



KIWA NUCLEAR  
TYPKONTROLLINTYG  
TYPE INSPECTION CERTIFICATE

FÖRETAG/COMPANY

**RINGO VALVULAS S.L**  
**SAMSON RINGO**

Calle Romero N°6 & N°8  
Polígono Industrial Empresarium  
50720 Zaragoza  
Spain

SERIETILLVERKADE / SERIAL PRODUCED

**GLOBE VALVES**  
**BELLOW SEALED GLOBE VALVES**  
**CHECK VALVES**  
**BALL VALVES**  
**GATE VALVES**

I KVALITETSKLASS / IN QUALITY CLASS

**1,2,3,4 & 4A**

TYPKONTROLLINTYG NR.: / TYPE INSPECTION CERTIFICATE NO.:

**11744**

Utfärdad / Date of authorization: 17<sup>th</sup> December 2020

Giltig till / Valid until: 31<sup>st</sup> December 2024

Revisionsnr / Revision no.: 17

Revisionsdatum / Revision date: 8<sup>th</sup> June 2023

Årliga uppföljningsrevisioner: / Yearly follow-up audits:

2020	2021	2022	2023	2024
Patrik Sandgren Alexander Wulff	Patrik Sandgren Mikael Lorentzon	P Sandgren 8 Juni 2023		

# TYPKONTROLLINTYG

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## 1. Tillverkning och kontroll / Manufacturing and inspection

Namnivet företag medges tillverka och leverera komponenter, i den omfattning som anges nedan, i enlighet med tillämpliga bestämmelser i

The named company is authorized to manufacture and supply components to the scope shown below in accordance with applicable rules and regulations in

- SSMFS 2008:13
- KBM edition 8

Bemyndigandet och tillämpningen är underkastade villkor som anges i detta typkontrollintyg. The authorization and use are subject to provisions stated in this type inspection certificate.

Typkontrollintyget gäller endast under förutsättning av godkända årliga uppföljningsrevisioner. The type inspection certificate is only valid under the condition of approved yearly follow-up audits.

### Tillverkare / Manufacturer

Ringo Valvulas S.L

### Referens / Reference

María Ángel Gumiel

### Adress / Address

Calle Romero N°6  
Polígono Industrial Empresarium  
50720 Zaragoza Spain

### Telefon / Telephone

+34 976 45 49 40

### Telefax / Facsimile

+34 976 45 48 40

### E-mail

mariaangel.gumiel@samsongroup.com

### Representant / Representative

Ringo Nordic AB

### Referens / Reference

Bo Eriksson

### Adress / Address

Gulskärsvägen 12  
442 75 Lycke  
Sweden

### Telefon / Telephone

+46 70 570 80 68

### Telefax / Facsimile

-

### E-mail

[beriksson@ringonordic.com](mailto:beriksson@ringonordic.com)

## Företagsgodkännanden / Company qualifications

- |   |   |  |                          |
|---|---|--|--------------------------|
| <input checked="" type="checkbox"/> 2014/68/EU    | <input checked="" type="checkbox"/> ISO 9001:2015 | <input checked="" type="checkbox"/> AD2000-Merkblatt<br>HP 0 | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> EN ISO 3834-2 | <input checked="" type="checkbox"/> TRD 201       | <input checked="" type="checkbox"/> ASME N, NPT              | <input type="checkbox"/> |

## Villkor / Conditions

1. Minimum wall thickness for welding ends must be calculated for the design data given by customer.
2. In case that seismic loads or pipe loads are present, a separate calculation is needed.

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3. Valves with minor design deviations can, after approved design review by Kiwa Nuclear, be supplied according to the Type Inspection Certificate.
4. Cobalt based hardfacing is not allowed in valves in primary water systems.
5. For valves in quality class 1 hot tensile test according to KBM EP 2-03 is required.

## 2. Konstruktionskontroll / Design review

### Omfattning av godkännande/Scope of approval

#### Godkända komponenter/Approved components:

Type	Dimension	Rating
Check Valve	DN15-DN50	PN16-PN250
Globe Valve	DN15-DN50	PN16-PN250
Ball Valve	DN15-DN50	PN16-PN160
Gate Valve	DN15-DN50	PN16-PN250
Bellows Globe Valve	DN15-DN50	PN16- PN250
”Y” Globe Valves	DN15-DN50	PN16- PN250

#### Regler och förutsättningar för konstruktionsgranskning/ Rules and conditions related to product design review

SSMFS 2008:13     2014/68/EU     ASME III   

#### Konstruktionskontrollintyg / Design review certificate

Nej/No

Ja/Yes

thothu110304_1	thudan150701_3
thothu111018_1	sanpat170523-1
thothu120427_1	sanpat170627-1
hanmar120415_1	holbjo180508-1
hanmar130408_1	holbjo180508-2
hanmar140414_1	holbjo180508-3
hanmar140521_1	holbjo180508-4
hanmar141202_1	holbjo180509-1
thudan150313_1	holbjo180509-2
holbjo190408-1	sanpat190408-1
holbjo200422-2	holbjo200515-1
sanpat200604-1	sanpat200625-2
sanpat200626-1	sanpat201216-1

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## 3. Materialspecifikationer / Material specifications

### Materiallista / Bill of materials

#### Materialspecifikationer / Material specifications:

Part	Material options		
	SS	CS	CS
Body, Bonnet	SA182 – F316L	SA182 F1 (1.5415)	SA105
	A182 – F316L	-	A105
Ball	SA182 – F316	-	SA182 – F316
	A182 – F316	-	A182 – F316
Disc, Wedge	SA479 – 316	SA182 F1 (1.5415)	SA479 – 316
	A479 – 316	-	A479 – 316
Stud	SA453 – Gr660B	SA 193 B7	SA 193 B7
	A453 – Gr660B	-	A 193 B7
Nut	SA194 – Gr6 T410	SA 194 2H	SA 194 2H
	A194 – Gr6 T410	-	A 194 2H
Bellow	SA182 – 316Ti	SA182 – 316Ti	SA182 – 316Ti

### Materialspecifikation / Material specification

Material Requirements incorporated in applicable Inspection & Test Plan for manufacturing.

### Registrering och arkivering / Indexing, filing and storage

PR-104 rev 6                      Purchases  
PR-106 rev 4                      Inspection  
IIP-01-001 rev 3                Incoming Inspection Procedure

The material certificates are stored in the quality department.

## 4. Kvalitetssystem / Quality system

### Organisation och kvalitetssystem / Organization and quality system

ISO 9001:2015                       ISO 14001:2015                       USNRC 10 CFR50APP B

### Kvalitetsmanual / Quality manual

Nej/No                                       Ja/Yes: MG/01 Edition 7 26/07/2021

### Registrerad på Kiwa / Registered on Kiwa

Nej/No                                       Ja/Yes:

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## Genomförande / Implementation

MG/01 Edition 9, Divided into section 1-8

General procedures PG-X and PR-X according to Current Document List 31/05/2023

Instructions according to "list of procedures applicable to type inspection certificate" Rev 5  
06/06/2023

## 5. Inköp / Purchasing

### Bedömning av underleverantörer / Assessment of sub-contractors

PR-104 Rev 6 Purchases and evaluation of suppliers

### Kontraktsgenomgång / Contract review

PR-101 Rev 7 Commercial Management

## 6. Processtyrning / Process control

### Arbetsinstruktioner / Work instructions

Instructions according "list of procedures applicable to type inspection certificate" Rev 5  
06/06/2023

### Kontroll- och provningsstatus / Inspection and test status

MG/01 Chapter 8

PR-106 Rev 4 Inspection

### Behandling av avvikande produkter / Control of nonconforming products

PR-204 Rev 6 Improvement (non conformities, corrective and preventive actions,  
internal audits) Non-conformance report Form FPR-204-1

## 7. Svetsning / Welding

### Kvalificering för svetsning / Qualification for welding

#### Företag / Company

EN ISO 3834-2

#### Procedurer / Procedure qualification record

SS-EN ISO 15614-1  ASME IX

#### Svetsarprovning / Welder performance qualifications

SS-EN ISO 9606-1, 9606-5  ASME IX

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## **Svetsprocedurer / Welding procedure specifications**

WPS-01-001, rev: 0	WPQR ZA - 709/15/004/PS/16E
WPS-01-002, rev. 0	WPQR ZA - 709/15/004/PS/16E
WPS-03-001, rev. 0	WPQR PQR-1-EN
WPS-03-002, rev. 0	WPQR ZA - 709/15/004/PS/15E
WPS-03-003, rev. 1	WPQR PQR-1-EN
WPS-11-001, rev. 0	WPQR ZA - 709/15/004/PS/16E
WPS-11-002, rev. 0	WPQR ZA - 709/15/004/PS/16E
WPS-11-003, rev. 1	WPQR ZA - 709/15/004/PS/16E
WPS-13-001, rev. 2	WPQR PQR-1-EN
WPS-15-001, rev. 0	WPQR ZA - 709/09/003/PS/04E
WPS-20-002, rev. 1	WPQR ZA - 709/15/004/PS/12E
WPS-20-003, rev. 0	WPQR ZA - 709/15/004/PS/10E
WPS-25-001, rev. 0	WPQR ZA - 709/15/004/PS/14E
WPS-25-002, rev. 0	WPQR ZA - 709/15/004/PS/13E
WPS-28-001, rev. 0	WPQR ZA - 709/13/003/PS/05E
WPS-28-002, rev. 0	WPQR ZA - 709/15/004/PS/08E
WPS-29-001, rev. 0	WPQR ZA - 709/15/004/PS/11E
WPS-29-002, rev. 0	WPQR ZA - 709/15/004/PS/09E

## **Referens / Reference**

Sergio Esco Muñoz, IWE  
Santiago Hijazo, IWE

## **8. Värmebehandling – Formning / Heat treatment – Forming**

### **Tillstånd / Authorization**

SS-EN ISO 17663

AD-Merkblatt HP 7/1

### **Värmebehandlingsprocedurer / Heat treatment specifications**

N/A

### **Formningsprocedurer / Forming specifications**

N/A

### **Referens / Reference**

N/A



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## 9. Oförstörande provning / Non destructive testing

### OFP-metoder / NDT-methods

Metod/Method      Utföres av/Performed by

<input type="checkbox"/>	RT	
<input type="checkbox"/>	MT	
<input checked="" type="checkbox"/>	UT	Ringo / S.C.I
<input checked="" type="checkbox"/>	PT	Ringo / S.C.I.
<input type="checkbox"/>	ET	
<input checked="" type="checkbox"/>	VT	Ringo

### Certifieringssystem / Certification system

<input checked="" type="checkbox"/> SNT-TC 1A	<input checked="" type="checkbox"/> EN ISO 9712	<input type="checkbox"/>	<input type="checkbox"/> CSWIP
<input type="checkbox"/> COFREND	<input type="checkbox"/> DGZfp	<input type="checkbox"/>	

### OFP-procedurer / NDT-procedure

PT	PTP-10-001, rev. 3	
UT	UTP-10-002, rev. 3	Surface welding*
UT	UTP-10-001, rev. 3	Forging
VT	VTP-10-001, rev. 2	

\*Not applicable due to geometry of valves  $\leq$  DN50

### Referens / Reference

Santiago Hijazo, Level II

## 10. Utrustning – Kalibrering / Equipment – Calibration

### Kontroll-, mät- och provningsutrustning/Inspection, measuring and test equipment

SS-EN ISO 17662     SS-EN 50504

### Utrustning / Equipment

List of calibration/verification in computer.

### Kalibrering och underhåll / Calibration and maintenance

PR-203 Rev 5                      Infrastructure (Maintenance of Equipment & Installations,  
Computer Maintenance, Calibration of Equipment)

### Kalibrering utförs av / Calibration performed by

Ringo Valvulas uses Accredited laboratory for calibration of manometers, measuring equipment and UT-equipment.

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## 11. Kvalitetsplan / Quality plan

### Kontroll och provning / Inspection and testing

Inspection and Test Plan	Material	Quality Class
ITP-BALL-1, rev. 1	Stainless Steel	2,3 & 4
ITP-BALL-2, rev. 1	Carbon Steel	2,3 & 4
ITP-BALL-3, rev. 0	Stainless Steel	1
ITP-BALL-4, rev. 0	Stainless / Carbon Steel	4
ITP-GLOBE-1, rev. 1	Stainless Steel	2,3 & 4
ITP-GLOBE-2, rev. 3	Carbon Steel	2,3 & 4
ITP-GLOBE-3, rev. 0	Stainless Steel	1
ITP-BELLOW-1, rev. 1	Stainless Steel	2,3 & 4
ITP-BELLOW-2, rev. 1	Carbon Steel	2,3 & 4
ITP-BELLOW-3, rev. 0	Stainless Steel	1
ITP-4742-1, rev. 0	Stainless Steel	4
ITP-CHECK-1, rev. 1	Stainless Steel	2,3 & 4
ITP-CHECK-2, rev. 2	Carbon Steel	2,3 & 4
ITP-CHECK-3, rev. 0	Stainless Steel	1
ITP-GATE-1, rev. 1	Stainless Steel	2,3 & 4
ITP-GATE-2, rev. 1	Carbon Steel	2,3 & 4
ITP-GATE-3, rev. 0	Stainless Steel	1
ITP-YGLOBE-1, rev 1	Carbon Steel	2 - 4
ITP-YGLOBE-2, rev 1	Stainless Steel	2 - 4
ITP-8086-1, rev 0	Carbon Steel	3

### Mottagningskontroll / Receiving inspection and testing

MG/01 Chapter 6 and 8  
PR-104 Rev 6 Purchases (Reception)  
PR-106 Rev 4 Inspection (Inspection in Reception)  
IIP-01-001 rev 3 Incoming Inspection Procedure

### Referens / Reference

Sergio Esco

### Kontroll och provning under tillverkning / In-process inspection and testing

MG/01 Chapter 6 and 8  
PR-106 Rev 4 Inspection (Inspection in process)

### Slutkontroll / Final inspection

TVP-10-001, rev. 0 Hydraulic and functional test according to KBM  
CLP-01-001, rev. 0 Cleaning of carbon steel and stainless steel valves.  
PCP-01-001, rev. 6 Packing ,shipping, handling and storage procedure  
VTP-10-001, rev. 2 Inspection of surfaces  
TIP-01-001, rev. 5 Identification of valves  
FIP-01-001, rev. 4 Final Inspection

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## Slutprovning / Final testing

N/A

## 12. Övrigt / Miscellaneous

Material specifications for stainless steel fulfils requirement in TBM ed. 8 chp. 3.1.9 regarding the maximum carbon content of 0.02%.

MPS-10-001, rev. 2      Material procurement specification SS (Forgings SA-182)  
MPS-10-002, rev. 2      Material procurement specification SS (Forgings SA-479)

### Corrosion protection and Packing

PCP-01-001, rev. 6      Packing ,shipping, handling and storage procedure  
CLP-01-001, rev. 0      Cleaning of carbon steel and stainless steel valves.  
PPP-10-001, rev. 1      Painting procedure according to TBY

## 13. Leverans / Delivery

### Kvalitetsdokument / Quality records

PR-201 rev 4      Management of the Documented Information  
Certificate of compliance 3.1  
Traveler, Inspection and testing plan  
NDT Certificates

### Referens / Reference

María Ángel Gumiel, Jose Antonio Adan

### Märkning och dokumentation / Marking and documentary evidence

#### Marking:

Marking:

Manufacturer name, Type, Size, Pressure rating, Body material, Disc material, Design temperature, Nuclear quality class, Seismic class, Design pressure, Serial number, Date (year)

#### Documentation sent together with delivery:

Certificate of compliance to Type Inspection Certificate  
Assembly drawing

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## **Bilagor / Appendices**

**Appendices filed at Kiwa Nuclear AB:**  
CD with all design information

### **Documents appended to Type Inspection Certificate:**

- Appendix 1 Certificate of compliance
- Appendix 2 List of Drawings
- Appendix 3 Example of PT record


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## Bilaga 1 / Appendix 1      Certificate of compliance

	<p><b><u>CERTIFICADO DE CUMPLIMIENTO</u></b></p> <p><b><u>(COMPLIANCE CERTIFICATE)</u></b></p>
Certificate Nr.:	Page: 1 of 1

<b>Obra (Work Order) nº:</b>	<b>Cliente (Customer):</b>
<b>Equipo (Product):</b>	<b>Ctd (Qty):</b>
<b>Orden de compra (P/O) nº:</b>	

<b><i>(Ringo Valvulas, S.L. hereby, certifies that): Ringo Valvulas, S.L. por el presente certifica que:</i></b>	
<i>The goods stated here below have been inspected and tested in accordance with the conditions and requirements of the Type Inspection Certificate number 117448 issued 2015-12-15 valid until 2020-12-15 by Kiwa Inspecta Nuclear AB</i>	
<b>Firmado (Signed):</b>	<b>Fecha (Date):</b>

Item	Datos de la válvula (Valve Data)	Nº Serie (Serial Nº)	Tag nº	Ctd (Qty)
	<b>Datos de la presión de pruebas (Valve Pressure Test Data)</b>			

RINGO VALVULAS, S.L. F8-3-2

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## Bilaga 2 / Appendix 2      List of drawings

TYPE	DRAWINGS	REV.	MTRL.*	DIMENSIONS DN	RATING
Ball Valves	RV-B2814	4	SS	15/20/25/40/50	PN100
	RV-B2813	4	CS	15/20/25/40/50	PN100
	RV-B5077	10	CS/SS	50	PN16
	RV-B5945	8	SS	8	PN16
	RV-B7104	0	SS	DN20	PN150
	RV-B7107	0	SS	DN50	PN150
	RV-B7109	0	SS	DN25	PN150
Bellow Globe Valves	RV-G1866	4	CS	15/20/25	PN250
	RV-G1867	5	SS	15/20/25	PN250
	RV-G1868	5	CS	40/50	PN250
	RV-G1869	5	SS	40/50	PN250
	RV-G2092	5	CS <sup>1</sup>	20	PN250
	RV-G2063	5	SS	25	PN250
	RV-G1941	4	CS <sup>1</sup>	25	PN250
	RV-G2152	2	SS	15/20/25	PN250
	RV-G2151	2	CS	15/20/25	PN250
	RV-G2154	2	SS	40/50	PN250
	RV-G2153	2	CS	40/50	PN250
	RV-G2519	6	CS	25	PN250
	RV-G3145	4	SS	25	PN250
	RV-G3542 <sup>3</sup>	4	CS	25	PN250
Check Valves	RV-R1164	4	CS	15/20	PN250
	RV-R1163	4	SS	15/20	PN250
	RV-R1162	4	CS	25/40/50	PN250
	RV-R1161	4	SS	25/40/50	PN250
	RV-R2003	0	SS	15	PN250
	RV-R2004	0	CS	15	PN250
	RV-R3419	3	SS	50	PN40
Gate Valves	RV-C1874	3	SS	15/20	PN250
	RV-C1875	2	CS	15/20	PN250
	RV-C1876	3	SS	25	PN250
	RV-C1877	2	CS	25	PN250
	RV-C1878	4	SS	40/50	PN250
	RV-C1879	3	CS	40/50	PN250
	RV-C5188 <sup>5</sup>	3	SS	40/50	PN250
Globe Valves	RV-G1751	5	SS	15/20	PN250
	RV-G1847	3	CS	15/20	PN250
	RV-G1848	4	SS	40/50	PN250
	RV-G1849	4	CS	40/50	PN250
	RV-G1850	4	SS	25	PN250
	RV-G1851	3	CS	25	PN250
	RV-G1879	6	CS	25	PN250
	RV-G1942	6	CS <sup>1</sup>	50	PN250

# TYPKONTROLLINTYG TYPE INSPECTION CERTIFICATE

Revision nr/Revision No.:  
17

Typkontrollintyg nr.: / Type Inspection Certificate No.:  
117448

Datum/Date:  
8<sup>th</sup> June 2023

	RV-G2093	5	CS <sup>1</sup>	20	PN250
	RV-G2094	4	CS <sup>1</sup>	20	PN250
	RV-G2145	2	SS	15/20	PN250
	RV-G2146 <sup>2</sup>	1	CS	15/20	PN250
	RV-G2147	2	SS	40/50	PN250
	RV-G2148	2	CS	40/50	PN250
	RV-G2149	2	SS	25	PN250
	RV-G2150 <sup>2</sup>	1	CS	25	PN250
	RV-G3042	2	SS	50	PN250
	RV-G3804	8	SS	50	PN150
	RV-G3919 <sup>6</sup>	3	CS	25	PN250
	RV-G3920 <sup>6</sup>	3	SS	25	PN250
	RV-G4168	3	CS	20	PN250
	RV-G4183	3	SS	20	PN250
	RV-G4937 <sup>4</sup>	6	CS	50	PN150
"Y" Globe Valves	RV-G4292	5	SS	50	PN250
	RV-G4293	3	SS	25/40	PN250
	RV-G4294 <sup>6</sup>	4	CS	50	PN250
	RV-G3921	5	CS	50	PN250
	RV-G3922	5	SS	50	PN250
	RV-G4209	4	SS	25/40	PN250
	RV-G4536	1	CS	20	PN250
	RV-G4539	1	SS	20	PN250
	RV-G4537	1	CS	25	PN250
	RV-G4538	1	SS	25	PN250

\*CS = Carbon Steel

SS = Stainless Steel

<sup>1</sup> SA182 F1 (16Mo3).

<sup>2</sup> RV-G2146, RV-G2150 are verified for acceleration load 10g in vertical direction and horizontal directions and 7.6 MPa design pressure and 316 °C design temperature.

<sup>3</sup> Approval of Valve includes actuator. Verified in calculation report DC-6803-1.

<sup>4</sup> Valve with Actuator, RV-G4937, verified and approved for 6g acceleration in all directions.

<sup>5</sup> Valve, RV-C5188, verified and approved for 6g acceleration in all directions.

<sup>6</sup> Valve, RV-G3919, RV-G3920, RV-G4294 verified and approved for 6g acceleration in all directions.

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## Bilaga 3 / Appendix 3 Example of PT record



### INFORME DE INSPECCION POR LIQUIDOS PENETRANTES

Penetrant Liquid Test Report

Laboratorio de ensayo acreditado por ENAC con acreditación N° 67/LE101.  
Las actividades marcadas con (\*) no están amparadas por la acreditación ENAC.

INFORME: 190092ENDMAD-OT0001-PT01-REV1 REV. 1  
Report  
O.T.(S.C.I.): 190092ENDMAD-OT0001



Digitally signed by:  
SERVICIOS DE  
CONTROL E  
INSPECCION S.A.  
Date:2019.02.14 15:54:37

CLIENTE:  
Customer

DOMICILIO SOCIAL:  
Address

DIRECCION DE REALIZACION DEL ENSAYO:  
Testing Place

PEDIDO: UPPER SHAFT ADAPTER FALNGE RUBBING. S/P ENAZ170P0004  
DAMPER SHAFT ADAPTER S/P ENAZ170P0005

OBJETO ENSAYADO: UPPER SHAFT ADAPTER FALNGE PLANO: ENAZ170P0004 Y ENAZ170P0005  
Tested Object RUBBING.(1UD.) Drawing

PROCEDIMIENTO: END-PT-4062 REV/ED: 0.0 CALIF. S/ESPECIFICACION:  
Procedure Specification Certification

NORMA ENSAYO: UNE-EN ISO 3452-01 2013 FECHA DE ENSAYO: 08/02/2019  
Testing norm Test date

EXTENSION EXAMEN: 100% FECHA DE RECEPCION: 08/02/2019  
Control extension Reception date

DATOS DE LA PIEZA:  SOLDADURA  CHAPA  FUNDICION, FORJA, REDONDO  OTROS  
Specimen Weld Plate Casting, forging and bars Other

IDENTIFICACION: UPPER SHAFT ADAPTER FALNGE RUBBING. S/P ENAZ170P0004 (1 UD).  
Identification DAMPER SHAFT ADAPTER S/P ENAZ170P0005 (1UD).

ZONA A INSPECCIONAR: CARAS EXTERNAS E INTERNAS ACCESIBLES  
Inspection area

MATERIAL - CALIDAD: (\*) F1272 ESPESOR (mm): (\*) 10/92  
Material - Specification Thickness

TRATAMIENTO TERMICO: (\*) N/D TIPO DE UNION: (\*) N/A  
Heat Treatment Type of Joint

PROCESO DE SOLDEO: (\*) N/A ESTADO SUPERFICIAL: (\*) Mecanizado  
Welding procedure Surface Condition

MEDIOS DE INSPECCION. TIPO DE ENSAYO: Fluorescentes eliminables con agua y revelador humedo  
Inspection Equipments Type of test

	MARCA COMERCIAL Commercial name	CODIGO Code	TIPO Type	COLOR Colour	Nº LOTE Batch No.
DISOLVENTE Solvent	N/A	N/A	AGUA	N/A	N/A
PENETRANTE Penetrant	CHEMETALL	BRITEMOR 4455	ELIMINABLE CON AGUA	ROJO	0900061018
REVELADOR Developer	CHEMETALL	LD7	HUMEDO NO ACUOSO	BLANCO	0900058050

ILUMINACION:  NATURAL  ARTIFICIAL  U.V. CODIGO SCI LAMPARA U.V.: PME02022  
Illumination type Black light code nbr.

APLICACION.  
Application

TEMPER. SUPERFICIE 16 °C TIEMPO PENETRACION 30 MINUTOS TIEMPO REVELADO 20 MINUTOS  
Surface temperature Penetrating time Developing time

Nº DE DOCUMENTOS ANEXOS AL INFORME: 3  
Nº of annex attached to this

RESULTADOS DE LA PRUEBA: (\*)  
Test Result  
ACEPTABLE.

OBSERVACIONES GENERALES:  
General Notes

-ESTA REVISIÓN ANULA Y SUSTITUYE AL INFORME ANTERIOR. EMITIDO POR ERROR DE TRANSCRIPCIÓN.  
-A PETICIÓN DEL CLIENTE, NO SE ADMITEN GRIETAS

SUPERVISOR: FRANCISCO JAVIER RODRIGO CASADO  
DNI: 07829036C



Para verificar la autenticidad de este certificado accede a la url  
<http://www.scisa.es/verificar>