



By John at 11:20 am, Jul 06, 2017

Grade			Batch No.		Heat No.		Size		Pieces		Bundles		Weight (MT)		Total Length(FT)		Manufacture Process				Delivery Condition															
9Cr-1Mo			H617068550		7050285M		3"		31		4		6.38		589,924		EAF+LF+VD+1C				quenched and tempered															
Chemical Composition (Wt %)																																				
	C	Mn	Si	P	S	Cr	Ni	Mo	Cu	W	Al	V	Nb	Ti	Ca	B	As	Sn	Pb	Sb	Zn	Zr		Co	Cd	[N]	[O]	[H]	DI	Hard factor	CEV /CEQ					
Min	0.09	0.30	0.25	0	0	8.00	0	0.90	0																											
Max	0.15	0.50	0.60	0.020	0.010	10.00	0.50	1.10	0.25																											
Ladle	0.12	0.44	0.36	0.009	0.004	8.74	0.22	0.95	0.04																											
Product1																																				
Product2																																				
Macrostructure Examination(Level)						Non-metallic inclusion (Level)						K4 Method Oxides		Ds		Microstructure				Jominy Test (ASTM A255 HRC-1/16 inch)						Hydrostatic Pressure Test			Drift result		Dimensional inspection		Visual examination			
S		R		C		A		B		C		D		Grain Size		Decarburizing Layer								time			pressure			conclusion						
						T	H	T	H	T	H	T	H																							
														ASTM E112		psi		mm																		
														9-8																						

Note: (1) No impermissible macro-structural defects, such as flakes, subsurface bubbles and pipes are available. This material is free from mercury and radioactivity. No welding repair.
(2) When there is any complaint, you are kindly requested to mark the Steel Grade, Heat No., Size, Delivery Date, Causes and reserve the material in the condition of delivery
(3) Our company's quality management system has been certified by TÜV SÜD for fulfilling all requirements of ISO9001:2008, ISO/TS 16949.
(4) Straightening: cold rotary straightening

Signature of quality assurance manager: ZhangZhiCheng
Date: 2017-05-27

Certificate of Conformance



Houston Plating & Coatings, LLC.
Houston Plating & Coatings, LLC.
Electroless Nickel Plating / Spray Coatings

1301 Georgia St.
South Houston, TX 77587
Phone: (713) 946-8920
Fax: (713) 946-8487
www.houstonplating.com

Customer:	P. O. Number:	Order No:
B & T OILFIELD PRODUCTS	603489	563343
BFBF-02500-09		7
BFBF-03000-06		6
BIHB-02250-09		13
BIHB-02310-09		7
BIHB-02750-09		13
BIHB-03680-09		4
BIHB-01865-09		7
BIHO-01865-09		13
FBPM-02310-09		4
FBPN-02750-09		4
GBBO-01870-09		6
GBBO-02250-09		8
GBBO-02560-09		4
GBBO-02750-09		7
GBBO-03688-09		5
RBPM-02250-09		4
RBPM-02750-09		4
XLEM-01875-09		100
XLEM-01875-09		100

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Customer:	P. O. Number:	Order No:
B & T OILFIELD PRODUCTS	603489	563343

Process Date: 10/27/2017

Expiration Date: NA

Process Required: QPQ- Liquid Nitriding

To Spec: HPC Proc 11.0 Rev 10

Manufacture DELAMIN

Batch No: 102717

Cure Time/Temp: 1075°F FOR 2HRS


DFT: NA

ENPMils: NA

Notes:

KQ500: 750°F FOR 30 MIN.
VISUAL INSPECTION: PASS

Quality, Assurance Manual Rev: 15 Date: 07/2017

DATE: 10/27/2017 SIGNATURE: 

Country of Origin: U.S.A.

Alberto Landois