

## INSPECTION CERTIFICATE

CERTIFICATE NO. :BYZF2128 PAGE : 1/3 DATE: 2019-01-16

:SUMITOMO CORPORATION EUROPE LTD CUSTOMER

ORDER NO. :18-69

SHIPPER :SUMITOMO CORPORATION 057 KEN 1199/4 9-845-N3-5-1-FKD3-01

COMMODITY :COUPLING WITH VAM 21

:API 5CT GROUP2 GR.L80-TYPE 1 PSL 2(9TH ED., JUL. 2011) **STANDARD** 

SPECIFICATION :TSP-4343R1

MILL WORK NO. :BYZF2128 0.D.:7inch W.T.:29.00lb/ft QUANTITY:100pcs. MASS:1316kg

MATERIAL WORK NO. : WCFK7266

HEAT TREATMENT: QUENCHED & TEMPERED

CHEMICAL COMPOSITION(%)

OTTENTIONE OF	JIII 00111011	\ ^0/											
			С	Si	Mn	Р	S	Cu	Cr	Νi	Mo	ΑI	
		*1				*2	*2					*2	
SPEC. MIN.		R	-	-	-	-	-	-	-	-	-	-	
MAX.		R	43	45	190	30	30	35	-	25	-	-	
HEAT NO.													
J8L7799		L	25	29	81	10	3	2	113	2	32	46	
		Р	25	29	79	9	3	2	112	2	32	45	
		Р	25	29	80	9	2	2	112	2	32	46	
*1 D.I ADIE	8 DDUDIT	ΛNI	VIVCIC	1.1	۷۵۱ =	ANALV	212	D • DD(	חחורד	ANIAL'	VQ   Q	*2.V1000	0THED - V100

1 R:LADLE & PRODUCT ANALYSIS L:LADLE ANALYSIS P:PRODUCT ANALYSIS 

TENSILE TEST

			YS	TS	EL	
		*1 *2	*3	*3	%	
SPEC. MIN.	HEAT-	L B	P 80.0	P 95.0	15	
MAX.	LOT NO.	L B	P 95.0	Р -	-	
HEAT NO.						
J8L7799	001	L B	P 88.9	P 109.1	27	
	001	L B	P 85.7	P 108.5	25	

TYPE OF SPECIMEN:ROUND BAR 0.5in. DIAMETER \*1 SAMPLING DIRECTION L:LONGITUDINAL

\*2 SAMPLING POSITION B:BASE METAL \*3 UNIT P:ksi GAUGE LENGTH:2.0in. KIND OF YS:0.5% EXTENSION UNDER LOAD

IMPACT TEST(+32.0°F 2mm V-Notch 10X10)

		*1 *2	*3 *4			AVG	*3 *4			AVG	
SPEC. MIN.	HEAT-	ТВ	E F	*5	11/16	16	S %	*6	75	-	
MAX.	LOT NO.	ТВ	E F		-/-	-	S %		-	-	
				[1]	[2] [3]			[1]	[2] [3]		
HEAT NO.											
J8L7799	001	ТВ	E F	158	153 165	159	S %	100	100 100	100	

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

ABSORBED ENERGY \*5: VALUE OF ONE PIECE/EACH VALUE OF TWO PIECES AVG: AVERAGE VALUE OF ONE SET(3 PIECES)

SHEAR AREA \*6: VALUE OF ONE PIECE AVG: AVERAGE VALUE OF ONE SET(3 PIECES)

\*1 SAMPLING DIRECTION T:TRANSVERSE \*2 SAMPLING POSITION B:BASE METAL \*3 E:ABSORBED ENERGY S:SHEAR AREA

\*4 UNIT F:ft · lbf %:%

VISUAL & DIMENSIONS: ACCEPTABLE

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

YUJIN ITO

HEAD OF DEPARTMENT QUALITY ASSURANCE DEPARTMENT

NO. 049789K19





NIPPON STEEL & SUMITOMO METAL CORPORATION WAKAYAMA WORKS [KAINAN AREA] 260-100, FUNOO, KAINAN, JAPAN

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MAGNETIC PARTICLE EXAMINATION: ACCEPTABLE

APPLICABLE STANDARD: API 5CT SEC.9

REFERENCE STANDARD: JIS Z 2320 TYPE A1 EXTERNAL & INTERNAL LONGITUDINAL & TRANSVERSE

I TIMS CONTRACT NO. 18-DSCT-12-117467

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YUJIN ITO

HEAD OF DEPARTMENT QUALITY ASSURANCE DEPARTMENT

<An Important Message To Our Customers> NO.049789K19
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## HARDNESS TEST( HRC )

		*1*:	2 *	3	*4	*5													*V.A.	
SPEC. MIN.		В	С		-	-													-	
MAX.		В	С		-	23.0													-	
				Α	VG.			OUTER	WALL			MID \	VALL		INNER WALL					
	HEAT-					QUAD	11	IMPRESSION NO.				IMPRESSION NO.				IMPRESSION NO.				
HEAT NO.	LOT NO.					-RANT	(1)	(2)	(3)	AVG.	(1)	(2)	(3)	AVG.	(1)	(2)	(3)	AVG.		
J8L7799	001	В	С	Т	19.2	Α	19.2	18.8	19.1	19.0	20.3	20.0	20.1	20.1	18.5	18.3	18.4	18.4	1.7	
	001	В	С	В	19.4	Α	19.3	19.4	18.9	19.2	20.6	20.4	20.3	20.4	18.6	18.9	18.6	18.7	1.7	
			*AL	L	19.3															

\*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.

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<An Important Message To Our Customers> NO.049789K19
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