CERTIFICATO DI COLLAUDO EN 10204/3.1 1546708 PAG. /

SPECIFICATION: ASTM A 240 ASTM A 480
ASME SA 240

CUSTOMER ORDER №

CUSTOMER

MILL TEST CERTIFICATE

INTERNAL ORDER № 8E150236

*P62504.05 DISC

DOC.CREDIT N. M04091506NU00250

PRODUCT:
STAINLESS STEEL COILS

SHIPPING NOTICE № 00056352

COIL, N*	HEAT N*	CHEMICAL COMPOSITION												
		%C	%Mn	%Si	%P	%S	%Cr	%Ni	%Mo	%N	%Ti	%Cu	%	%
760819	0442576	.023	.930	.340	.027	.001	16.54	10.14	2.04	.046		.240		
833344	0490070	.023	.890	.320	.028	.001	16.82	10.24	2.04	.048		.220		

STELL TYPE:
316L/316
316L

PRODUCER TRADE MARK

INSPECTOR STAMP:

THE MATERIAL MEETS THE HARDNESS REQUIREMENTS OF NACE MR0175/MR0103

80 CENTRO DI FINITURA P.F, TERN 1050 °c

M04091506NU00250

HEAT TRATEMENT – ANNEALING: AIR – WATER SPRAY – WATER COOLING STEELMAKING PROCESS THE MATERIAL IS RESISTANT TO INTERCRYSTALLINE CORROSION IN DACCORDANCE WITH: ASTM A262 E

TEST RESULTS (1 N/mm^2 = 1 M Pa)

PACKAGE N*	COIL N*	DIMENSIONS mm	P-CES N*	FINISH	WEIGHT	(1) PRELIEVO	(2) SENC	TRACTION Rp 02% N/mm2	TRACTION Rp 1% N/mm2	TRACTION Rm N/mm2	TRACTION A% Lo=2"	TRACTION A% Lo=80	TRACTION A% Lo=A5	HARDNESS HR B	HARDNESS H	BEND 180	GRAIN (mm)	
REQUIRED CHARACTERISTICS								≥ 170	≥	>485	≥ 40	≥	≥	≤ 95	≤			
C22741	760819	1.50X1545.0	1	2B	8730	T	T	275		607	57.3			75.0				
C22741						C	T	269		598	58.4			73.0				
C22742	760819	1.50X1545.0	1	2B	9020	T	T	275		607	57.3			75.0				
C22742						C	T	269		598	58.4			73.0				
C34909	833344	1.50X1245.0	1	2B	6048	T	T	266		589	58.8			73.0				
C34909						C	T	264		585	59.3			72.0				
C34921	833344	1.50X1245.0	1	2B	4983	T	T	266		589	58.8			73.0				
C34921						C	T	264		585	59.3			72.0				

MOD. 2114-33355130

We certify the products rated above complying order requirements.

COMPLIES WITH ED 2000/53/EC

1)Location
T=Top
C=Bottom

2) Direction
T-Transverse
L-Long

MARKING

Wn–Type
Heath–Coll N
Thinkness-Flash

TERNI.II

Certificato emesso automaticamente

08-07-2015

Mill Test Certificate

Certificate No.:
Date of issue:
Surface Finish:

Seller:
Manufacturer:
Order No.: PO No.:
Supplier: Commodity: STAINLESS COLD ROLLED COIL
Customer: Spec & Type: ASTM-A240M-316L

Size	Product No.	Quantity	Weight (kg)	Heat No.	Position	Tensile Test YS 02	TS	EL	Hardness HRB		Division	Chemical Composition C (%)	Si (%)	Mn (%)	P (%)	S (%)	Cr (%)	Ni (%)	Cu (%)	Mo (%)	N (ppm)
0.8×1219×C	QCR0430	1	14.579	SY80601	T	289	644	55	60.0		L	0.0203	0.579	1.036	0.0311	0.0039	16.208	10.070	0.245	2.056	256
					B	301	642	55	60.1												
												* P62506,09 DISC									
*** Sub Total (030)***		1	14.579	(kg)																	
** Heal Treatment ** Solution Treatment Min 1040 °C Quenching																					
*** Grande Total***		1	14.579	(kg)																	
*** Grand Total ***		1	14.579	(kg)						*** Last Item***											

*** Position - T: Top, Middle, B: Bottom**
*** Tensile Test. Direction: Transversal, Gauge Length: 50 mm (Rectangular)**
YP Method: 0.2% off-set
*** Division – L: Ladle Analysis**

We hereby certify that the material herein has been made in accordance with the order and above specification.
No repair welding was performed to the products.
Test Certificate is Issued according to EN10204 3.1.

Legal sanction can be imposed on forging. Improper use of product can cause safety issues._

Surveyor To:

<PAGE 1> MANAGER OF QUALITY ASSURANCE TEAM

MILL TEST CERTIFICATE

EN 10204 3.1

End User	Works No.		Certificate Ref. No.	
	141112010		20150107-1026-1-013	1/4
Customer Name			Purcharge Order No.	

Specification	Sub-Section	Grade (TYPE)	Edition	Addenda	UNS	Finish
ASTM A240M/48OM		304			S30400	No. 1

Head Treatment – Solution Annealed		Condition of Plate		Mps No.
1080	°C WATER COOLING	GOOD		
Intergranular Corrosion Test		UT Test Spec		

No.	Bungle No.	Request No.	Heat No.	Plate No.	Product SIZE (mm) T	W	L	Q`ty (sh)	Weight (kg)	AGS	Roughness	Permeability (u)	POSITION	DIRECTION	SIZE	Impact Test (charpy) V-notch °C Min J 1st	2nd	3rd	Avg
1			SD10586	11P8644878-1-01	35	2.438	7.000	1	4.820.0				T						
2			SD10586	11P8644878-1-02	35	2.438	7.000	1	4.820.0				B						
3			SD10570	11P8644899-1-01	25	2.000	6.096	1	2.460.0				T						
4			SD10570	11P8644899-1-02	25	2.000	6.096	1	2.460.0				B						
5			SD10570	11P8644901-1-01	25	2.000	6.096	1	2.460.0				T						
													B						
				Sub Total	5			17.020.0		Grand Total		18		49.508.0					

No.	DIVISION	Chemical Composition (%) Cont	C	Si	Mn	P	S	Cr	Ni	Mo	N	Co	Cu	Ti	Nb	Practice A	E	B	C	POSITION	DIRECTION	GL	Tensile Test (1N/m=1MPa) Y.S 0.2%	Y.S 1.0%	T.S	EL	Ra	Hardness HRB
		Max	0.070	0.75	2.00	0.045	0.030	19.50	10.50		0.100												N/mm2			%	%	92
		Min						17.50	8.00														205		515	40		
1	L		0.066	0.48	0.96	0.030	0.002	18.42	8.10	0.18	0.034	0.18	0.29							T	C	E	258.3	322.3	653.7	57.0		81.5
2	P		0.066	0.48	0.96	0.030	0.002	18.42	8.10	0.18	0.034	0.18	0.29							B	C	E	258.3	322.3	653.7	57.0		81.5
3	L		0.050	0.48	0.97	0.031	0.002	18.10	8.05	0.19	0.032	0.16	0.34							T	C	E	242.8	306.2	646.5	54.9		79.3
4	P		0.050	0.48	0.97	0.031	0.002	18.10	8.05	0.29			0.34							B	C	E	242.8	306.2	646.5	54.9		79.3
5	L		0.49	0.49	0.98	0.031	0.001	18.20		0.19	0.038	0.16	0.34							T	C	E	255.9	316.3	652.1	54.9		60.4
	P																			B								

Remarks	
*P62501,02 UP HOLDER	
Manufacture Info.	

Note

NO REPAIR WELDING HAS BEEN PERFORMED ON THE MATERIAL

Boneyer or Inspector to:

Position	T: Top	N: Middle	B: Bottom	Division	L: Ledle Analysis	P: Product Analysis
Direction	L: Longitudinal	C: Crossfire (Transverse)		AGS	ASTM E112 A, G, S TEST	

GL (Gauge Lengh) ASTM E8

Rectangle : A: 50mm B: 70mm C: 100 mm D: 5.65VA
Round : E: 50mm F: 70mm G: 5.65VA

Impact Test Specimen Size

1:10X10mm 2:7.5x10mm 3:5.0X10mm 4:2.5X10mm
(1:0.39X0.39 inch 2:0.3X0.39 inch 3:0.2X0.39 inch 4:0.1X0.39 inch

10% Oxalic Acid Etch Text – ASTM A262 Practice A

1: Step Structure 2: Dual Structure
3: Ditch Structure 4: Isolated Ferrite Roots
5: Interdendritic Ditchs 6: End Grain Pilling 1.11

CU-CU Sulfate-Sulfuric Acid TEST – ASTM A262 Practice E

G: GOOD N: NOT GOOD

General Manager of DKC Quality

We hereby certify that the material herein has been made in accordance with the order and specification

INSPECTION-CERTIFICATE

CUSTOMER :

SUPPLIER :

PURCHASE ORDER NO :

CERT. NO. :

MANUFACTURE NO. :

STEEL GRADE :	304/304L	SPECIFICATION:	ASTM A479MOD	MELTING PROCESS :	E.A.F.
SIZE:	DIAMETER 150 MM	EDITION/ADDENDA:	14		V.O.D.
ARTICLE :	ROUND BARS	STATE OF DELIVERY :	SOLUTION TREATMENT		STRAND CASTING
			ROUGH TURNED		

Heat No.		Chemical Composition(wt.%)														Non-Metallic Inclusion Test							
		C	Si	Mn	P	S	Ni	Cr	Mo	Cu						ASTM-E45							
Spec.	MIN.						8.000	18.000															
	MAX.	.030	1.000	2.000	.0450	.0300	10.500	20.000								TA	TB	TC	TD	HA	HB	HC	HD
N08703		.009	.414	1.602	.0337	.0234	8.547	18.024	.202	.567						2.0	0.0	1.5	1.0	0.0	0.0	0.0	0.0

Test No. (Lot No.)		Tensile Properties					Hardness		Impact Test			Decarburized Depth (mm)		Grain Size No.	Additional Tests
		Y.S.(KSI)		T.S. (KSI)	EL. (%)	R.A. (*)	Body HB					TOTAL	FERR.		Ultrasonic test: GOOD
		0.2%													
Spec.	MIN.	30.0		75.0	30.0	40.0									
	MAX.														
4000-1		41.0		79.0	63.0	78.0	135							2.0	

Lot No.	Bundle No.	Length (ram)	Number of Qt.	Weight		Additional Tests / Remarks
				Kg	lb	
5041194000	50411940001	5785 - 5895	2	1.648	3.633	Corrosion Test: GOOD Solution : 1050°C. 3:00Hrs. WATER cooling ISO 15156 (Hardness Only) EN 10204 Type 3.1 /NO REPAIR WELDING. FREE FROM MERCURY CONTAMINATIO * P62509. 09 HOLDER
		TOTAL	2	1.648	3.633	We here certify, that the material described above has been tested and complies with the terms of the order contract. Our quality system is certified in accordance with ISO 9001: 2008 by DNV.

Team Manager. Quality Assurance Team

DATE : JUN.01. 2015