u>	<u>Heat no</u> <u>Cap</u>	<u>Skipper Part</u> <u>No.</u>
Valve Element:	UM9A	UM9A	ZCC-01015
Intermediate Element:		2349	DB-2051
Bottom Flange:		568409	SB-2019
Intermediate flange (for DB valves)			

### Visual Inspection:


Performed without remarks:

### Pressure Test:

Working pressure 2 bar  
 Tested for 5 minutes with 5 bar pressure,  
 According to procedure no. 02-Q12\_Pressure testing Gate\_ball Valve

Performed without remarks:

Date: 24/6

Sign: 

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**SKIPPER**  
 C.O. reg no: NO-965378847-MVA

## INSPECTION & TEST PROTOCOL FOR SEA VALVE

Document No: Q12-TI-0108-02 2023

<b>SKIPPER sea valve Serial No.:</b>	24380
<b>Class certificate no.:</b>	

Class stamp and certificate no. shall be stamped on main element and bottom flange (welding part)

Class: DNV  ABS  BV  LR  RINA  NK

### Sea valve Type:

		-SA	-SB	-LA	-LB	-F1	SLB	SJB
<b>SB-60</b>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
<b>DB-60</b>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
<b>SB-100</b>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<b>DB-100</b>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<b>ETN- 100mm</b>							<input type="checkbox"/>	<input type="checkbox"/>
<b>SB-200-Echo</b>	<input type="checkbox"/>							

### Assembly, Items Serial No. / Batch No. / Charge No.:

	<u>Heat no</u> <u>Body</u>	<u>Heat no</u> <u>Cap</u>	<u>Skipper Part</u> <u>No.</u>
Valve Element:	UM9A	UM9A	ZCC-01015
Intermediate Element:		2359	DB-2051
Bottom Flange:		568409	SB-2019
Intermediate flange (for DB valves)			

### Visual Inspection:

Performed without remarks:

### Pressure Test:

Working pressure 2 bar  
 Tested for 5 minutes with 5 bar pressure,  
 According to procedure no. 02-Q12\_Pressure testing Gate\_ball Valve

Performed without remarks:

Date: 24/6

Sign: 

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**SKIPPER**  
 C.O. reg no: NO-965378847-MVA

## INSPECTION & TEST PROTOCOL FOR SEA VALVE

Document No: Q12-TI-0108-02 2023

<b>SKIPPER sea valve Serial No.:</b>	24381
<b>Class certificate no.:</b>	

Class stamp and certificate no. shall be stamped on main element and bottom flange (welding part)

Class: DNV  ABS  BV  LR  RINA  NK

### Sea valve Type:

	-SA	-SB	-LA	-LB	-F1	SLB	SJB
<b>SB-60</b>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
<b>DB-60</b>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
<b>SB-100</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<b>DB-100</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<b>ETN- 100mm</b>						<input type="checkbox"/>	<input type="checkbox"/>
<b>SB-200-Echo</b>	<input type="checkbox"/>						

### Assembly, Items Serial No. / Batch No. / Charge No.:

	<u>Heat no</u> <u>Body</u>	<u>Heat no</u> <u>Cap</u>	<u>Skipper Part</u> <u>No.</u>
Valve Element:	UM9A	UM9A	ZCC-01015
Intermediate Element:		2379	DB-2051
Bottom Flange:		568409	SB-2019
Intermediate flange (for DB valves)			

### Visual Inspection:

Performed without remarks:

### Pressure Test:


Working pressure 2 bar

Tested for 5 minutes with 5 bar pressure,

According to procedure no. 02-Q12\_Pressure testing Gate\_ball Valve

Performed without remarks:

Date: 24/6

Sign.: 

# PICKING LIST

# SKIPPER

SKI-NO: PWO/128657

CASE. 128648

Printed: 21.06.2024 - 08:33

Operation number      Operation      Manufacturing area      Remaining quantity  
**PRODUCTION**      **5 stk**

Note  
**ETNSTCLF-LR**

Stockloc / Details	Assignment	Quantity	Product
<b>For operation number 100</b>			
<b>1-PALL-08</b> 1-PALL-08	<b>SSA/134087-1</b> 30 stk	<b>5 stk</b>	<b>ETNSTCLF</b> Tank combo, steel low freq. w/ DNV approval, TC-2002
<b>3-A-04</b> 3-A-04	<b>SSA/126680-1</b> 15 stk	<b>2 stk</b>	<b>ZZA-01127</b> Metallized, silver polyester label, on roll
<b>3-A-04</b> 3-A-04	<b>SSA/131679-1</b> 1721.5 stk	<b>3 stk</b>	<b>ZZA-01127</b> Metallized, silver polyester label, on roll

## Additional parts

Product	Stockloc	Quantity
<b>TA-LR</b> Tank approval from LR		<b>5 stk</b>



# PICKING LIST

SKI-NO: PWO/129524

CASE. 129520

**SKIPPER**



Printed: 21.06.2024 - 08:36

Operation number      Operation      Manufacturing area      Remaining quantity  
**PRODUCTION**      **2 stk**

Note

**SB-60-SA-LR**

Stockloc / Details	Assignment	Quantity	Product
<b>For operation number 100</b>			
1-PALL-00	SSA/132781-1	2 stk	ZCC-02001
1-PALL-00	4 stk		Main element DN65 for XB-60-XA
<b>For operation number 200</b>			
1-PALL-07	SSA/133448-1	2 stk	SB-1022
1-PALL-07	16 stk		Bottom flange for SB-60-XA
1-PALL-07	SSA/133483-1	2 stk	DB-1031
1-PALL-07	4 stk		Top Flange for XB-60-XA
1-PALL-07	SSA/133886-1	2 stk	DB-1021
1-PALL-07	31 stk		Intermediate Element 60 mm
1-S-24	SSA/131168-1	8 stk	ZOA-01023
1-S-24	16 stk		Nut M12 DIN934 A4
1-S-74	SSA/132430-1	2 stk	DB-2040
1-S-74	76 stk		Washer Ø46x2,5 Ø32,5 for XB-60/100/200-XX
1-T-01	SSA/133605-1	4 stk	DB-2035
1-T-01	179 stk		Gasket Ø47/32,5 X 20mm for XB-60/100/200-XX
1-T-01	SSA/133655-1	2 stk	DB-2036
1-T-01	2 stk		Nut M50 Brass for XB-60/100/200-XX
1-T-02	SSA/132139-1	8 stk	ZOA-01048
1-T-02	220 stk		Washer M12 DIN125 A4
1-T-02	SSA/132838-1	4 stk	ZOA-01065
1-T-02	143 stk		Bolt M12x40mm DIN933 A4-80
1-T-02	SSA/132836-1	8 stk	ZOA-01034
1-T-02	60 stk		Bolt M16x40 DIN933 A4-80
1-T-02	SSA/133576-1	12 stk	ZOA-01066
1-T-02	548 stk		Spring Washer M12,2 DIN 127B A4
1-T-02	SSA/133932-1	8 stk	ZOA-01035
1-T-02	1010 stk		Spring washer M16 DIN127B A4
3-A-04	SSA/131679-1	4 stk	ZZA-01127
3-A-04	1721.5 stk		Metallized, silver polyester label, on roll

## Additional parts

Product	Stockloc	Quantity
GVA-LR Sea Valve approval from Lloyds Register		2 stk

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**SKIPPER**  
 C.O. reg no: NO-965378847-MVA

## INSPECTION & TEST PROTOCOL FOR SEA VALVE

Document No: Q12-TI-0108-02 2023

<b>SKIPPER sea valve Serial No.:</b>	24376
<b>Class certificate no.:</b>	

Class stamp and certificate no. shall be stamped on main element and bottom flange (welding part)

Class: DNV  ABS  BV  LR  RINA  NK

### Sea valve Type:

		-SA	-SB	-LA	-LB	-F1	SLB	SJB
SB-60		<input checked="" type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
DB-60		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
SB-100		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
DB-100		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
ETN- 100mm							<input type="checkbox"/>	<input type="checkbox"/>
SB-200-Echo	<input type="checkbox"/>							

### Assembly, Items Serial No. / Batch No. / Charge No.:

	<u>Heat no</u> <u>Body</u>	<u>Heat no</u> <u>Cap</u>	<u>Skipper Part</u> <u>No.</u>
Valve Element:	CP2F2		ZCC-02001
Intermediate Element:		2339	DB-1021
Bottom Flange:		568933	SB-1022
Intermediate flange (for DB valves)			

### Visual Inspection:

Performed without remarks:

### Pressure Test:

Working pressure 2 bar  
 Tested for 5 minutes with 5 bar pressure,  
 According to procedure no. 02-Q12\_Pressure testing Gate\_ball Valve

Performed without remarks:

Date: 24/6

Sign: 

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**SKIPPER**  
 C.O. reg no: NO-965378847-MVA

## INSPECTION & TEST PROTOCOL FOR SEA VALVE

Document No: Q12-TI-0108-02 2023

<b>SKIPPER sea valve Serial No.:</b>	24377
<b>Class certificate no.:</b>	

Class stamp and certificate no. shall be stamped on main element and bottom flange (welding part)

Class: DNV  ABS  BV  LR  RINA  NK

### Sea valve Type:

		-SA	-SB	-LA	-LB	-F1	SLB	SJB
SB-60		<input checked="" type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
DB-60		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
SB-100		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
DB-100		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
ETN- 100mm							<input type="checkbox"/>	<input type="checkbox"/>
SB-200-Echo	<input type="checkbox"/>							

### Assembly, Items Serial No. / Batch No. / Charge No.:

	<u>Heat no</u> <u>Body</u>	<u>Heat no</u> <u>Cap</u>	<u>Skipper Part</u> <u>No.</u>
Valve Element:	CP2F2		ZCC-02001
Intermediate Element:		2339	DB-1021
Bottom Flange:		568933	SB-1022
Intermediate flange (for DB valves)			

### Visual Inspection:

Performed without remarks:

### Pressure Test:

Working pressure 2 bar  
 Tested for 5 minutes with 5 bar pressure,  
 According to procedure no. 02-Q12\_Pressure testing Gate\_ball Valve

Performed without remarks:

Date: 24/6

Sign: 