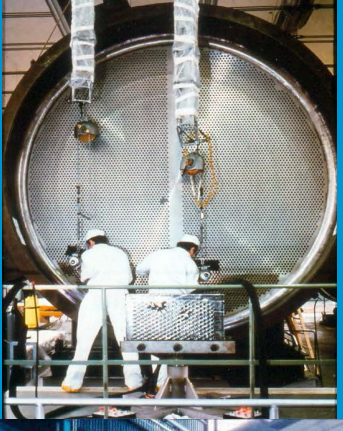
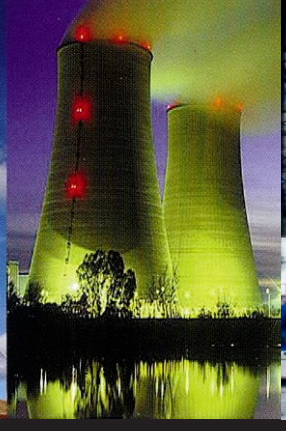
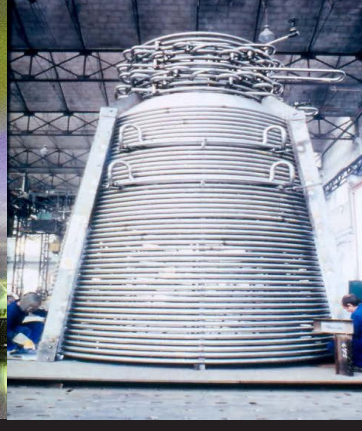
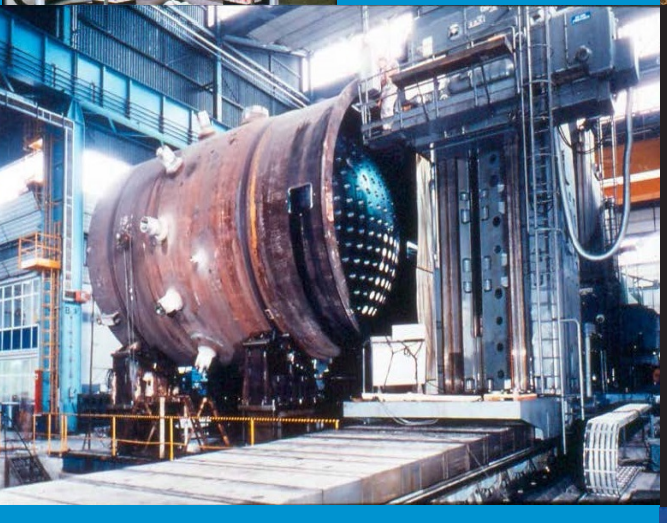






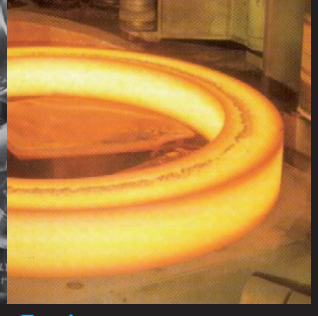


R|C

ITALIAN PRODUCTION & TRADING

- Production
- Trading
- Design
- Inspection

Forged Fittings



Forging

Y Pieces

Production

Trading

Design

Inspection

RC has become a powerful manufacturing and trading company offering inspection and service on an international scale and satisfying any quality requirements stated by contracts, customers' specifications or projects and by international codes and laws.

RC operates in several industrial sectors such as: Metallurgical and mechanical industry, oil industry, power industry (both conventional and nuclear), iron and steel industry, naval industry, On-shore off-shore industry.

RC is able to:
> Manufacture special pieces such as BW and SW fittings, valves, forged items, pressure vessels.
> Carry on assemblying and welding activities as well as heat treatments and control.
> Check the mechanical stability of pipeline components. (Flowtees, Lateral, Barred Tee)

RC si inserisce in un contesto globale quale società di produzione, commercializzazione e servizio, nel rispetto dei requisiti qualitativi richiesti dalle procedure contrattuali, dalle specifiche dei propri clienti, delle specifiche di progetto e dall'applicazione dei codici internazionali.

Si rivolge ai diversi Settori industriali quali: Metalmeccanico, Petrolchimico, Energetico (Convenzionale e Nucleare), Siderurgico, Navale, On-Shore / Off-Shore.

RC è in grado di:
> Gestire la produzione di particolari quali raccordi a saldare BW e SW, valvole, forgiati, recipienti a pressione.
> Eseguire attività di assemblaggio, saldatura trattamento termico e controllo.
> Eseguire la verifica della stabilità meccanica di componenti per pipeline (Flowtees, Lateral, Barred Tee)

RC always employs highly qualified staff for all its production in appliance with ASME, API, MSS-SP, ANSI, EN, ISO, BS codes and all its staff working on non-destructive testing (RT, UT, PT, MT, MSLT, EC, PMI) is rained according to SNT-TC-1A, UNI-EN 473, CP 189, ISO 9712 procedures for all testing techniques.

Thanks to its experience and competence, RC is nowadays a modern, reliable and flexible company whose main goal is and will always be quality.

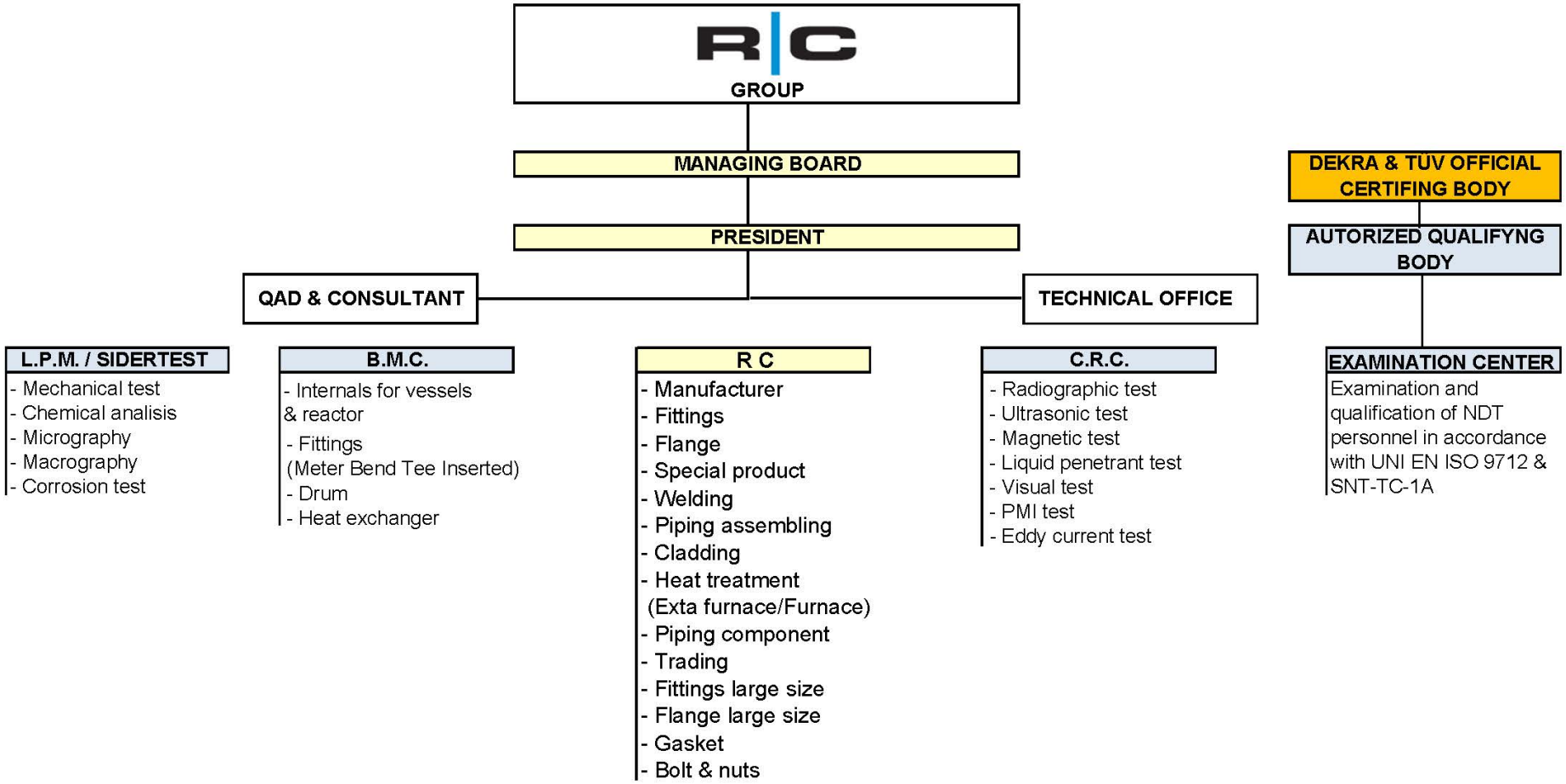
RC sviluppa tutte le proprie attività di produzione con personale qualificato, in accordo ai codici ASME, API, MSS-SP, ANSI, EN, ISO, BS, Etc. Il proprio personale addetto alle prove non distruttive (RT, UT, PT, MT, MSLT, EC, PMI) è qualificato in accordo a SNT-TC-1A, UNI-EN 473, CP 189, ISO 9712, per tutte le tecniche d'esame.

La qualificazione e l'esperienza del proprio personale fanno della RC una società moderna, affidabile e flessibile che ha fatto della qualità il suo scopo principale.

Flow Tee

Flanges

RC ITALIAN PRODUCTION & TRADING



ITALIAN PRODUCTION & TRADING

GROUP ORGANIZATION CHART

QUALITY APPROVAL

LRQA
Business Assurance

CERTIFICATE OF APPROVAL

This is to certify that the Quality Management System of:

R C S.r.l.
Via Crocetta, 9
26010 Ripalta Cremasca (Cremona) – Italia

has been approved by Lloyd's Register Quality Assurance to the following Quality Management System Standards:

ISO 9001:2008

The Quality Management System is applicable to:

Trading and manufacture of fittings with hot and cold forming process, for carbon, low alloy, stainless steel, up to 48". Trading and manufacture of flange with hot forming process, for carbon, low alloy, stainless steel, up to 24". Trading of tubes, fittings, flanges, and piping components. The Quality Management System supports the requirements of Annex I sect. of Pressure Equipment Directive (PED) 97/23/EC.

This certificate forms part of the approval identified by certificate number LRC 0131160/QMS/U/EN.

Approval Certificate
No: LRC 0131160/QMS/U/EN/003

Original Approval: 9th July 2003

Current Certificate: 24th June 2013

Certificate Expiry: 8th July 2015

Issued by: Lloyd's Register Quality Assurance Italy Srl
for and on behalf of Lloyd's Register Quality Assurance Limited

UKAS MANAGEMENT SYSTEMS
001

This document is subject to the provision on the reverse
LRQA Italy – Via Cadorna, 69 20090 Vimodrone (MI)
LRQA Ltd,- registered office 71, Fenchurch Street, London EC3M 4BS United Kingdom.
This approval is carried out in accordance with the LRQA assessment and certification procedures and monitored by LRQA.
The use of the UKAS Accreditation Mark indicates Accreditation in respect of those activities covered by the Accreditation Certificate Number 001

QUALITY APPROVAL

TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT

TRANSPORTOWY DOZÓR TECHNICZNY

CERTYFIKAT
CERTIFICATE

Nr. TDT-UW-42/14

Niniejszym potwierdza się, że firma:
We hereby certify that the company:

RC S.r.l.
Via Crocetta, 9
26010 Ripalta Cremasca (Cremona)
Włochy / Italy

posiada uznanie do wytwarzania elementów rurociągów przesyłowych podlegających dozorowi technicznemu wykonywanemu przez Transportowy Dozór Techniczny

possesses recognition to manufacture elements of piping installations under technical supervision of Transportation Technical Supervision

Szczegółowy zakres i warunki uznania zostały zawarte w załączniku do niniejszego certyfikatu.
Detailed scope and conditions of recognition are included in annex to this certificate.

Załącznik:
Warunki uznania

Annex:
Conditions of recognition

DYREKTOR
p.o.
Andrzej Kolasa

Miejsce i data wystawienia: Warszawa, 10 kwietnia 2014 r.
Place and date of issue: Warszawa, April 10, 2014

Uznanie ważne do dnia: 9 April 2016 r.
Date of expiry: April 9, 2016

TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT TDT

PERSONNEL QUALIFICATIONS

TÜVRheinland®
Genau. Richtig.

Zertifikat PersCert TÜV

Personnel Certification Office Welding. PersCert TÜV

Mr. Giuseppe Rivaroli

Date of birth: 31st August 1950, place of birth: Cappella Depicenardi (CR)
has passed the examination 25th February 2013
and has acquired the qualification level of a

Welding Inspector (TÜV)
(Comprehensive Level)
in conformity with
TÜV training and examination guideline QMV-WS-WI

Certificate-Nr.: Sch/870/2013/00013

Berlin, 17th July 2013

This certificate expires on 25th February 2016

Dr. Steven Schmidt
Leiter PersCert TÜV

Dott. Ing. Giorgio Gasparri
President of Examining Board

Personenzertifizierungsstelle PersCert TÜV • Alboinstr. 56 • 12103 Berlin

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The American Society for Nondestructive Testing, Inc.
Be it known that

Giuseppe Rivaroli

has met the established and published Requirements for Certification by ASNT as

NDT Level III

in the following Nondestructive Testing Methods:

Method	Issue Date	Expiration Date
Liquid Penetrant Testing	2/11	2/16
Magnetic Particle Testing	2/11	2/16
Radiographic Testing	2/11	2/16
Ultrasonic Testing	2/11	2/16

27936
Certificate Number

ASNT President

Certification Management Council Chair

This certificate is the property of ASNT, is not official without ASNT's raised gold seal and is subject to revocation prior to the listed expiration date.
This certificate should be verified on the ASNT Web site or by contacting the ASNT Technical Services Department.

Certificato
Certificate

01 202 I/Z-10 4140/01

di personale addetto alle prove non distruttive
for personnel of non-destructive testing

in conformità alla direttiva
According to

DIN EN 473 e ISO 9712
DIN EN 473 & ISO 9712

Sig. Rivaroli, Giuseppe
Titolo, Cognome, Nome
Title, Last Name, First name

Cappella de Picenardi (CR), 31.08.1950
Luogo di nascita ; Data di nascita
Place of birth, Date of birth

Metodo Method	Livello Level	Valido fino Expiring date	Settore industriale & di prodotto Industries & product sector	Metodo Method	Livello Level	Valido fino Expiring date	Settore industriale & di prodotto Industrial & product sector
RT	3	11/2017	A,B: c,t,f,w,wp PED: w	AT	---	---	---
UT	3	11/2017	A,B: c,t,f,w,wp PED: w	VT	3	07/2013	A,B: c,t,f,w,wp PED: w
PT	3	11/2017	A,B: c,t,f,w,wp PED: w	ET	---	---	---
MT	3	11/2017	A,B: c,t,f,w,wp PED: w	RT-FA	---	---	---
LT	---	---	---	---	---	---	---

A: Fabbricazione di metalli / Metal manufacturing
B: Prova pre-servizio e in servizio di attrezzature, impianti e strutture / Pre and in-service testing of equipment, plant & structure
PED: Direttiva attrezzature a pressione 97/23/EC* / Pressure Equipment Directive 97/23/EC*
(c) Fusioni/ Castings, (f) Fucinati / forgings, (w) Prodotti saldati / Welded products, (wp) Prodotti lavorati / Wrought products
(t) Tubi e condotte, inclusi i prodotti piatti per la fabbricazione di tubi saldati / Tubes and pipes, incl. flat products for the manufacturing of welded pipes
RT: Radiografia / Radiographic testing
VT: Metodo visivo / Visual testing
UT: Ultrasuoni / Ultrasonic testing
ET: Correnti indotte / Eddy current testing
PT: Liquidi penetranti / Penetrant testing
LT: Rivelazione di fughe / Leak testing
MT: Particelle magnetiche / magnetic particle testing
AT: Emissioni Acustiche / Acoustic emission testing
RT-FA: Radiografia con limitazione interpretazione lastre radiografiche / Radiographic testing, restricted to radiographic film evaluation
UT-WD: Controllo Spessimetrico / Thickness measuring

Firma intestatario del certificato
Signature of certificate owner

Dipl.-Phys Herbert Gries

Medolago, 13.11.2012

Certification body for NDT-Personnel
TÜV Rheinland Industrie Service GmbH
Am Grauen Stein, D-51105 Köln

-*: Ente Certificatore opera sulla base di un accreditamento valido in accordo alla DIN EN ISO/IEC 17024-
-*The certification body operates on the basis of a valid accreditation according to DIN EN ISO/IEC 17024-
*Ente terzo riconosciuto ai sensi dell'Art. 13 della direttiva 97/23/CE per attrezzature a pressione.
Accreditato secondo ZLS Reg. -No. ZLS-2F-073/09. Accreditamento applicabile al solo scopo PED
Recognized third party organization according to article 13 of the European pressure equipment directive 97/23/EC
Accredited by ZLS, Reg. -No. ZLS-2F-073/09. The accreditation applies only to the scope of PED.

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TÜVRheinland®
Genau. Richtig.

NDT PERSONNEL QUALIFICATIONS

WELDING PERSONNEL QUALIFICATIONS

Certificate no: MLN0700066/05
Page 1 of 2

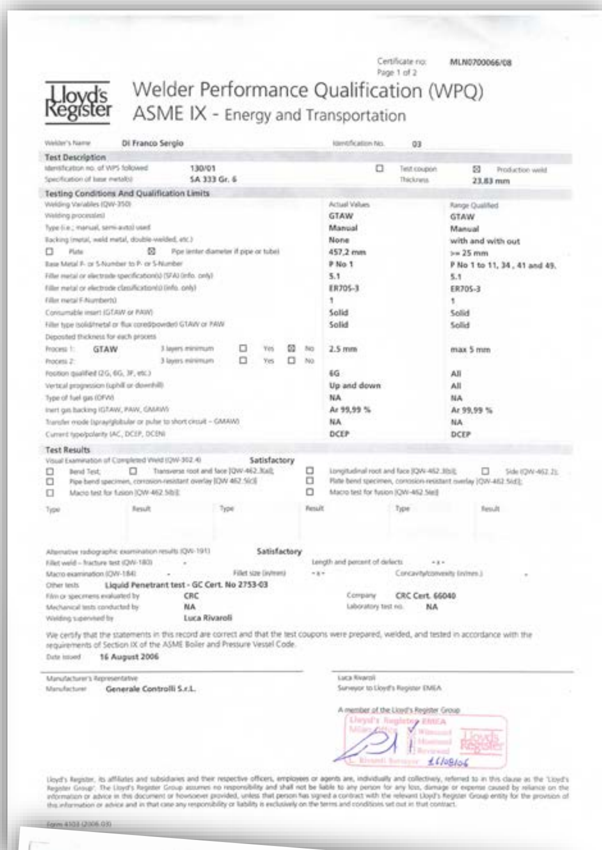
Lloyd's Register

Welder Performance Qualification (WPQ)
ASME IX - Energy and Transportation

Welder's Name: Gambino Alessandro — Identification No. 01

Test Description
Identification no. of WPS followed: 130/01
Specification of base metal(s): SA 333 Gr. 6
Thickness: 23,83 mm

Date issued: 20 June 2006
Manufacturer: Generale Controlli S.r.L.



Certificate no: MLN0700066/08
Page 1 of 2

Lloyd's Register

Welder Performance Qualification (WPQ)
ASME IX - Energy and Transportation

Welder's Name: Di Franco Sergio — Identification No. 03

Test Description
Identification no. of WPS followed: 130/01
Specification of base metal(s): SA 333 Gr. 6
Thickness: 23.83 mm

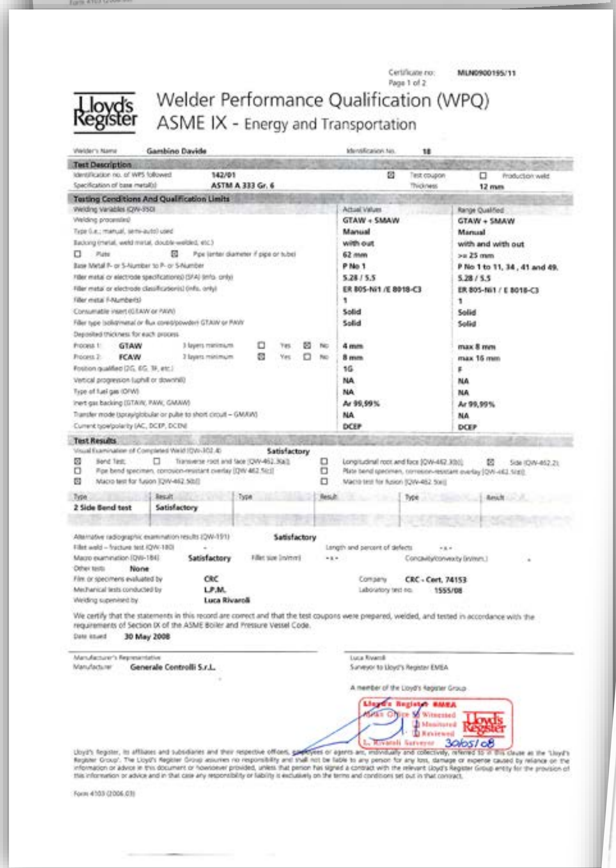
Testing Conditions And Qualification Limits	Actual Values	Range Qualified
Welding process(es)	GTAW	GTAW
Type (i.e.; manual, semi-auto) used	Manual	Manual
Backing (metal, weld metal, double-welded, etc.)	None	with and with out
Pipe (enter diameter if pipe or tube)	457,2 mm	>= 25 mm
Base Metal P- or S-Number to P- or S-Number	P No 1	P No 1 to 11, 34 , 41 and 49.
Filler metal or electrode specification(s) (SFA) (info. only)	5.1	5.1
Filler metal or electrode classification(s) (info. only)	ER70S-3	ER70S-3
Filler metal F-Number(s)	1	1
Consumable insert (GTAW or PAW)	Solid	Solid
Filler type (solid/metal or flux cored/powder) GTAW or PAW	Solid	Solid
Process 1: GTAW	2.5 mm	max 5 mm
Position qualified (2G, 6G, 3F, etc.)	6G	All
Vertical progression (uphill or downhill)	Up and down	All
Type of fuel gas (OFW)	NA	NA
Inert gas backing (GTAW, PAW, GMAW)	Ar 99,99 %	Ar 99,99 %
Transfer mode (spray/globular or pulse to short circuit – GMAW)	NA	NA
Current type/polarity (AC, DCEP, DCEN)	DCEP	DCEP

Test Results
Visual Examination of Completed Weld (QW-302.4): Satisfactory

Alternative radiographic examination results (QW-191): Satisfactory
Other tests: Liquid Penetrant test - GC Cert. No 2753-03
Film or specimens evaluated by: CRC — Company: CRC Cert. 66040
Mechanical tests conducted by: NA — Laboratory test no.: NA
Welding supervised by: Luca Rivaroli

We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code.
Date issued: 16 August 2006

Manufacturer: Generale Controlli S.r.L.
Luca Rivaroli, Surveyor to Lloyd's Register EMEA
A member of the Lloyd's Register Group



Certificate no: MLN0900195/11
Page 1 of 2

Lloyd's Register

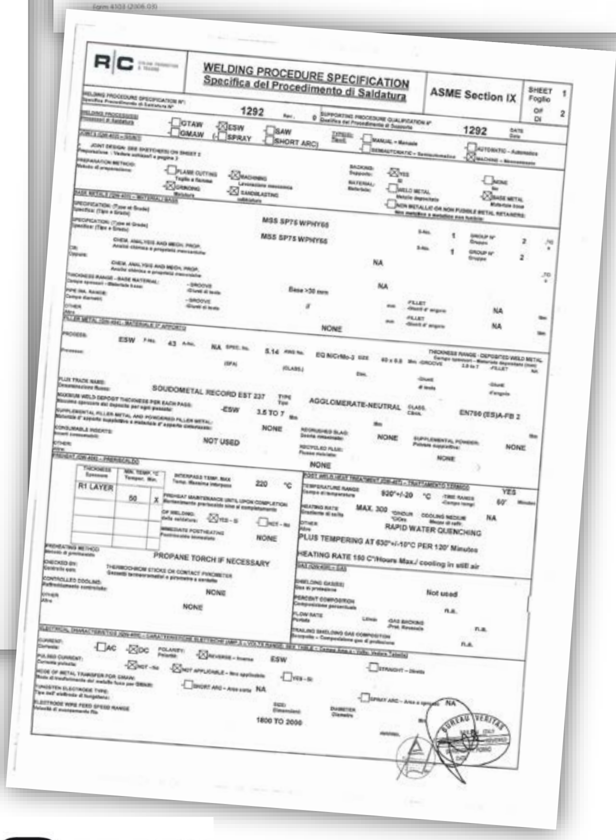
Welder Performance Qualification (WPQ)
ASME IX - Energy and Transportation

Welder's Name: Gambino Davide — Identification No. 18

Test Description
Identification no. of WPS followed: 142/01
Specification of base metal(s): ASTM A 333 Gr. 6
Thickness: 12 mm

Testing Conditions And Qualification Limits	Actual Values	Range Qualified
Welding process(es)	GTAW + SMAW	GTAW + SMAW
Type (i.e.; manual, semi-auto) used	Manual	Manual
Backing	with out	with and with out
Pipe	62 mm	>= 25 mm
Base Metal P- or S-Number	P No 1	P No 1 to 11, 34 , 41 and 49.
Filler metal specification(s)	5.28 / 5.5	5.28 / 5.5
Filler metal classification(s)	ER 80S-Ni1 /E 8018-C3	ER 80S-Ni1 / E 8018-C3
Filler metal F-Number(s)	1	1
Consumable insert	Solid	Solid
Filler type	Solid	Solid
Process 1: GTAW	4 mm	max 8 mm
Process 2: FCAW	8 mm	max 16 mm
Position qualified	1G	F
Vertical progression	NA	NA
Type of fuel gas	NA	NA
Inert gas backing	Ar 99,99%	Ar 99,99%
Transfer mode	NA	NA
Current type/polarity	DCEP	DCEP

Test Results: 2 Side Bend test — Satisfactory
Date issued: 30 May 2008
Manufacturer: Generale Controlli S.r.L.



WELDING PROCEDURE SPECIFICATION
Specifica del Procedimento di Saldatura
ASME Section IX
WPS 1292

BW FITTINGS

PRODUCTION RANGE (SEAMLESS)

Gamma di Produzione (SENZA SALDATURA)

½" ÷ 24"	½" ÷ 12"
FORMATURA A CALDO **HOT FORMING**	FORMATURA A FREDDO **COLD FORMING**
SENZA SALDATURA **SEAMLESS**	SENZA SALDATURA **SEAMLESS**
CURVE LR & SR CURVE 3D & 5D CROCI SELLE COLLARI FONDELLI RIDUZIONI CONC. & ECC. TEE NORMALI E RIDOTTI TEE LATERALI TEE CON BARRE DI GUIDA TEE PASSAGGIO SFERE SPLIT TEES **ELBOWS LR & SR** **BENDS 3R & 5 R** **CROSSES** **SADDLES STUB ENDS** **CAPS** **CONC. & ECC. REDUCERS** **EQUAL & RED. TEES** **LATERAL** **SCRAPER BAR TEES** **SPECIAL FLOW TEES** **SPLIT TEES** **EXTRUDED BRANCH FOR MANIFOLD PRODUCTION**	TEE NORMALI E RIDOTTI RIDUZIONI CONC. & ECC. FONDELLI **EQUAL & RED. TEES** **CONC. & ECC. REDUCERS** **CAPS** **EXTRUDED BRANCH FOR MANIFOLD PRODUCTION**

BW FITTINGS
(WELDED OR SEAMLESS)

12” ÷ 72”
FORMATURA A CALDO **HOT FORMING**
CON O SENZA SALDATURA **WELDED OR SEAMLESS**
CURVE LR & SR* CURVE 3D & 5D** CROCI COLLARI FONDELLI RIDUZIONI CONC. & ECC. TEE NORMALI E RIDOTTI TEE LATERALI TEE CON BARRE DI GUIDA TEE PASSAGGIO SFERE SPLIT TEES **ELBOWS LR & SR*** **BENDS 3R & 5R**** **CROSSES** **STUB ENDS** **CAPS** **CONC. & ECC. REDUCERS** **EQUAL & RED. TEES** **LATERAL** **SCRAPER BAR TEES** **SPECIAL FLOW TEES** **SPLIT TEES** **EXTRUDED BRANCH FOR MANIFOLD PRODUCTION**

* LR & SR SEAMLESS UP TO 48” OD
** 3D & 5D SEAMLESS UP TO 56” OD

BW FITTINGS
REFERENCE STANDARD
Codici di Riferimento

TIPO DI ACCIAIO	NORMA DI RIFERIMENTO *REFERENCE SPECIFICATION*	*STEEL TYPE*
ACCIAIO AL CARBONIO		*CARBON STEEL*
ASTM / ASME A 234 WPB-WPC		
ACCIAIO AL CARBONIO ALTO SNERVAMENTO		*HIGH YIELD CARBON STEEL*
MSS-SP 75 WPHY 42-46-52-60-65-70		
ACCIAIO AL CARBONIO PER BASSA TEMPERATURA		*LOW TEMPERATURE CARBON STEEL*
ASTM / ASME A 420 WPL6		
ACCIAIO AL CARBONIO-NICKEL PER BASSE TEMPERATURE		*LOW TEMPERATURE CARBON-NICKEL STEEL*
ASTM / ASME A 420 WPL3		
ACCIAIO AL CARBONIO-MOLIBDENO		*CARBON-MOLYBDENUM STEEL*
ASTM / ASME A 234 WP1		
ACCIAIO AL CROMO-MOLIBDENO		*CHROMIUM-MOLYBDENUM STEEL*
ASTM / ASME A 234 WP5-9-11-12-22-91-92		
ACCIAIO INOSSIDABILE		*AUSTENITIC STAINLESS STEEL*
ASTM / ASME A 403 WP 304 (L) (H) (LN) (N) 321 (H) 316 (L) (H) (LN) (N) (TI) 347 (H)		
ACCIAI SPECIALI		*EXOTIC STAINLESS STEEL*
Ni-Cr-Fe / Ni-Cr-Fe-Mo Ni-Cu Alloy 625/825 - Duplex - Superduplex - Titanium		
Possono essere inoltre forniti gli equivalenti secondo:		*Equivalent can be also be supplied according to:*
DIN - BS - AFNOR - JIS - UNI - GOST - EN - ISO		

BW FITTINGS
DESIGN AND PRODUCTION CODES
Codici per Progettazione e Produzione

PROGETTAZIONE	NORMA DI RIFERIMENTO *REFERENCE SPECIFICATION*	*DESIGN*
ANSI B 31.1 / 31.3 / 31.4 / 31.8 **ASME I / ASME VIII** **DIN 2413 - AD MERKBLATT B2/B3/B9 - TRD 301 - 303** **CSA**		

COSTRUZIONE	NORMA DI RIFERIMENTO *REFERENCE SPECIFICATION*	MANUFACTURING
ANSI B 16.9 / 16.28 **MSS-SP 75** **MSS-SP 43** **DIN 2605-2615-2616-2617** **AFNOR A49-281** **BS 1640-1965/1** **GOST** **CSA**		
Si possono inoltre eseguire stress analysis Sui raccordi in accordo a:		Stress analysis on fittings can also be performed in accordance with:
ANSI B 31.1 / 31.3 / 31.4 / 31.8		