



SERIAL NUMBER: N-190 COOK DATE: _____

MOLD SIZE _____ BY _____

ORDER DATE 19JUL18 SHIP DATE: 25JUL18 PO KKZ203446Z

SIZE 5.875x5 TYPE XDS FOR SLB

THREAD 3 1/2 REG PIN OTHER 5 3/4" x 5 1/2" x 75" swallow

NOTES _____

MATRIX (H) 1874 WEIGHT _____

MATRIX (S) 1876 WEIGHT _____

BINDER 23679 WEIGHT _____

BLANK 29983 TJ D1712717

BILLET _____ TUBE _____

WELD BY AH MPI BY JM MPI PIC JM

THREAD GAGE 24827 STAND OFF .635

FINAL DIAMOND GRIND SIZE 5.875 x 5

LENGTH TO WELD FRONT to end 84 1/2 end to front 78 1/2

FINISHED PIC TAKEN BY JM SHIPPED BY JM DATE: 8-1-18

SHORT BIT & TOOL CO
225 GOLD STREET
GARLAND TX 75042
972-205-1011
main@shortbits.com



Certificate of Conformance

Serial Number	Size	Type	Steel or Matrix	Shank Diameter	Bore
N-189, N-190	5.875 x 5	XDS	Matrix		
Component		Material	Vender	Lot or Heat Number	
Blank		8620 Steel	RHW	29983	
Hard Powder		WC	HMP	1874	
Soft Capping Powder		WC2	HMP	1876	
Tool Joint		4140 Steel	RHW	D1712717	
MIG Weld					
WP Tube					
Inspection					
Diamond Grinding To Size					
Weld MPI		Allan			
Thread Gaging			3 1/2 Reg Pin		
Signed By: <i>P. Beffy</i>			date: <i>8/6/2018</i>		



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8722-199 - 266



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 Phone (038) (062) 217-20-80
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QUALITY CERTIFICATE (EN 10204-3.1)
 № 30000691 Date 26.01.2012

Mfg. Contract № 502778 dd. 17.01.2011
 Specification № 115 dd. 20.12.2011 LOT 005/033
 Order № 30005228

Point of unload	
Customer	
Purch. Order №	
Reference Number	



Production process / Производственный процесс: Electric Arc Furnace, Fine Grain, Fully Killed, Aluminum and Calcium-Silicon Treated, Vacuum Degassed, Bottom Ingot Cast, Hot Rolled, Alloy Round Bars, Machine Straightened, Peeled, Ultrasonically Tested for Sound Internal Centers	Description of Goods / Наименование продукции: Cold Finished Peeled Hot Rolled Steel Round Bars Прутки круглого сечения горячекатаные с чистой обдиркой	Standard / Стандарт: ASTM A29/A29M, ASTM A322
Automobile № / Автомобиль №: BH4682BA/BH4705XT	Steel Grade / Марка стали: 8620	

Bundle № № пакета	Heat № № плавки	Diameter/диаметр		Length/длина		No. of bundles (pcs) кол-во пакетов	No. of bars (pcs) кол-во штук	Weight Gross/ Брутто (MT)		Weight Net / Netto (MT)	
		inch	mm	ft	mm			MT	Pounds	MT	Pounds
53279	29983	6.750"	171,45	13'07"	4130	1	1	0,78	1719,9	0,76	1675,8
Total/ Итого:						1	1	0,78	1719,90	0,76	1675,80

Chemical Composition / Химический состав % (acc.to ASTM A29/A29M, ASTM A751)																	Actual Reduction Ratio Фактический коэф. Вытяжки	
Heat № / № плавки	C	Mn	Si	S	P	Cr	Ni	Cu	Mo	V	Al	H2, ppm	Bi	As	Pb	Sb		
29983	0,22	0,83	0,27	0,017	0,017	0,53	0,45	0,23	0,2	0,002	0,026	1,00	0,001	0,01	0,001	0,003		17,60:1

Remarks / Примечание

8" 4140

D1712717



ASIL ÇELİK
SANAYİ ve TİCARET A.Ş.
www.asilcelik.com.tr



KALİTE BELGESİ

QUALITY CERTIFICATE / MILL TEST CERTIFICATE



Customer	SEBA TUBULAR LTD.	Date	01.09.2017
Heat no	D1712717	Quality	SAE 4140 QT+SR
Dimension	ØD 8,00 inch	Weight	24,989 LB / 11,335 KG
Your Order No	40230-17-259/B	Number of bars	15
Our Order No	120003192 / 000010	Doc. Norm / Number	EN 10204/3.1 - 1797501
Casting type	İngot Cast.	Reduction Ratio	12.8 /1

Product
PRIME NEWLY PRODUCED ROUND STEEL BARS
HOT ROLLED QUENCHED & TEMPERED AND STRESS RELIEVED
ACC. TO RHW SPEC. 4140 HT REV.05 (JAN 2016) AND YPX 17-032
LATEST EDITIONS OF ASTM A29, A304, A322, A370, A388, A751, E45, E112, E709, AMS 2750, API 6A PSL 3.
WE CERTIFY THAT THE MATERIAL IS AN ALLOY STEEL / ORDER NO: 40230
Electric Arc Furnace/EAF, Ladle Furnace/LF, Vacuum Degassing/VD

Ladle Chemical Composition (%)

	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Cu	Sn	V	Nb	O	H
Min	0.38	0.15	0.25			0.80	0.15								
Max	0.43	0.35	1.02	0.025	0.025	1.10	0.25	0.25				0.030	0.035	0.0030	0.00022
Sample	0.42	0.31	1.09	0.013	0.013	1.07	0.24	0.20	0.024	0.22	0.014	0.026	0.030	0.0021	0.00007

Product Chemical Composition (%)

	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Cu	Sn	V	Nb	O	H
Sample-1	0.42	0.31	1.00	0.013	0.009	1.07	0.24	0.20	0.021	0.22	0.014	0.025	0.029	0.0020	0.00008
Sample-2	0.42	0.30	1.01	0.009	0.010	1.08	0.25	0.19	0.025	0.21	0.014	0.022	0.031	0.0020	0.00008

Jominy - inch

	1,0 inch	4,0 inch	8,0 inch	16,0 inch	28,0 inch
Min	57	56	54	48	44
Max	62	62	61	58	57
Result-1	59,9	58,9	57,9	57,5	57

Hardness

Customer Req.		Asil Çelik Result		Unit	Test Loc.
Min	Max	Hardness			
285	341	321		HB	SURFACE
28	37	32		HRC	SURFACE

Mechanical Properties (Required)

Test	Min	Max	Unit	Test Loc.	Temp.	Direction	Notch Type	Result-1
Yield strength (NO.2)	110000		Psi	1"				137511
Yield strength (NO.2)			Psi	MIDRADIUS				121845
Tensile Strength	135000		Psi	1"				152161
Tensile Strength			Psi	MIDRADIUS				140412
Elongation	15		%	1"				17,80
Elongation			%	MIDRADIUS				18,40
Reduction	45		%	1"				54,00
Reduction			%	MIDRADIUS				53,90
Shear (%)			%	1"	-20 °F	Longitudinal		45
Lateral Expansion (mm)			mm	1"	-20 °F	Longitudinal		0,89
Shear (%)			%	1"	72 °F	Longitudinal		65
Lateral Expansion (mm)			mm	1"	72 °F	Longitudinal		0,82
Impact Strength-1			ft-lbs	1"	-20 °F	Longitudinal	ISO-V	48,68
Impact Strength-2			ft-lbs	1"	-20 °F	Longitudinal	ISO-V	51,63
Impact Strength-3			ft-lbs	1"	-20 °F	Longitudinal	ISO-V	51,93
Impact Strength-Average			ft-lbs	1"	-20 °F	Longitudinal	ISO-V	50,89
Impact Strength-1			ft-lbs	1"	-20 °F	Transversal	ISO-V	23,60
Impact Strength-2			ft-lbs	1"	-20 °F	Transversal	ISO-V	22,13
Impact Strength-3			ft-lbs	1"	-20 °F	Transversal	ISO-V	20,65
Impact Strength-Average			ft-lbs	1"	-20 °F	Transversal	ISO-V	22,13
Impact Strength-1			ft-lbs	1"	72 °F	Longitudinal	ISO-V	67,65
Impact Strength-2			ft-lbs	1"	72 °F	Longitudinal	ISO-V	64,91
Impact Strength-3			ft-lbs	1"	72 °F	Longitudinal	ISO-V	66,38
Impact Strength-Average			ft-lbs	1"	72 °F	Longitudinal	ISO-V	66,38
Impact Strength-1			ft-lbs	1"	72 °F	Transversal	ISO-V	32,45
Impact Strength-2			ft-lbs	1"	72 °F	Transversal	ISO-V	29,50
Impact Strength-3			ft-lbs	1"	72 °F	Transversal	ISO-V	33,93
Impact Strength-Average			ft-lbs	1"	72 °F	Transversal	ISO-V	31,72

Metallurgy Tests (Required)

Test	Min	Max	Unit	Standard	Result-1
Austenite Grain Size		5		ASTM E112	8

Special Chemical Analysis Requests

Formula	Min	Max	Unit	Value
DI (ASTM A255-10)		5,5	0,1%	7,93

MECHANICAL PROPERTIES TAKEN FROM PROLONGATION

LENGTH OF PROLONGATION : 20 cm / TENSILE SPECIMEN : RND 12,5 mm
GAGE LENGTH (%) : 2 inch / FBH SIZE MAX. 3,2 mm & RESULTS WERE OK.
METHOD OF MONITORING TEMPERATURE : FURNACE TYPE THERMOCOUPLE / FURNACE CALIBRATION : AMS 2750
ULTRASONIC TESTING 100% ASTM A-388/SA 388-07, AFTER Q&T+SR ACCEPTANCE CRITERIA
API 6A/ISO 10423 PSL 3 & 100% MIX-UP CONTROLLED & SURFACE CRACK TESTED & RESULTS WERE OK.
"FREE FROM RADIOACTIVITY & FREE FROM MERCURY, NO WELD REPAIR PERFORMED"
"WE HEREBY CERTIFY, MATERIAL DESCRIBED ABOVE HAS BEEN TESTED AND COMPLIES WITH THE TERMS OF ORDER CONTRACT"

Heat Treatment Parameters

QUENCH TEMPERATURES AT START & FINISH: 100/120 °F

COOLING MEDIA: AIR / QUENCH MEDIA: POLYMER

AUSTENITIZING TEMP. / TIME:	1580 °F	4,50	HOURS
TEMPERING TEMP. / TIME:	1186 °F	6,00	HOURS
STRESS RELIEVE TEMP. / TIME:	932 °F	4,50	HOURS

Approved by

Mert ÜLKER

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