

INSPECTION CERTIFICATE

CERTIFICATE NO. : OYYC2711 ✓

PAGE : 1/2 DATE : 2022-02-18

CUSTOMER :
ORDER NO. :
SHIPPER : SUMITOMO CORPORATION 057 KEA-5037/4 2-845-N3-5-1-AA2H-01 ✓
COMMODITY : SEAMLESS GOLD FINISHED HIGH ALLOY TUBING PLAIN END
STANDARD : SM2535-110 (NIPPON STEEL STD.)
SPECIFICATION : TSP-4550R8
MILL WORK NO. : OYYC2711 O.D.:5inch W.T.:15.00lb/ft LENGTH:MIN.11.61m MAX.12.21m
QUANTITY:204pcs. TOTAL LENGTH:2471.98m MASS:55180kg

HEAT NO. : F124091 F127011 F12A014
PRODUCTS PCS. : 22 18 164

HEAT TREATMENT : SOLUTION FOLLOWED BY COLD DRAWING

CHEMICAL COMPOSITION(%)

SPEC. MIN. MAX.	HEAT NO.	*1	C Si Mn P S Cu Cr Ni Mo Fe									
			*3							*2	*2	
		R	-	-	-	-	-	-	240	295	250	-
		R	30	50	100	3	3	150	270	365	400	*REM
	F124091	L	19	28	60	2	0	80	250	304	285	4003
		P	19	29	61	2	0	78	251	308	281	3957
	F127011	P	20	30	61	2	0	78	251	308	282	3955
		L	20	27	60	2	0	79	252	307	284	3956
		P	19	29	61	2	0	77	250	309	279	3960
		P	20	29	60	2	0	77	250	307	279	3981
	F12A014	L	18	27	63	2	0	85	248	303	287	4024
		P	18	29	65	2	0	83	250	305	286	3983
		P	18	29	65	2	0	86	250	307	285	3961

*1 R:LADLE & PRODUCT ANALYSIS L:LADLE ANALYSIS P:PRODUCT ANALYSIS *2:X10 *3:X1000 OTHER:X100 *REM:REMAINDER

TENSILE TEST

SPEC. MIN. MAX.	HEAT NO.	LOT NO.	*1 *2 *3	YS		TS	EL
				*4	*4	%	
			L B	P 110.0	P 115.0	12	
			L B	P 140.0	P -	-	
	F124091	B04-6	L B T	P 116.8	P 128.2	20	
	F127011	C01-6	L B B	P 117.7	P 128.2	22	
	F12A014	A06-6	L B B	P 118.3	P 129.5	20	
		A20-1	L B B	P 118.0	P 128.7	21	
		A24-5	L B T	P 117.2	P 127.8	21	
		A25-4	L B T	P 116.3	P 127.3	22	

TYPE OF SPECIMEN:STRIP 1in. WIDTH *1 SAMPLING DIRECTION L:LONGITUDINAL *2 SAMPLING POSITION B:BASE METAL
*3 SAMPLING LOCATION T:TOP B:BOTTOM *4 UNIT P:ksi GAUGE LENGTH:2.0in. KIND OF YS:0.2% OFFSET

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.



NOBUYUKI HISAMUNE

SENIOR MANAGER
QUALITY ASSURANCE DEPARTMENT

<Notice>

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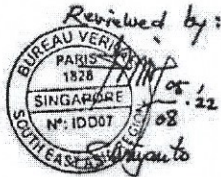
NO.315483A22

HARDNESS TEST(HRC)

SPEC. MIN. MAX.	LOT NO. -P NO.	*1	*2	*3	*4	*5	*V.A.		
		B	C		-	-			
		B	C		-	-	-		
		B	C		-	32.0	3		
HEAT NO. /	LOT NO. -P NO.			AVG.					
				QUAD -RANT	MID WALL IMPRESSION NO.				AVG.
					(1)	(2)	(3)	AVG.	
F124091	BO4-6	B	C	T	26.6	A 26.8	26.4	26.7	26.6
F127011	CO1-6	B	C	R	26.4	A 26.5	26.2	26.5	26.4
F12A014	A06-6	B	C	B	26.9	A 26.9	27.1	26.8	26.9
	A20-1	B	C	B	27.5	A 27.4	27.5	27.6	27.5
	A24-5	B	C	T	26.6	A 26.8	26.8	26.2	26.6
	A25-4	B	C	T	26.4	A 26.3	26.9	26.0	26.4
		*ALL			26.7				

*1 SAMPLING POSITION B:BASE METAL *2 LOCATION C:CROSS SECTION *3 SAMPLING LOCATION T:TOP R:BOTTOM *4 EACH
 *5 AVERAGE *V.A.:VARIATION AVERAGE MAX.-MIN. * ALL:ALL AVG.

MICRO STRUCTURE TEST: ACCEPTABLE ✓
 SIGMA PHASE EXAMINATION: 0.0%
 FLATTENING TEST: ACCEPTABLE (FLATTENING HEIGHT: 3.425in.) ✓
 VISUAL & DIMENSIONS*: ACCEPTABLE ✓
 * DIAMETER, WALL THICKNESS, LENGTH, STRAIGHTNESS, MASS AND OUT-OF-SQUARENESS ✓
 DRIFT TEST: ACCEPTABLE ✓
 HYDROSTATIC TEST 10000psi X 5sec.: GUARANTEED BUT NOT CONDUCTED ✓
 ULTRASONIC EXAMINATION:ACCEPTABLE
 APPLICABLE STANDARD: API 5CRA
 REFERENCE STANDARD : L2 EXTERNAL & INTERNAL LONGITUDINAL & TRANSVERSE ✓
 NOTCH LENGTH1.0inch WIDTH0.020inch :ACCEPTABLE
 LAMINATION CHECK FLAT BOTTOMED ROUND HOLE (≤0.41inch²) :ACCEPTABLE ✓
 ULTRASONIC WALL THICKNESS CHECK :ACCEPTABLE
 MATERIAL NO.
 1056-7104
 21-MSCE-01-136820



WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

N. Hisamune

NOBUYUKI HISAMUNE
 SENIOR MANAGER
 QUALITY ASSURANCE DEPARTMENT

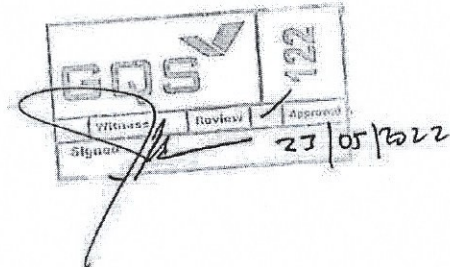
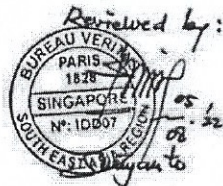
NO.315483A22

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TEST LOT LIST

DOCUMENT NO. : 0YYC2711T PAGE : 1/1 DATE : 2022-02-18
 CERTIFICATE NO. : 0YYC2711 ✓

HEAT TREATMENT BATCH	HEAT NUMBER	TEST LOT	QUANTITY (pcs.)	HANDLING LOT	QUANTITY AT HEAT TREATED (pcs.)
45801121301	F124091	4N1K97	24	B04	6
				B02	6
				B01	6
				B03	6
	F127011	4N1L35	18	C01	6
				C03	3
				C02	6
				C04	3
	F12A014	4N1K73	48	A24	6
				A27	6
				A07	6
				A08	6
				A11	6
				A13	6
				A10	6
				A15	6
		4N1K39	48	A14	6
				A03	6
				A02	6
				A06	6
				A05	6
				A16	6
				A01	6
				A21	6
	4N1K44	48	A04	6	
			A17	6	
			A19	6	
A25			6		
A12			6		
A26			6		
4N1R58	22	A23	6		
		A22	6		
		A09	6		
		A28	4		
				A18	6
				A20	6



N/ks NOBUYUKI HISAMUNE
 SENIOR MANAGER
 QUALITY ASSURANCE DEPARTMENT

INSPECTION CERTIFICATE

CERTIFICATE NO. :OYYC2330

PAGE : 1/2 DATE :2020-02-10

CUSTOMER :
 ORDER NO. :
 SHIPPER :SUMITOMO CORPORATION 057 KEA-5053/2 0-845-N3-5-1-AA2A-01
 COMMODITY :SEAMLESS COLD FINISHED HIGH ALLOY COUPLING STOCK
 STANDARD :SM2535-110 (NIPPON STEEL STD.)
 SPECIFICATION :TSP-4550RO
 MILL WORK NO. :OYYC2330 O.D.:142.75mm W.T.:18.55mm LENGTH:MIN.3.05m MAX.6.71m QUANTITY:23pcs.
 TOTAL LENGTH:149.79m MASS:8749kg

HEAT NO. :F929016 F929043
 PRODUCTS PCS. :3 20

HEAT TREATMENT :SOLUTION FOLLOWED BY COLD DRAWING

CHEMICAL COMPOSITION(%)

			C	Si	Mn	P	S	Cu	Cr	Ni	Mo	Fe
		*1	*3						*2	*2		
SPEC. MIN.		R	-	-	-	-	-	-	240	295	250	-
MAX.		R	30	50	100	3	3	150	270	365	400	*REM
HEAT NO.												
F929016		L	20	26	61	2	0	80	248	304	282	4027
		P	19	28	63	2	0	79	247	308	278	3998
		P	19	27	63	2	0	79	246	309	277	4000
F929043		L	20	25	62	2	0	81	250	304	283	4005
		P	20	26	63	2	0	80	250	308	278	3969
		P	20	26	63	2	0	79	250	308	280	3968

*1 R:LADLE & PRODUCT ANALYSIS L:LADLE ANALYSIS P:PRODUCT ANALYSIS *2:X10 *3:X1000 OTHER:X100 *REM:REMAINDER


TENSILE TEST

			YS	TS	EL
		*1 *2 *3	*4	*4	%
SPEC. MIN.	LOT NO.	L B	P 110.0	P 115.0	12
MAX.	-P NO.	L B	P 140.0	P -	-
HEAT NO.					
F929016	BO1-3	L B T	P 117.8	P 125.0	23
F929043	A01-5	L B T	P 117.3	P 125.1	23
	A02-5	L B B	P 119.6	P 127.4	22

TYPE OF SPECIMEN:ROUND BAR 0.5in. DIAMETER *1 SAMPLING DIRECTION L:LONGITUDINAL
 *2 SAMPLING POSITION B:BASE METAL *3 SAMPLING LOCATION T:TOP B:BOTTOM *4 UNIT P:ksi GAUGE LENGTH:2.0in.
 KIND OF YS:0.2% OFFSET

GQS 122
 Witness / Review / Approved
 Signed: 05 08 2022

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

Revised by:

 05.22
 08

A. Uehira AKIHIRO UEHIRA

HEAD OF DEPARTMENT
 QUALITY ASSURANCE DEPARTMENT


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 Fax. No. : +81-3-6867-4926 E-mail:pipe-ipp@jp.nipponsteel.com

TEST LOT LIST

DOCUMENT NO. : OYYC2330T PAGE : 1/1 DATE : 2020-02-10
 CERTIFICATE NO. : OYYC2330

HEAT TREATMENT BATCH	HEAT NUMBER	TEST LOT	QUANTITY (pcs.)	HANDLING LOT	QUANTITY AT HEAT TREATED (pcs.)
45109111301	F929015	4NCK29	3	B01	3
	F929043	4NCK43	10	A01	6
					A03
			10	A04	4
			4NCK32		A02

GQS 122
 Witness Review Approved
 Signed *[Signature]* 05 08 2022

Reviewed by:

[Signature] 05.08.22

A. Uehira
 AKIHIRO UEHIRA
 HEAD OF DEPARTMENT
 QUALITY ASSURANCE DEPARTMENT

HARDNESS TEST(HRC)

		*1*2 *3	*4 *5													*V.A.
SPEC. MIN.		B C														-
MAX.		B C														4
HEAT NO.	LOT NO. -P NO.		AVG.	OUTER WALL				MID WALL				INNER WALL				
				QUAD	IMPRESSION NO.			IMPRESSION NO.			IMPRESSION NO.					
				-RANT	(1)	(2)	(3)	AVG.	(1)	(2)	(3)	AVG.	(1)	(2)	(3)	AVG.
F929016	BO1-3	B C T	27.6	A 26.8	27.0	27.0	26.9	28.0	27.8	28.1	28.0	27.4	27.6	28.3	27.8	1.1
F929043	A01-5	B C T	26.3	A 25.0	25.8	25.9	25.6	26.6	26.7	27.0	26.8	27.0	26.6	26.5	26.7	1.2
	A02-5	B C B	28.2	A 27.3	27.2	28.0	27.5	29.1	29.4	29.0	29.2	28.1	27.9	27.9	28.0	1.7
		*ALL	27.4													

*1 SAMPLING POSITION B:BASE METAL *2 LOCATION C:CROSS SECTION *3 SAMPLING LOCATION T:TOP B:BOTTOM *4 EACH
 *5 AVERAGE *V.A.:VARIATION AVERAGE MAX.-MIN. * ALL:ALL AVG.

IMPACT TEST(+14.0°F 2mm V-Notch 10X10)

		*1*2*3	*4 *5	AVG			*4 *5	AVG				
SPEC. MIN.	LOT NO.	T B	E F	*6	16/24			S %	*7	-		
MAX.	-P NO.	T B	E F		-/-			S %		-		
				[1]	[2]	[3]		[1]	[2]	[3]		
HEAT NO. F929016	BO1-2	T B B	E F	151	155	154	153	S %	100	100	100	100
	BO1-2	T B T	E F	156	166	168	163	S %	100	100	100	100
	BO1-3	T B B	E F	167	160	158	162	S %	100	100	100	100
F929043	BO1-3	T B T	E F	158	157	167	161	S %	100	100	100	100
	A01-4	T B B	E F	176	174	175	175	S %	100	100	100	100
	A01-4	T B T	E F	184	175	178	179	S %	100	100	100	100
	A01-5	T B B	E F	179	184	184	182	S %	100	100	100	100
	A01-5	T B T	E F	179	167	173	173	S %	100	100	100	100
	A02-4	T B B	E F	183	176	172	177	S %	100	100	100	100
	A02-4	T B T	E F	173	178	172	174	S %	100	100	100	100
	A02-5	T B B	E F	183	188	184	185	S %	100	100	100	100
	A02-5	T B T	E F	194	186	185	188	S %	100	100	100	100

[1] [2] [3]: SPECIMEN NO.
 ABSORBED ENERGY *6:VALUE OF ONE PIECE/EACH VALUE OF TWO PIECES AVG:AVERAGE VALUE OF ONE SET(3 PIECES)
 SHEAR AREA *7:VALUE OF ONE PIECE AVG:AVERAGE VALUE OF ONE SET(3 PIECES)
 *1 SAMPLING DIRECTION T:TRANSVERSE *2 SAMPLING POSITION B:BASE METAL *3 SAMPLING LOCATION T:TOP B:BOTTOM
 *4 E:ABSORBED ENERGY S:SHEAR AREA *5 UNIT F:ft-lbf %:%

MICRO STRUCTURE TEST: ACCEPTABLE

SIGMA PHASE EXAMINATION : 0.0%

VISUAL & DIMENSIONAL REQUIREMENT*: ACCEPTABLE

*DIAMETER, WALL THICKNESS, LENGTH, STRAIGHTNESS AND OUT-OF-SQUARENESS

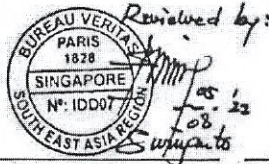
ULTRASONIC EXAMINATION STANDARD PRACTICE/REFERENCE DISCONTINUITIES API 5CRA L2: ACCEPTABLE

L2 : 5%WT MAX. X 0.040in.W MAX. X 2.000in.L MAX. LONGITUDINAL, TRANSVERSE, INTERNAL AND EXTERNAL NOTCHES

MATERIAL NO.

1056-7104

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

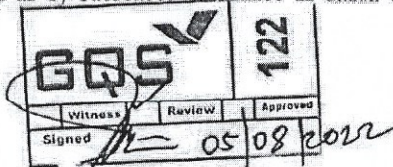


A. Uehira
 AKIHIRO UEHIRA
 HEAD OF DEPARTMENT
 QUALITY ASSURANCE DEPARTMENT

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Fax. No. : +81-3-6867-4926 E-mail: pipe-ipp@jp.nipponsteel.com



NO.157329A20

INSPECTION CERTIFICATE

CERTIFICATE NO. :OYYC2710

PAGE : 1/2 DATE :2022-02-18

CUSTOMER :
ORDER NO. :
SHIPPER :SUMITOMO CORPORATION 057 KEA-5037/5 2-845-N3-5-1-AA2G-01
COMMODITY :SEAMLESS COLD FINISHED HIGH ALLOY COUPLING STOCK
STANDARD :SM2535-110 (NIPPON STEEL STD.)
SPECIFICATION :TSP-4550R8
MILL WORK NO. :OYYC2710 O.D.:142.75mm W.T.:18.55mm LENGTH:MIN.3.05m MAX.6.71m QUANTITY:7pcs.
TOTAL LENGTH:45.98m MASS:2686kg

HEAT NO. :F12A018
PRODUCTS PCS. :7

HEAT TREATMENT :SOLUTION FOLLOWED BY COLD DRAWING

CHEMICAL COMPOSITION(%)

		*1	C	Si	Mn	P	S	Cu	Cr	Ni	Mo	Pe
			*3						*2	*2		
SPEC. MIN.	R		-	-	-	-	-	-	240	295	250	-
MAX.	R		30	50	100	3	3	150	270	365	400	*REM
HEAT NO.		L	20	26	62	2	0	85	252	306	788	3955
F12A018		P	20	29	63	2	0	84	251	309	284	3936
		P	19	29	62	2	0	83	252	310	285	3917

*1 R:LADLE & PRODUCT ANALYSIS L:LADLE ANALYSIS P:PRODUCT ANALYSIS *2:X10 *3:X1000 OTHER:X100 *REM:REMAINDER

TENSILE TEST

		*1	*2	*3	YS	TS	EL
					*4	*4	%
SPEC. MIN.	LOT NO.	L	B		P 110.0	P 115.0	12
MAX.	-P NO.	L	B		P 140.0	P -	-
HEAT NO.		L	B	T	P 118.0	P 126.7	22
F12A018	A01-1	L	B	T	P 118.0	P 126.7	22

TYPE OF SPECIMEN:ROUND BAR 0.5in. DIAMETER *1 SAMPLING DIRECTION L:LONGITUDINAL
*2 SAMPLING POSITION B:BASE METAL *3 SAMPLING LOCATION T:TOP B:BOTTOM *4 UNIT P:ksi GAUGE LENGTH:2.0in.
KIND OF YS:0.2% OFFSET

HARDNESS TEST (HRC)

		*1	*2	*3	*4	*5	*V.A.
SPEC. MIN.		B	C		-	-	-
MAX.		B	C		-	32.0	4
					AVG.	OUTER WALL IMPRESSION NO.	MID WALL IMPRESSION NO.
	LOT NO.					QUAD	INNER WALL IMPRESSION NO.
	-P NO.					-RANT (1) (2) (3) AVG.	(1) (2) (3) AVG.
HEAT NO.		B	C	T	27.4	A 27.0 27.0 26.7 26.9 28.1	27.5 28.1 27.9 28.1 27.0 27.4 27.5 1.0
F12A018	A01-1	B	C	T	27.4		
		*ALL			27.4		

*1 SAMPLING POSITION B:BASE METAL *2 LOCATION C:CROSS SECTION *3 SAMPLING LOCATION T:TOP *4 EACH *5 AVERAGE
*V.A.:VARIATION AVERAGE MAX.-MIN. * ALL:ALL AVG.

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

122
05/08/2022
BUREAU VERITAS PARIS 1828 SINGAPORE N°:IDD07 SOUTHEAST ASIA
Reviewed by: [Signature]
NOBUYUKI HISANUNE
SENIOR MANAGER
QUALITY ASSURANCE DEPARTMENT

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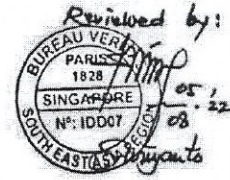
IMPACT TEST(+14.0°F 2mm V-Notch 10X10)

SPEC. MIN. MAX.	LOT NO. -P NO.	*1 *2 *3		*4 *5		AVG		*4 *5		AVG		
		T B	E F	E F	*6	16/24	24	S %	*7	-	-	
		T B	E F	[1]	[2]	[3]			[1]	[2]	[3]	
HEAT NO. F12A018	A01-1	T B B	E F	178	180	176	178	S %	100	100	100	100
	A01-1	T B T	E F	178	169	174	174	S %	100	100	100	100
	A01-2	T B B	E F	160	166	164	163	S %	100	100	100	100
	A01-2	T B T	E F	164	171	166	167	S %	100	100	100	100

[1] [2] [3]: SPECIMEN NO.
 ABSORBED ENERGY
 *6: ABSOLUTE SINGLE VALUE / SINGLE VALUE (ONE CAN BE BELOW AVG) AVG: AVERAGE VALUE OF ONE SET(3 PIECES)
 SHEAR AREA *7: VALUE OF ONE PIECE AVG: AVERAGE VALUE OF ONE SET(3 PIECES)
 *1 SAMPLING DIRECTION T: TRANSVERSE *2 SAMPLING POSITION B: BASE METAL *3 SAMPLING LOCATION T: TOP B: BOTTOM
 *4 E: ABSORBED ENERGY S: SHEAR AREA *5 UNIT F: ft·lbf %: %

MICRO STRUCTURE TEST: ACCEPTABLE
 SIGMA PHASE EXAMINATION : 0.0%
 VISUAL & DIMENSIONAL REQUIREMENT*: ACCEPTABLE
 *DIAMETER, WALL THICKNESS, LENGTH, STRAIGHTNESS
 ULTRASONIC EXAMINATION: ACCEPTABLE
 APPLICABLE STANDARD: API 5CRA
 REFERENCE STANDARD : L2 EXTERNAL & INTERNAL LONGITUDINAL & TRANSVERSE
 NOTCH LENGTH 1.0inch WIDTH 0.020inch : ACCEPTABLE
 LAMINATION CHECK FLAT BOTTOMED ROUND HOLE (≤0.4inch²) : ACCEPTABLE
 ULTRASONIC WALL THICKNESS CHECK : ACCEPTABLE
 MATERIAL NO.
 1056-7104

GOS		122
Witness	Review	Approved
Signed	05 08 2022	



WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

N. Hisamune

NOBUYUKI HISAMUNE

SENIOR MANAGER
 QUALITY ASSURANCE DEPARTMENT

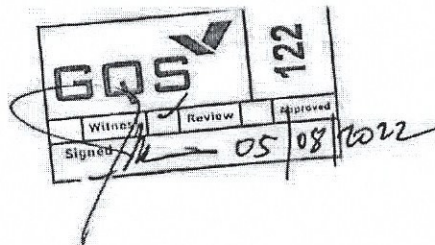
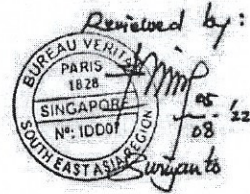
NO. 315484A22

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TEST LOT LIST

DOCUMENT NO. : OYYC2710T PAGE : 1/1 DATE : 2022-02-18
 CERTIFICATE NO. : OYYC2710

HEAT TREATMENT BATCH	HEAT NUMBER	TEST LOT	QUANTITY (pcs.)	HANDLING LOT	QUANTITY AT HEAT TREATED (pcs.)
45101112702	F12A018	4NCR93	8	A01	4
				A02	4



N/ks

NOBUYUKI HISAMUNE
 SENIOR MANAGER
 QUALITY ASSURANCE DEPARTMENT

INSPECTION CERTIFICATE

CERTIFICATE NO. :OYYC2454

PAGE : 1/2 DATE :2020-10-15

CUSTOMER :
ORDER NO. :
SHIPPER :SUMITOMO CORPORATION Q57 KEA-5801/2 0-845-N3-5-9-AA25-01
COMMODITY :SEAMLESS COLD FINISHED HIGH ALLOY COUPLING STOCK
STANDARD :SM2535-110 (NIPPON STEEL STD.)
SPECIFICATION :TSP-4550R2
MILL WORK NO. :OYYC2454 O.D.:142.75mm W.T.:18.55mm LENGTH:MIN.3.05m MAX.6.71m QUANTITY:17pcs.
TOTAL LENGTH:111.67m MASS:6523kg

HEAT NO. :FO25020
PRODUCTS PCS. :17

HEAT TREATMENT :SOLUTION FOLLOWED BY COLD DRAWING

CHEMICAL COMPOSITION(%)

		*1	C	Si	Mn	P	S	Cu	Cr	Ni	Mo	Fe
			*3						*2	*2		
SPEC. MIN.	R		-	-	-	-	-	-	240	295	250	-
MAX.	R		30	50	100	3	3	150	270	365	400	*REM
HEAT NO.												
FO25020	L		20	26	62	2	0	83	250	304	285	4000
	P		18	28	63	2	0	81	251	307	281	3963
	P		19	29	64	2	0	81	251	306	281	3971

*1 R:LADLE & PRODUCT ANALYSIS L:LADLE ANALYSIS P:PRODUCT ANALYSIS *2:X10 *3:X1000 OTHER:X100 *REM:REMAINDER

TENSILE TEST

		*1	*2	*3	YS	TS	EL
					*4	*4	%
SPEC. MIN.	LOT NO.	L	B		P 110.0	P 115.0	12
MAX.	-P NO.	L	B		P 140.0	P -	-
HEAT NO.							
FO25020	A01-2	L	B	T	P 116.2	P 122.9	23
	A02-2	L	B	T	P 117.3	P 123.4	22
	A03-1	L	B	B	P 119.6	P 126.2	22

TYPE OF SPECIMEN:ROUND BAR 0.5in. DIAMETER *1 SAMPLING DIRECTION L:LONGITUDINAL
*2 SAMPLING POSITION B:BASE METAL *3 SAMPLING LOCATION T:TOP B:BOTTOM *4 UNIT P:ksi GAUGE LENGTH:2.0in.
KIND OF YS:0.2% OFFSET

HARDNESS TEST(HRC)

		*1	*2	*3	*4	*5	*V.A.	
SPEC. MIN.		B	C		-	-	-	
MAX.		B	C		-	32.0	4	
					AVG.	OUTER WALL	MID WALL	INNER WALL
					QUAD	IMPRESSION NO.	IMPRESSION NO.	IMPRESSION NO.
					-RANT	(1) (2) (3) AVG.	(1) (2) (3) AVG.	(1) (2) (3) AVG.
HEAT NO.	LOT NO.	B	C	T	26.6	A 26.3 26.6 26.0 26.3	27.1 26.9 27.0 27.0	26.4 25.9 27.0 26.4
	-P NO.	B	C	T	27.4	A 26.2 26.9 26.4 26.5	27.3 28.0 28.9 28.1	27.3 27.8 27.5 27.5
FO25020	A01-2	B	C	T	26.6	A 26.3 26.6 26.0 26.3	27.1 26.9 27.0 27.0	26.4 25.9 27.0 26.4
	A02-2	B	C	T	27.4	A 26.2 26.9 26.4 26.5	27.3 28.0 28.9 28.1	27.3 27.8 27.5 27.5

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

GQS 122

Witness	Review	Approved
Signed		

05/09/2022

Reviewed by:

BUREAU VERITAS
PARIS 1828
SINGAPORE
N° 10007
SOUTHEAST ASIA REGION

05.08.22
Suryanto

A. Uehira
AKIHIRO UEHIRA
SENIOR MANAGER
QUALITY ASSURANCE DEPARTMENT

Notice: Modification to or unauthorized use of this certificate is strictly prohibited. If you have any questions on the authenticity of this certificate, you can contact us by E-mail. pipe-ipp@jp.nipponsteel.com . NO.218051A20

HARDNESS TEST(HRC)

		*1 *2 *3	*4 *5											*V.A.			
SPEC. MIN. MAX.		B C	- -											-			
		B C	- 32.0											4			
HEAT NO.	LOT NO. -P NO.		AVG.	OUTER WALL				MID WALL				INNER WALL					
				QUAD	IMPRESSION NO.			IMPRESSION NO.			IMPRESSION NO.						
				-RANT	(1)	(2)	(3)	AVG.	(1)	(2)	(3)	AVG.	(1)	(2)	(3)	AVG.	
FO25020	A03-1	B C B	27.7	A	26.7	27.3	26.9	27.0	28.0	28.7	28.3	28.3	27.6	27.7	28.0	27.8	1.3
		*ALL	27.2														

*1 SAMPLING POSITION B:BASE METAL *2 LOCATION C:CROSS SECTION *3 SAMPLING LOCATION T:TOP B:BOTTOM *4 EACH
 *5 AVERAGE *V.A.:VARIATION AVERAGE MAX,-MIN. * ALL:ALL AVG.

IMPACT TEST(+14.0 F 2mm V-Notch 10X10)

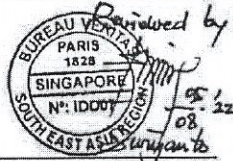
		*1 *2 *3	*4 *5	AVG			*4 *5	AVG				
SPEC. MIN. MAX.	LOT NO. -P NO.	T B	E F	*6	16/24	24	S %	*7	-	-		
		T B	E F		-/-	-	S %		-	-		
				[1]	[2]	[3]		[1]	[2]	[3]		
HEAT NO. FO25020	A01-2	T B B	E F	174	176	169	173	S %	100	100	100	100
	A01-2	T B T	E F	175	173	173	174	S %	100	100	100	100
	A01-3	T B B	E F	150	177	169	165	S %	100	100	100	100
	A01-3	T B T	E F	171	174	181	175	S %	100	100	100	100
	A02-2	T B B	E F	166	181	178	175	S %	100	100	100	100
	A02-2	T B T	E F	182	173	178	178	S %	100	100	100	100
	A02-3	T B B	E F	172	174	166	171	S %	100	100	100	100
	A02-3	T B T	E F	175	171	171	172	S %	100	100	100	100
	A03-1	T B B	E F	170	169	176	172	S %	100	100	100	100
	A03-1	T B T	E F	164	177	179	173	S %	100	100	100	100
	A03-3	T B B	E F	175	184	185	181	S %	100	100	100	100
	A03-3	T B T	E F	179	177	169	175	S %	100	100	100	100

[1] [2] [3]: SPECIMEN NO.
 ABSORBED ENERGY
 *6:ABSOLUTE SINGLE VALUE / SINGLE VALUE (ONE CAN BE BELOW AVG) AVG:AVERAGE VALUE OF ONE SET(3 PIECES)
 SHEAR AREA *7:VALUE OF ONE PIECE AVG:AVERAGE VALUE OF ONE SET(3 PIECES)
 *1 SAMPLING DIRECTION T:TRANSVERSE *2 SAMPLING POSITION B:BASE METAL *3 SAMPLING LOCATION T:TOP B:BOTTOM
 *4 E:ABSORBED ENERGY S:SHEAR AREA *5 UNIT F:ft·lbf %:

MICRO STRUCTURE TEST: ACCEPTABLE
 SIGMA PHASE EXAMINATION : 0.0%
 VISUAL & DIMENSIONAL REQUIREMENT*: ACCEPTABLE
 *DIAMETER, WALL THICKNESS, LENGTH, STRAIGHTNESS AND OUT-OF-SQUARENESS
 ULTRASONIC EXAMINATION STANDARD PRACTICE/REFERENCE DISCONTINUITIES API 5CRA L2: ACCEPTABLE
 L2 : 5%WT MAX. X 0.040in.W MAX. X 2.000in.L MAX. LONGITUDINAL, TRANSVERSE, INTERNAL AND EXTERNAL NOTCHES
 MATERIAL NO.
 1056-7104
 20-MSCE-01-125471

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

GQS		122
Witness	Review	
Signed	05/08/2022	Approved



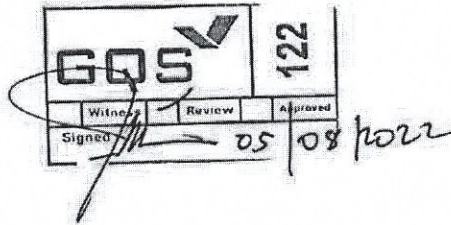
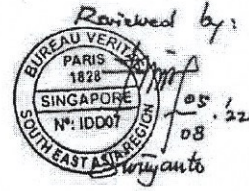
A. Uehira AKIHIRO UEHIRA
 SENIOR MANAGER
 QUALITY ASSURANCE DEPARTMENT

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TEST LOT LIST

DOCUMENT NO. : OYYC2454T PAGE : 1/1 DATE : 2020-10-15
 CERTIFICATE NO. : OYYC2454

HEAT TREATMENT BATCH	HEAT NUMBER	TEST LOT	QUANTITY (pes.)	HANDLING LOT	QUANTITY AT HEAT TREATED(pes.)
45100081002	F025020	4N9329	6	A01	6
		4N9312	6	A02	6
		4N9321	5	A03	5



A. Uehira

AKIHIRO UEHIRA
 SENIOR MANAGER
 QUALITY ASSURANCE DEPARTMENT

Item 3



NIPPON STEEL CORPORATION
AMAGASAKI WORKS
1, NISHINO-CHO, HIGASHI-MUKOJIMA, AMAGASAKI, JAPAN

INSPECTION CERTIFICATE

CERTIFICATE NO. :OYYC2331

PAGE : 1/3 DATE :2020-02-12

CUSTOMER :
ORDER NO. :
SHIPPER :SUMITOMO CORPORATION 057 KEA-5053/1 0-845-N3-5-1-AA29-01
COMMODITY :SEAMLESS COLD FINISHED HIGH ALLOY TUBING PLAIN END
STANDARD :SM2535-110 (NIPPON STEEL STD.)
SPECIFICATION :TSP-4550RO
MILL WORK NO. :OYYC2331

O.D.:5inch W.T.:15.001b/ft LENGTH:MIN.11.61m MAX.12.21m
QUANTITY:460pcs, TOTAL LENGTH:5593.08m MASS:124851kg

HEAT NO. :F929038 F929039 F929040 F929041 F929042 F929043 F929060
PRODUCTS PCS. :69 78 20 207 54 30 1
HEAT NO. :F92A023
PRODUCTS PCS. :1

HEAT TREATMENT :SOLUTION FOLLOWED BY COLD DRAWING

CHEMICAL COMPOSITION(%)

SPEC. MIN. MAX.	#1	C	Si	Mn	P	S	Cu	Cr	NI	Mo	Fe
		*3						*2	*2		
	R	-	-	-	-	-	-	240	295	250	-
	R	30	50	100	3	3	150	270	365	400	*REM
HEAT NO. F929038	L	20	26	61	2	0	79	247	303	283	4047
	P	18	28	61	2	0	77	248	308	278	3992
	P	18	28	62	2	0	77	248	306	281	4008
F929039	L	18	28	62	2	0	82	250	305	283	3991
	P	17	30	62	2	0	79	249	308	279	3976
	P	20	31	63	2	0	81	249	306	282	3989
F929040	L	17	25	62	2	0	81	248	304	283	4025
	P	17	27	63	2	0	81	248	306	281	4004
	P	17	27	62	2	0	79	247	307	278	4010
F929041	L	17	26	65	2	0	89	251	304	281	3985
	P	18	28	67	2	0	89	251	306	279	3963
	P	17	28	67	2	0	88	250	305	277	3986
F929042	L	18	29	65	2	0	82	250	306	282	3978
	P	18	30	65	2	0	80	248	307	277	3994
	P	18	31	66	2	0	80	248	308	279	3980
F929043	L	20	25	62	2	0	81	250	304	283	4005
	P	20	26	63	2	0	79	249	306	278	4000
	P	19	26	63	2	0	79	248	306	278	4010
F929060	L	19	26	55	2	0	79	248	305	285	4021
	P	19	29	56	2	0	77	248	308	284	3990
F92A023	L	19	32	58	2	0	80	247	304	284	4032
	P	19	34	59	2	0	79	245	306	281	4033

*1 R:LADLE & PRODUCT ANALYSIS L:LADLE ANALYSIS P:PRODUCT ANALYSIS *2:X10 *3:X1000 OTHER:X100 *REM:REMAINDER

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

Sumitomo
2/17/2020
Sumitomo /BV

Yon Heon
2/17/20
AKIHIRO UEHIRA
HEAD OF DEPARTMENT
QUALITY ASSURANCE DEPARTMENT

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Fax. No. : +81-3-6867-4926 E-mail: pipe-ipp@jp.nipponsteel.com NO. 157822A20

TENSILE TEST

SPEC. MIN. MAX.	LOT NO. -P NO.	#1 #2 #3		YS	TS	EL
		L B	L B	*4	*4	%
		L B	L B	P 110.0	P 115.0	12
		L B	L B	P 140.0	P -	-
HEAT NO.		L B B	L B B	P 128.4	P 131.5	19
F929038	G01-5	L B T	L B T	P 118.2	P 127.7	21
	G17-5	L B T	L B T	P 116.6	P 126.1	22
	G21A-1	L B T	L B T	P 125.2	P 128.9	21
F929039	D05-4	L B B	L B B	P 119.0	P 129.6	20
	D10-6	L B T	L B T	P 124.2	P 127.9	21
F929040	E01-1	L B T	L B T	P 123.9	P 128.2	20
F929041	A03-6	L B B	L B B	P 121.6	P 130.0	21
	A12-5	L B B	L B B	P 120.1	P 129.9	21
	A50-5	L B T	L B T	P 122.6	P 127.0	22
	A53-4	L B T	L B T	P 123.3	P 128.1	21
	A56-6	L B B	L B B	P 129.6	P 133.1	20
F929042	C02-6	L B T	L B T	P 124.1	P 128.3	21
	C09-1	L B B	L B B	P 129.9	P 132.9	19
F929043	D05-3	L B T	L B T	P 119.5	P 128.7	22
F929060	L01-1	L B B	L B B	P 121.5	P 130.8	20
F92A023	M01-1	L B B	L B B			

TYPE OF SPECIMEN: STRIP 1in. WIDTH #1 SAMPLING DIRECTION L: LONGITUDINAL #2 SAMPLING POSITION B: BASE METAL
#3 SAMPLING LOCATION T: TOP B: BOTTOM #4 UNIT P: ksi GAUGE LENGTH: 2.0in. KIND OF YS: 0.2% OFFSET

HARDNESS TEST (HRC)

SPEC. MIN. MAX.	LOT NO. -P NO.	#1 #2 #3		#4	#5	#V.A.			
		B C	B C	-	-	-			
		B C	B C	-	-	3			
		B C	B C	-	32.0				
HEAT NO.	LOT NO.			AVG.	MID WALL IMPRESSION NO.				
					QUAD	(1)	(2)	(3)	AVG.
					-RANT				
F929038	G01-5	B C	B	28.4	A	28.4	28.1	28.6	28.4
	G17-5	B C	T	27.7	A	27.5	27.9	27.7	27.7
	G21A-1	B C	T	26.3	A	26.1	26.7	26.1	26.3
F929039	D05-4	B C	T	27.6	A	27.5	27.5	27.9	27.6
	D10-6	B C	B	28.0	A	28.1	28.0	27.8	28.0
F929040	E01-1	B C	T	27.7	A	28.0	27.0	28.1	27.7
F929041	A03-6	B C	T	27.2	A	27.4	27.5	26.8	27.2
	A12-5	B C	B	27.7	A	27.3	28.0	27.7	27.7
	A50-5	B C	B	27.2	A	27.6	27.1	26.9	27.2
	A53-4	B C	T	27.2	A	26.9	27.4	27.4	27.2
	A56-6	B C	T	26.6	A	26.9	26.7	26.3	26.6
F929042	C02-6	B C	B	27.9	A	28.5	27.6	27.7	27.9
	C09-1	B C	T	27.8	A	28.0	27.7	27.8	27.8
F929043	D05-3	B C	B	28.5	A	28.6	28.5	28.3	28.5
F929060	L01-1	B C	T	28.2	A	28.2	27.6	28.7	28.2
F92A023	M01-1	B C	B	28.3	A	28.1	28.4	28.5	28.3

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

Ammp 2/17/2020
Suryanto 18V

Yan Hendri
AKIHIRO UEHARA
HEAD OF DEPARTMENT
QUALITY ASSURANCE DEPARTMENT

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Fax. No. : +81-3-6867-4926 E-mail: pipe-1ppe@nipponsteel.com NO. 157822A20



NIPPON STEEL CORPORATION
 AMAGASAKI WORKS
 1, NISHINO-CHO, HIGASHI-MUKOJIMA, AMAGASAKI, JAPAN

INSPECTION CERTIFICATE

CERTIFICATE NO. :OYYC2331

PAGE : 3/3 DATE :2020-02-12

		*ALL 27.6
*1 SAMPLING POSITION B:BASE METAL	*2 LOCATION C:CROSS SECTION	*3 SAMPLING LOCATION T:TOP B:BOTTOM
*4 EACH		
*5 AVERAGE *V.A.:VARIATION AVERAGE MAX.-MIN. * ALL:ALL AVG.		

MICRO STRUCTURE TEST: ACCEPTABLE
 SIGMA PHASE EXAMINATION : 0.0%
 FLATTENING TEST:ACCEPTABLE (FLATTENING HEIGHT: 3.425in.)
 DRIFT TEST: ACCEPTABLE
 HYDROSTATIC TEST 10000psi X 5sec. : GUARANTEED BUT NOT CONDUCTED
 VISUAL & DIMENSIONAL REQUIREMENT*: ACCEPTABLE
 *DIAMETER, WALL THICKNESS, LENGTH, STRAIGHTNESS AND OUT-OF-SQUARENESS
 ULTRASONIC EXAMINATION STANDARD PRACTICE/REFERENCE DISCONTINUITIES API 5CRA I.2: ACCEPTABLE
 I.2 : 5%WT MAX. X 0.040in.W MAX. X 2.000in.L MAX. LONGITUDINAL, TRANSVERSE, INTERNAL AND EXTERNAL NOTCHES
 MATERIAL NO.
 1056-7104

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

Amf
 2/17/2020
 Saito/BV

A. Uehira

Y. Uehira 2/17/2020
 Y. Uehira
 ARIHIRO UEHIRA
 Director

HEAD OF DEPARTMENT
 QUALITY ASSURANCE DEPARTMENT

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 This certification is intended only for products listed. Modification to or unauthorized use of this certification is strictly prohibited. Offences may be regarded as forgery of documents and be subject to criminal prosecution. If you have any questions on this certification, you can contact us by facsimile or e-mail as shown below:
 Fax. No. : +81-3-6867-4926 E-mail:pipe-ipp@jp.nipponsteel.com NO. 157822A20

TEST LOT LIST

DOCUMENT NO. : OYYC2331T
 CERTIFICATE NO. : OYYC2331

PAGE : 1/2 DATE : 2020-02-12

HEAT TREATMENT BATCH	HEAT NUMBER	TEST LOT	QUANTITY (pcs.)	HANDLING LOT	QUANTITY AT HEAT TREATED (pcs.)
45109112801A	F929038	4NCB00	44	G04	3
				G22	4
				G17	6
				G18	6
				G14	6
				G16	6
				G03	4
				G21	3
				G15	6
				G19	6
				G02	6
				G01	6
				G20	6
				F929040	4NCG09
	E04	4			
	E01	6			
	E02	6			
	F929042	4NCF18	48	C02	6
				C04	6
				C05	6
				C03	6
				C06	6
				C07	6
				C08	6
				C01	6
				C09	6
				F929043	4NCE81
D03	6				
D02	6				
D01	6				
D04	6				
F929060	4NCA77	1	L01	1	
F92A023	4NCA98	1	M01	1	
45109112801B	F929038	4NCB28	1	G21A	1

Amf 2/14/2020
Sungento 10V

Yon... 2/17/20

A. Uehira
 AKIHIRO UEHIRA
 HEAD OF DEPARTMENT
 QUALITY ASSURANCE DEPARTMENT

TEST LOT LIST

DOCUMENT NO. : OYVC2331T
 CERTIFICATE NO. : OYVC2331

PAGE : 2/2 DATE : 2020-02-12


HEAT TREATMENT BATCH	HEAT NUMBER	TEST LOT	QUANTITY (pcs.)	HANDLING LOT	QUANTITY AT HEAT TREATED (pcs.)	
45809112702	F929039	4NCG38	47	B05	6	
				B04	6	
				B01	6	
				B08	6	
				B06	6	
				B07	6	
				B02	5	
				B03	5	
				B03A	1	
				B15	6	
				B16	4	
				B17	4	
				B02A	1	
				B11	4	
	B09	6				
	B10	6				
	45809112702	F929041	4NCB21	31	A53	6
					A45	6
					A40	6
					A54	6
					A01	6
					A51	6
					A46	6
					A49	6
					A37	6
					A02	6
					A38	5
					A50	6
					A39	5
					A14	4
		A15	3			
		A52	6			
		A13	6			
		A07	6			
		A09	6			
		A06	6			
		A03	6			
		A10	6			
		A04	6			
		A41	6			
		A08	6			
		A43	6			
		A44	6			
		A55	6			
		A56	6			
		A39A	1			
		A47	6			
A11		6				
A48		6				
A38A		1				
A57		5				
A42		6				
A05		6				
A12		6				
45809112702		F929041	4NCE87	48	A53	6
					A45	6
					A40	6
					A54	6
					A01	6
					A51	6
					A46	6
					A49	6
					A37	6
	A02				6	
	A38				5	
	A50				6	
	A39				5	
	A14				4	
	A15	3				
	A52	6				
	A13	6				
	A07	6				
	A09	6				
	A06	6				
	A03	6				
	A10	6				
	A04	6				
	A41	6				
	A08	6				
	A43	6				
	A44	6				
	A55	6				
	A56	6				
	A39A	1				
	A47	6				
	A11	6				
	A48	6				
	A38A	1				
	A57	5				
	A42	6				
	A05	6				
	A12	6				
	45809112702	F929041	4NCE88	48	A53	6
					A45	6
					A40	6
					A54	6
					A01	6
					A51	6
					A46	6
					A49	6
					A37	6
A02					6	
A38					5	
A50					6	
A39					5	
A14					4	
A15		3				
A52		6				
A13		6				
A07		6				
A09		6				
A06		6				
A03		6				
A10		6				
A04		6				
A41		6				
A08		6				
A43		6				
A44		6				
A55		6				
A56		6				
A39A		1				
A47		6				
A11		6				
A48		6				
A38A		1				
A57		5				
A42		6				
A05		6				
A12		6				
45809112702		F929041	4NCG07	49	A53	6
					A45	6
					A40	6
					A54	6
					A01	6
					A51	6
					A46	6
					A49	6
					A37	6
	A02				6	
	A38				5	
	A50				6	
	A39				5	
	A14				4	
	A15	3				
	A52	6				
	A13	6				
	A07	6				
	A09	6				
	A06	6				
	A03	6				
	A10	6				
	A04	6				
	A41	6				
	A08	6				
	A43	6				
	A44	6				
	A55	6				
	A56	6				
	A39A	1				
	A47	6				
	A11	6				
	A48	6				
	A38A	1				
	A57	5				
	A42	6				
	A05	6				
	A12	6				
	45809112702	F929041	4NCA97	18	A53	6
					A45	6
					A40	6
					A54	6
					A01	6
					A51	6
					A46	6
					A49	6
					A37	6
A02					6	
A38					5	
A50					6	
A39					5	
A14					4	
A15		3				
A52		6				
A13		6				
A07		6				
A09		6				
A06		6				
A03		6				
A10		6				
A04		6				
A41		6				
A08		6				
A43		6				
A44		6				
A55		6				
A56		6				
A39A		1				
A47		6				
A11		6				
A48		6				
A38A		1				
A57		5				
A42		6				
A05		6				
A12		6				

A. Uehira

AKIHIRO UEHIRA

HEAD OF DEPARTMENT
 QUALITY ASSURANCE DEPARTMENT

*Printed 2/1/2020
 Sumitomo 18V*

Uehira 2/1/20
Yoshida




NIPPON STEEL CORPORATION
AMAGASAKI WORKS
1, NISHINO-CHO, HIGASHI-MUKOJIMA, AMAGASAKI, JAPAN

INSPECTION CERTIFICATE

CERTIFICATE NO. : OYVC2330

PAGE : 1/2 DATE : 2020-02-10

CUSTOMER :
ORDER NO. :
SHIPPER : SUMITOMO CORPORATION 057 KEA-5053/2 0-845-N3-5-1-AA2A-01
COMMODITY : SEAMLESS COLD FINISHED HIGH ALLOY COUPLING STOCK
STANDARD : SM2535-110 (NIPPON STEEL STD.)
SPECIFICATION : TSP-4550RO
MILL WORK NO. : OYVC2330

O.D.:142.75mm W.T.:18.55mm LENGTH:MIN.3.05m MAX.6.71m QUANTITY:23pcs.
TOTAL LENGTH:149.79m MASS:8749kg

HEAT NO. : F929016 F929043
PRODUCTS PCS. : 3 20

HEAT TREATMENT : SOLUTION FOLLOWED BY COLD DRAWING

CHEMICAL COMPOSITION(%)

SPEC. MIN. MAX.		#1	C	SI	Mn	P	S	Cu	Cr	Ni	Mo	Fe
			*3						*2	*2		
		R	-	-	-	-	-	-	240	295	250	-
		R	30	50	100	3	3	150	270	365	400	*REM
HEAT NO. F929016		L	20	26	61	2	0	80	248	304	282	4027
		P	19	28	63	2	0	79	247	308	278	3998
		P	19	27	63	2	0	79	246	309	277	4000
HEAT NO. F929043		L	20	25	62	2	0	81	250	304	283	4005
		P	20	26	63	2	0	80	250	308	278	3969
		P	20	26	63	2	0	79	250	308	280	3968

*1 R:LADLE & PRODUCT ANALYSIS L:LADLE ANALYSIS P:PRODUCT ANALYSIS *2:X10 *3:X1000 OTHER:X100 *REM:REMAINDER

TENSILE TEST

SPEC. MIN. MAX.	LOT NO. -P NO.	#1 #2 #3	YS	TS	EL
			*4	*4	%
		L B	P 110.0	P 115.0	12
		L B	P 140.0	P -	-
HEAT NO. F929016	B01-3	L B T	P 117.8	P 125.0	23
F929043	A01-5	L B T	P 117.3	P 125.1	23
	A02-5	L B B	P 119.6	P 127.4	22

TYPE OF SPECIMEN:ROUND BAR 0.5in. DIAMETER *1 SAMPLING DIRECTION L:LONGITUDINAL
*2 SAMPLING POSITION B:BASE METAL *3 SAMPLING LOCATION T:TOP B:BOTTOM *4 UNIT P:ksi GAUGE LENGTH:2.0in.
KIND OF YS:0.2% OFFSET

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

Signature
21/7/2020
Suzuhito / BV

Signature
AKIHIRO UEHIRA
HEAD OF DEPARTMENT
QUALITY ASSURANCE DEPARTMENT

Signature
21/7/20
Yon...
024

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Fax. No. : +81-3-6867-4920 E-mail:plpc-lppe.jp.nipponsteel.com

NO.157329A20



INSPECTION CERTIFICATE

CERTIFICATE NO. :0YVC2330

PAGE : 2/2 DATE :2020-02-10

HARDNESS TEST (HRC)

		*1*2 *3	*4 *5													*V.A.	
SPEC. MIN. MAX.		B C	- -													-	
		B C	- 32.0													4	
HEAT NO.	LOT NO. -P NO.		AVG.	OUTER WALL				MID WALL				INNER WALL					
				QUAD	IMPRESSION NO.			IMPRESSION NO.			IMPRESSION NO.						
				-RANT	(1)	(2)	(3)	AVG.	(1)	(2)	(3)	AVG.	(1)	(2)	(3)	AVG.	
F929016	B01-3	B C T	27.6	A	26.8	27.0	27.0	26.9	28.0	27.8	28.1	28.0	27.4	27.6	28.3	27.8	1.1
F929043	A01-5	B C T	26.3	A	25.0	25.8	25.9	25.6	26.6	26.7	27.0	26.8	27.0	26.6	26.5	26.7	1.2
	A02-5	B C B	28.2	A	27.3	27.2	28.0	27.5	29.1	29.4	29.0	29.2	28.1	27.9	27.9	28.0	1.7
		*ALL	27.4														

*1 SAMPLING POSITION B:BASE METAL *2 LOCATION C:CROSS SECTION *3 SAMPLING LOCATION T:TOP B:BOTTOM *4 EACH
 *5 AVERAGE *V.A.:VARIATION AVERAGE MAX.-MIN. * ALL:ALL AVG.

IMPACT TEST(+14.0°F 2mm V-Notch 10X10)

		*1 *2*3	*4 *5	AVG			*4 *5	AVG				
SPEC. MIN. MAX.	LOT NO. -P NO.	T B	E F	*6	16/24	24	S %	*7	-	-		
		T B	E F		-/-	-	S %		-	-		
				[1]	[2]	[3]		[1]	[2]	[3]		
HEAT NO.												
F929016	B01-2	T B B	E F	151	155	154	153	S %	100	100	100	100
	B01-2	T B T	E F	156	166	168	163	S %	100	100	100	100
	B01-3	T B B	E F	167	160	158	162	S %	100	100	100	100
F929043	B01-3	T B T	E F	158	157	167	161	S %	100	100	100	100
	A01-4	T B B	E F	176	174	175	175	S %	100	100	100	100
	A01-4	T B T	E F	184	175	178	179	S %	100	100	100	100
	A01-5	T B B	E F	179	184	184	182	S %	100	100	100	100
	A01-5	T B T	E F	179	167	173	173	S %	100	100	100	100
	A02-4	T B B	E F	183	176	172	177	S %	100	100	100	100
	A02-4	T B T	E F	173	178	172	174	S %	100	100	100	100
	A02-5	T B B	E F	183	188	184	185	S %	100	100	100	100
	A02-5	T B T	E F	194	186	185	188	S %	100	100	100	100

[1] [2] [3]: SPECIMEN NO.

ABSORBED ENERGY *6:VALUE OF ONE PIECE/EACH VALUE OF TWO PIECES AVG:AVERAGE VALUE OF ONE SET(3 PIECES)

SHEAR AREA *7:VALUE OF ONE PIECE AVG:AVERAGE VALUE OF ONE SET(3 PIECES)

*1 SAMPLING DIRECTION T:TRANSVERSE *2 SAMPLING POSITION B:BASE METAL *3 SAMPLING LOCATION T:TOP B:BOTTOM

*4 E:ABSORBED ENERGY S:SHEAR AREA *5 UNIT F:ft·lbf %:%

MICRO STRUCTURE TEST: ACCEPTABLE

SIGMA PHASE EXAMINATION : 0.0%

VISUAL & DIMENSIONAL REQUIREMENT*: ACCEPTABLE

*DIAMETER, WALL THICKNESS, LENGTH, STRAIGHTNESS AND OUT-OF-SQUARENESS

ULTRASONIC EXAMINATION STANDARD PRACTICE/REFERENCE DISCONTINUITIES API 5CR4 L2: ACCEPTABLE

L2 : 5%WT MAX. X 0.040in.W MAX. X 2.000in.L MAX. LONGITUDINAL, TRANSVERSE, INTERNAL AND EXTERNAL NOTCHES

MATERIAL NO.

1056-7104

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

Signature
 21/7/20
 Sunjanto / BV

Signature
 A. Uehira

AKIHIRO UEHIRA

HEAD OF DEPARTMENT
 QUALITY ASSURANCE DEPARTMENT

NO. 157329A20

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Fax. No. : +81-3-6867-4926 E-mail: pipe-ippe@jp.nipponsteel.com

TEST LOT LIST

DOCUMENT NO. : OYVC2330T PAGE : 1/1 DATE : 2020-02-10
 CERTIFICATE NO. : OYVC2330

HEAT TREATMENT BATCH	HEAT NUMBER	TEST LOT	QUANTITY (pcs.)	HANDLING LOT	QUANTITY AT HEAT TREATED (pcs.)
45109111301	F929016	4NCK29	3	B01	3
	F929043	4NCK43	10	A01	6
				A03	4
	4NCK32		10	A04	4
				A02	6

Handwritten signature
 7/1/2020
 Sujiyanto /BV

Handwritten signature 2/17/20
 Yoko Akashi


AKIHIRO UETAKE
 HEAD OF DEPARTMENT
 QUALITY ASSURANCE DEPARTMENT

INSPECTION CERTIFICATE

CERTIFICATE NO. :OYYC2331

PAGE : 1/3 DATE :2020-02-12

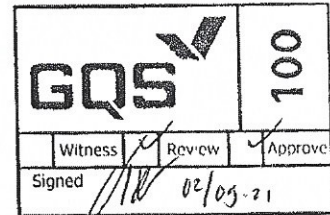
CUSTOMER :
ORDER NO. :
SHIPPER :SUMITOMO CORPORATION 057 KEA-5053/1 0-845-N3-5-1-AA29-01
COMMODITY :SEAMLESS COLD FINISHED HIGH ALLOY TUBING PLAIN END
STANDARD :SM2535-110 (NIPPON STEEL STD.)
SPECIFICATION :TSP-4550RO
MILL WORK NO. :OYYC2331 O.D.:5inch W.T.:15.00lb/ft LENGTH:MIN.11.61m MAX.12.21m
QUANTITY:460pcs. TOTAL LENGTH:5593.08m MASS:124851kg

HEAT NO. :F929038 F929039 F929040 F929041 F929042 F929043 F929060
PRODUCTS PCS. :69 78 20 207 54 30 1
HEAT NO. :F92A023
PRODUCTS PCS. :1

HEAT TREATMENT :SOLUTION FOLLOWED BY COLD DRAWING

CHEMICAL COMPOSITION(%)

		*1	C	Si	Mn	P	S	Cu	Cr	Ni	Mo	Fe
			*3							*2	*2	
SPEC. MIN.	R		-	-	-	-	-	-	240	295	250	-
MAX.	R		30	50	100	3	3	150	270	365	400	*REM
HEAT NO.		L	20	26	61	2	0	79	247	303	283	4047
F929038		P	18	28	61	2	0	77	248	308	278	3992
		P	18	28	62	2	0	77	248	306	281	4008
F929039		L	18	28	62	2	0	82	250	305	283	3991
		P	17	30	62	2	0	79	249	308	279	3976
		P	20	31	63	2	0	81	249	306	282	3989
F929040		L	17	25	62	2	0	81	248	304	283	4025
		P	17	27	63	2	0	81	248	306	281	4004
		P	17	27	62	2	0	79	247	307	278	4010
F929041		L	17	26	65	2	0	89	251	304	281	3985
		P	18	28	67	2	0	89	251	306	279	3963
		P	17	28	67	2	0	88	250	305	277	3986
F929042		L	18	29	65	2	0	82	250	306	282	3978
		P	18	30	65	2	0	80	248	307	277	3994
		P	18	31	66	2	0	80	248	308	279	3980
F929043		L	20	25	62	2	0	81	250	304	283	4005
		P	20	26	63	2	0	79	249	306	278	4000
		P	19	26	63	2	0	79	248	306	278	4010
F929060		L	19	26	55	2	0	79	248	305	285	4021
		P	19	29	56	2	0	77	248	308	284	3990
F92A023		L	19	32	58	2	0	80	247	304	284	4032
		P	19	34	59	2	0	79	245	306	281	4033



*1 R:LADLE & PRODUCT ANALYSIS L:LADLE ANALYSIS P:PRODUCT ANALYSIS *2:X10 *3:X1000 OTHER:X100 *REM:REMAINDER

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

Reviewed by:
[Signature]
03/05/21
18V

A. Uehira AKIHIRO UEHIRA
HEAD OF DEPARTMENT
QUALITY ASSURANCE DEPARTMENT

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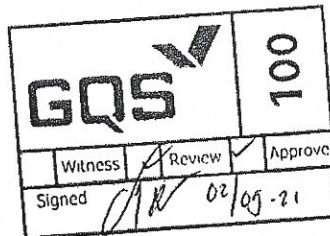
TENSILE TEST

SPEC. MIN. MAX.	LOT NO. -P NO.	*1 *2 *3			YS	TS	EL.
		L	B	B	*4	*4	%
		L	B	B	P 110.0	P 115.0	12
		L	B	B	P 140.0	P -	-
HEAT NO.							
F929038	G01-5	L	B	B	P 128.4	P 131.5	19
	G17-5	L	B	T	P 118.2	P 127.7	21
	G21A-1	L	B	T	P 116.6	P 126.1	22
F929039	B05-4	L	B	T	P 125.2	P 128.9	21
	B10-6	L	B	B	P 119.0	P 129.6	20
F929040	E01-1	L	B	T	P 124.2	P 127.9	21
F929041	A03-6	L	B	T	P 123.9	P 128.2	20
	A12-5	L	B	B	P 121.6	P 130.0	21
	A50-5	L	B	B	P 120.1	P 129.9	21
	A53-4	L	B	T	P 122.6	P 127.0	22
	A56-6	L	B	T	P 123.3	P 128.1	21
F929042	C02-6	L	B	B	P 129.6	P 133.1	20
	C09-1	L	B	T	P 124.1	P 128.3	21
F929043	D05-3	L	B	B	P 129.9	P 132.9	19
F929060	L01-1	L	B	T	P 119.5	P 128.7	22
F92A023	M01-1	L	B	B	P 121.5	P 130.8	20

TYPE OF SPECIMEN:STRIP 1in. WIDTH *1 SAMPLING DIRECTION L:LONGITUDINAL *2 SAMPLING POSITION B:BASE METAL
 *3 SAMPLING LOCATION T:TOP B:BOTTOM *4 UNIT P:ksi GAUGE LENGTH:2.0in. KIND OF YS:0.2% OFFSET

HARDNESS TEST (HRC)

SPEC. MIN. MAX.	LOT NO. -P NO.	*1 *2 *3			*4 *5		*V.A.		
		B	C	B	-	-	-	-	3
					AVG.			MID WALL	
					QUAD	IMPRESSION NO.			
					-RANT	(1)	(2)	(3)	AVG.
HEAT NO.									
F929038	G01-5	B	C	B	28.4	A 28.4	28.1	28.6	28.4
	G17-5	B	C	T	27.7	A 27.5	27.9	27.7	27.7
	G21A-1	B	C	T	26.3	A 26.1	26.7	26.1	26.3
F929039	B05-4	B	C	T	27.6	A 27.5	27.5	27.9	27.6
	B10-6	B	C	B	28.0	A 28.1	28.0	27.8	28.0
F929040	B01-1	B	C	T	27.7	A 28.0	27.0	28.1	27.7
F929041	A03-6	B	C	T	27.2	A 27.4	27.5	26.8	27.2
	A12-5	B	C	B	27.7	A 27.3	28.0	27.7	27.7
	A50-5	B	C	B	27.2	A 27.6	27.1	26.9	27.2
	A53-4	B	C	T	27.2	A 26.9	27.4	27.4	27.2
	A56-6	B	C	T	26.6	A 26.9	26.7	26.3	26.6
F929042	C02-6	B	C	B	27.9	A 28.5	27.6	27.7	27.9
	C09-1	B	C	T	27.8	A 28.0	27.7	27.8	27.8
F929043	D05-3	B	C	B	28.5	A 28.6	28.5	28.3	28.5
F929060	L01-1	B	C	T	28.2	A 28.2	27.6	28.7	28.2
F92A023	M01-1	B	C	B	28.3	A 28.1	28.4	28.5	28.3



WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

Reviewed by:
[Signature]
 02/09/21
 Sanyu / BV

A. Uehira AKIHIRO UEHIRA
 HEAD OF DEPARTMENT
 QUALITY ASSURANCE DEPARTMENT

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 Fax. No. : +81-3-6867-4926 E-mail:pipe-ipp@jp.nipponsteel.com NO.157822A20

*ALL	27.6
*1 SAMPLING POSITION B:BASE METAL	*2 LOCATION C:CROSS SECTION
*3 SAMPLING LOCATION T:TOP B:BOTTOM	*4 EACH
*5 AVERAGE	*V.A.:VARIATION AVERAGE MAX.-MIN. * ALL:ALL AVG.

MICRO STRUCTURE TEST: ACCEPTABLE
 SIGMA PHASE EXAMINATION : 0.0%
 FLATTENING TEST:ACCEPTABLE (FLATTENING HEIGHT: 3.425in.)
 DRIFT TEST: ACCEPTABLE
 HYDROSTATIC TEST 10000psi X 5sec. : GUARANTEED BUT NOT CONDUCTED
 VISUAL & DIMENSIONAL REQUIREMENT*: ACCEPTABLE
 *DIAMETER, WALL THICKNESS, LENGTH, STRAIGHTNESS AND OUT-OF-SQUARENESS
 ULTRASONIC EXAMINATION STANDARD PRACTICE/REFERENCE DISCONTINUITIES API 5CRA L2: ACCEPTABLE
 L2 : 5%WT MAX. X 0.040in.W MAX. X 2.000in.L MAX. LONGITUDINAL, TRANSVERSE, INTERNAL AND EXTERNAL NOTCHES
 MATERIAL NO.
 1056-7104

GQS ✓		100
Witness	Review	Approve
Signed <i>[Signature]</i>		02/03-21

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

Reviewed by:
[Signature]
 18.31
 03
 Sanjamb / BV

[Signature] AKIHIRO UEHIRA
 HEAD OF DEPARTMENT
 QUALITY ASSURANCE DEPARTMENT

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 Fax. No. : +81-3-6867-4926 E-mail:pipe-ipp@jp.nipponsteel.com

NO.157822A20

TEST LOT LIST

 DOCUMENT NO. : OYYC2331T PAGE : 1/2 DATE : 2020-02-12
 CERTIFICATE NO. : OYYC2331

HEAT TREATMENT BATCH	HEAT NUMBER	TEST LOT	QUANTITY (pcs.)	HANDLING LOT	QUANTITY AT HEAT TREATED (pcs.)
45109112801A	F929038	4NCB00	44	G04	3
				G22	4
				G17	6
				G18	6
				G14	6
				G16	6
				G03	4
				G21	3
				G15	6
				G19	6
				G02	6
				G01	6
				G20	6
				E03	4
	E04	4			
	F929040	4NCG09	20	E01	6
				E02	6
	F929042	4NCF18	48	C02	6
				C04	6
				C05	6
				C03	6
				C06	6
				C07	6
C08				6	
C01				6	
C09				6	
D05				6	
F929043	4NCE81	30	D03	6	
			D02	6	
			D01	6	
			D04	6	
F929060	4NCA77	1	L01	1	
F92A023	4NCA98	1	M01	1	
45109112801B	F929038	4NCB28	1	G21A	1

GQS ✓			100
Witness	Review	Approve	
Signed <i>[Signature]</i>		02/09-21	

Reviewed by:
[Signature]
 13.31
 08
[Signature] / DV

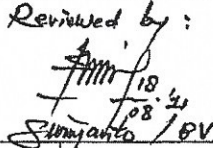
A. Uehira
 AKIHIRO UEHIRA
 HEAD OF DEPARTMENT
 QUALITY ASSURANCE DEPARTMENT


TEST LOT LIST

DOCUMENT NO. : OYYC2331T
 CERTIFICATE NO. : OYYC2331

PAGE : 2/2 DATE : 2020-02-12

HEAT TREATMENT BATCH	HEAT NUMBER	TEST LOT	QUANTITY (pcs.)	HANDLING LOT	QUANTITY AT HEAT TREATED (pcs.)					
45809112702	F929039	4NCG38	47	B05	6					
				B04	6					
				B01	6					
				B08	6					
				B06	6					
				B07	6					
				B02	5					
				B03	5					
				B03A	1					
				B15	6					
				B16	4					
				B17	4					
				B02A	1					
				B11	4					
	B09	6								
	B10	6								
	F929041	4NCE87	48	A53	6					
				A45	6					
				A40	6					
				A54	6					
				A01	6					
				A51	6					
				A46	6					
				A49	6					
				A37	6					
				A02	6					
				A38	5					
				A50	6					
				A39	5					
				A14	4					
	A15	3								
	A52	6								
	A13	6								
	4NCB26	47	47	A07	6					
				A09	6					
				A06	6					
				A03	6					
				A10	6					
				A04	6					
				A41	6					
				A08	6					
				A43	6					
				A44	6					
				A55	6					
				A56	6					
				A39A	1					
				A47	6					
A11	6									
A48	6									
A38A	1									
A57	5									
4NCE88	48	48	A42	6						
			A05	6						
			A12	6						
			4NCG07	49	49	A12	6			
						4NCA97	18	18	A12	6

Reviewed by:

 Simjanto 02/09/21


 AKIHIRO UEHIRA
 HEAD OF DEPARTMENT
 QUALITY ASSURANCE DEPARTMENT

GQS		100
Signed		02/09-21

INSPECTION CERTIFICATE

CERTIFICATE NO. :OYYC2454

PAGE : 1/2 DATE :2020-10-15

CUSTOMER :
ORDER NO. :
SHIPPER :SUMITOMO CORPORATION 057 KEA-5801/2 O-845-N3-5-9-AA25-01
COMMODITY :SEAMLESS COLD FINISHED HIGH ALLOY COUPLING STOCK
STANDARD :SM2535-110 (NIPPON STEEL STD.)
SPECIFICATION :TSP-4550R2
MILL WORK NO. :OYYC2454 O.D.:142.75mm W.T.:18.55mm LENGTH:MIN.3.05m MAX.6.71m QUANTITY:17pcs.
TOTAL LENGTH:111.67m MASS:6523kg

HEAT NO. :F025020
PRODUCTS PCS. :17

HEAT TREATMENT :SOLUTION FOLLOWED BY COLD DRAWING

CHEMICAL COMPOSITION(%)

			C	Si	Mn	P	S	Cu	Cr	Ni	Mo	Fe
		*1	*3						*2	*2		
SPEC. MIN.		R	-	-	-	-	-	-	240	295	250	-
MAX.		R	30	50	100	3	3	150	270	365	400	*REM
HEAT NO.		L	20	26	62	2	0	83	250	304	285	4000
F025020		P	18	28	63	2	0	81	251	307	281	3963
		P	19	29	64	2	0	81	251	306	281	3971

*1 R:LADLE & PRODUCT ANALYSIS L:LADLE ANALYSIS P:PRODUCT ANALYSIS *2:X10 *3:X1000 OTHER:X100 *REM:REMAINDER

TENSILE TEST

			YS	TS	EL
		*1 *2 *3	*4	*4	%
SPEC. MIN.	LOT NO.	L B	P 110.0	P 115.0	12
MAX.	-P NO.	L B	P 140.0	P -	-
HEAT NO.		L B T	P 116.2	P 122.9	23
F025020	A01-2	L B T	P 117.3	P 123.4	22
	A02-2	L B T	P 117.3	P 123.4	22
	A03-1	L B B	P 119.6	P 126.2	22

TYPE OF SPECIMEN:ROUND BAR 0.5in. DIAMETER *1 SAMPLING DIRECTION L:LONGITUDINAL
*2 SAMPLING POSITION B:BASE METAL *3 SAMPLING LOCATION T:TOP B:BOTTOM *4 UNIT P:ksi GAUGE LENGTH:2.0in.
KIND OF YS:0.2% OFFSET

HARDNESS TEST (HRC)

		*1 *2 *3	*4	*5	*V.A.
SPEC. MIN.		B C	-	-	-
MAX.		B C	-	32.0	4
			AVG.	OUTER WALL IMPRESSION NO.	MID WALL IMPRESSION NO.
			QUAD	(1) (2) (3) AVG.	(1) (2) (3) AVG.
			-RANT		
HEAT NO.	LOT NO.	B C T	26.6	A 26.3 26.6 26.0 26.3 27.1	26.9 27.0 27.0 26.4 25.9 27.0 26.4 0.7
F025020	A01-2	B C T	27.4	A 26.2 26.9 26.4 26.5 27.3	28.0 28.9 28.1 27.3 27.8 27.5 27.5 1.6
	A02-2	B C T			

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

Reviewed by:

[Signature]
18/10/20
Suzuki / BV

[Signature]

AKIHIRO UEHIRA

SENIOR MANAGER
QUALITY ASSURANCE DEPARTMENT

<Notice>
Modification to or unauthorized use of this certificate is strictly prohibited. If you have any questions on the authenticity of this certificate, you can contact us by e-mail, pipe-ipp@jp.nipponsteel.com.

NO.218051A20

GQS		100	
Witness	Review	Approve	
Signed	<i>[Signature]</i>	02/10/21	

HARDNESS TEST(HRC)

		*1*2	*3	*4	*5									*V.A.					
SPEC. MIN. MAX.		B	C	-	-									-					
		B	C	-	32.0									4					
HEAT NO.	LOT NO.	AVG.			OUTER WALL				MID WALL				INNER WALL						
	-P NO.	QUAD			IMPRESSION NO.				IMPRESSION NO.				IMPRESSION NO.						
		-RANT			(1)	(2)	(3)	AVG.	(1)	(2)	(3)	AVG.	(1)	(2)	(3)	AVG.			
FO25020	A03-1	B	C	B	27.7	A	26.7	27.3	26.9	27.0	28.0	28.7	28.3	28.3	27.6	27.7	28.0	27.8	1.3
		*ALL			27.2														

*1 SAMPLING POSITION B:BASE METAL *2 LOCATION C:CROSS SECTION *3 SAMPLING LOCATION T:TOP B:BOTTOM *4 EACH
 *5 AVERAGE *V.A.:VARIATION AVERAGE MAX.-MIN. * ALL:ALL AVG.

IMPACT TEST(+14.0°F 2mm V-Notch 10X10)

		*1	*2*3	*4	*5	AVG			*4	*5	AVG				
SPEC. MIN. MAX.	LOT NO.	T	B	E	F	*6	16/24	24	S %	*7	-	-			
	-P NO.	T	B	E	F		-/-	-	S %		-	-			
					[1]	[2]	[3]				[1]	[2]	[3]		
HEAT NO.															
FO25020	A01-2	T	B	B	E	F	174	176	169	173	S %	100	100	100	100
	A01-2	T	B	T	E	F	175	173	173	174	S %	100	100	100	100
	A01-3	T	B	B	E	F	150	177	169	165	S %	100	100	100	100
	A01-3	T	B	T	E	F	171	174	181	175	S %	100	100	100	100
	A02-2	T	B	B	E	F	166	181	178	175	S %	100	100	100	100
	A02-2	T	B	T	E	F	182	173	178	178	S %	100	100	100	100
	A02-3	T	B	B	E	F	172	174	166	171	S %	100	100	100	100
	A02-3	T	B	T	E	F	175	171	171	172	S %	100	100	100	100
	A03-1	T	B	B	E	F	170	169	176	172	S %	100	100	100	100
	A03-1	T	B	T	E	F	164	177	179	173	S %	100	100	100	100
	A03-3	T	B	B	E	F	175	184	185	181	S %	100	100	100	100
	A03-3	T	B	T	E	F	179	177	169	175	S %	100	100	100	100

[1] [2] [3]: SPECIMEN NO.
 ABSORBED ENERGY
 *6:ABSOLUTE SINGLE VALUE / SINGLE VALUE (ONE CAN BE BELOW AVG) AVG:AVERAGE VALUE OF ONE SET(3 PIECES)
 SHEAR AREA *7:VALUE OF ONE PIECE AVG:AVERAGE VALUE OF ONE SET(3 PIECES)
 *1 SAMPLING DIRECTION T:TRANSVERSE *2 SAMPLING POSITION B:BASE METAL *3 SAMPLING LOCATION T:TOP B:BOTTOM
 *4 E:ABSORBED ENERGY S:SHEAR AREA *5 UNIT F:ft·lbf %:

MICRO STRUCTURE TEST: ACCEPTABLE
 SIGMA PHASE EXAMINATION : 0.0%
 VISUAL & DIMENSIONAL REQUIREMENT*: ACCEPTABLE
 *DIAMETER, WALL THICKNESS, LENGTH, STRAIGHTNESS AND OUT-OF-SQUARENESS
 ULTRASONIC EXAMINATION STANDARD PRACTICE/REFERENCE DISCONTINUITIES API 5CRA L2: ACCEPTABLE
 L2 : 5%WT MAX. X 0.040in.W MAX. X 2.000in.L MAX. LONGITUDINAL, TRANSVERSE, INTERNAL AND EXTERNAL NOTCHES
 MATERIAL NO.
 1056-7104
 20-MSCB-01-125471

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

Reviewed by:

[Signature]
 10/15/21
 10/15/21
 10/15/21

[Signature]

AKIHIRO UEHIRA

SENIOR MANAGER
 QUALITY ASSURANCE DEPARTMENT

NO. 218051A20

<Notice>
 Modification to or unauthorized use of this certificate is strictly prohibited. If you have any questions the authenticity of this certificate, you can contact us by E-mail, pipe-ipp@jp.nipponsteel.com.

GQS		100
Signed		02/09-21

TEST LOT LIST

DOCUMENT NO. : OYYC2454T PAGE : 1/1 DATE : 2020-10-15
 CERTIFICATE NO. : OYYC2454

HEAT TREATMENT BATCH	HEAT NUMBER	TEST LOT	QUANTITY (pcs.)	HANDLING LOT	QUANTITY AT HEAT TREATED (pcs.)
45100081002	F025020	4N9329	6	A01	6
		4N9312	6	A02	6
		4N9321	5	A03	5

GQS ✓		100
Witness ✓	Review ✓	Approve ✓
Signed <i>[Signature]</i>		02/09-21

Reviewed by :

[Signature]
 10/21
 Sanyuanto / BV

A. Uehira

AKIHIRO UEHIRA
 SENIOR MANAGER
 QUALITY ASSURANCE DEPARTMENT