Vulcan Threaded Products #10 Crosscreek Trail Pelham, Al 35124 Ph:(205) 620-5100 Fax:(205) 620-5150

Ref: Low Carbon All-Thread Rod

February 19, 2017

This letter is to certify that the All-Thread Rod supplied by Vulcan Threaded Products will meet the minimum tensile and yield requirements of ASTM A36 & A307 and produced to a 1A fit. ¹/₄" to 1" All-Thread Rod is produced from 1006 to 1010 steel. 1-1/8" to 2-1/2" All-Thread rod is produced from 1018 or A36 Steel. All of the above mentioned threaded rod is manufactured in the United States from domestic and foreign raw material.

All Hot-Dip galvanized Threaded Rod is plated according to ASTM A153 specification. All Zinc Threaded Rod is plated to ASTM B633 specification.

Best Regards,

Jeff Hayes

Jeff Hayes Purchasing Manager

CERTIFIED RECORD OF CHEMICAL AND MECHANICAL PROPERTIES

		1/4" 7	THROUGH	5/8" MA	NUFACTUR	EDI	FROM	1006-1010	STEEL					
					CTURED FR					_				
					VILL MEET	 MIN	IMI IM	TENSII E	& VIFI D		-			
ALL ALL-THREAD ROD WILL MEET MINIMUM TENSILE & YIELD REQUIREMENTS OF ASTM A307 GRADE C														
ITEM MANUFACTURER MATERIAL AS DESCRIBED ON INVOICE														
1	VI	JLCAN TH	HREADED		1/4"-20 LOW CARBON STEEL THREADED ROD									
		PRODU	JCTS		MELTED DOMESTICALLY AND INTERNATIONALLY									
					MANUFACTURED IN THE UNITED STATES									
2	Vt	JLCAN TH		5/16"-18 LOW CARBON STEEL THREADED ROD										
		PRODU	5015		MELTED DOMESTICALLY AND INTERNATIONALLY MANUFACTURED IN THE UNITED STATES									
3	VI	II CAN TH			MANUFACTURED IN THE UNITED STATES 3/8"-16 LOW CARBON STEEL THREADED ROD									
5		VULCAN THREADED PRODUCTS				3/8"-16 LOW CARBON STEEL THREADED ROD MELTED DOMESTICALLY AND INTERNATIONALLY								
				MANUFACTURED IN THE UNITED STATES										
4	VULCAN THREADED				1/2"-13 LOW CARBON STEEL THREADED ROD									
		PRODU	JCTS		MELTED DOMESTICALLY AND INTERNATIONALLY									
5	371				MANUFACTURED IN THE UNITED STATES									
5	vt	PRODU	HREADED 5/8"-11 LOW CARBON STEEL THREADED ROD UCTS MELTED DOMESTICALLY AND INTERNATIONALLY											
		TRODU			MANUFACTURED IN THE UNITED STATES									
6	VU	JLCAN TH	Interview Interview IREADED 3/4"-10 LOW CARBON STEEL THREADED ROD)		
PRODUCTS 74 -10 LOW CAL							ESTICALLY AND INTERNATIONALLY							
				MANUFACTURED IN THE UNITED STATES										
7	VU	JLCAN TH	IREADED 7/8"-09 LOW CARBON STEEL THREADED						O ROE)				
		PRODU	JCTS		MELTED DOMESTICALLY AND INTERNATIONALLY									
				MANUFACTURED IN THE UNITED STATES										
8	V	JLCAN TH PRODU		1"-08 LOW CARBON STEEL THREADED ROD MELTED DOMESTICALLY AND INTERNATIONALLY										
		FRODU			MANUFACTURED IN THE UNITED STATES									
ITEM	HEAT#	CARBON	MANG.	PHOS.			LICON	CHROM.	NICKEL	MO		COPPER		
1	65800	.06	.47	.006	.010		.15	.06	.09	.0)2	.20		
2	64241	.06	.45	.011	.024		.12	.15	.10	.0)3	.26		
3	26863	.06	.40	.016	.025		.12	.13	.14	.0)0	.26		
4	26864	.07	.42	.013	.02		.13	.10	.11	.0)0	.21		
5	1030122	.04	.43	.018	.034		.11			-	-			
6	65197	.17	.67	.014	.016		.18	.14	.10	.0)3	.32		
7	62286	.22	.90	.006	.025		.23	.05	.07)2	.16		
8	62260	.15	.72	.012	.026		.19	.07	.08	.0)2	.21		
ITEM	HEAT # TENSILE PSI		LE	YIELD		%ELONGATION		REDUCTION			ND TEST			
			PSI		PSI		8" GAGE		OF AREA					
1	658	00	62,200											
2	6424	41	61,500											
3	268	63	60,915		40,053		36.0							
4	268			1	40,611		34.0							
5	1030	122	58,85	3	39,885		40.0							
6	651	65197 73,700			51,200		32.0							
	62286 78,600						31.0							
7	622	86	78,60	0	50,700		3	1.0						

WE HEREBY CERTIFY THAT THE FOREGOING DATA IS A TRUE COPY OF THE DATA FURNISHED BY THE PRODUCING MILL. ALL DATA SUPPLIED IN THE ABOVE TEST REPORT ARE TYPICAL OF MATERIAL FURNISHED BY VULCAN THREADED PRODUCTS.

DATE: __1-18-09_____

VULCAN THREADED PRODUCTS

By: _____Jeff Hayes_

AUTHORIZED AGENT QUALITY CONTROL SUPERVISOR #10 CROSSCREEK TRAIL PELHAM, AL 35124 PH (205) 620-5100 FAX (205) 620-5150

CERTIFIED RECORD OF CHEMICAL AND MECHANICAL PROPERTIES

			1-1/8" 7	HROUGH	[2" N	IANU	FACTURE	D FROM 10	18 or A36 S	TEEL				
								ED FROM						
								MINIMUM ASTM A30						
ITEM	MANUFACTURER MATERIAL AS DESCRIBED ON INVOICE													
1	VULCAN THREADED 1-1/8"-7 LOW CARBON STEEL THREADED									ED ROD				
		PRODUCTS				MELTED AND MANUFACTURED IN THE								
		DED	UNITED STATES											
2		VULCAN THREADED PRODUCTS				1-1/4"-7 LOW CARBON STEEL THREADED ROD MELTED AND MANUFACTURED IN THE								
						UNITED STATES								
3	3 VULCAN THREADED					1-3/8"-6	LOW CAR	BON STEEI	_ THREAD	ED ROD				
		PRODUCTS				MELTED AND MANUFACTURED IN THE								
4						UNITED STATES								
4		VULCAN THREADED PRODUCTS				1-1/2"-6 LOW CARBON STEEL THREADED ROD MELTED AND MANUFACTURED IN THE								
						UNITED STATES								
5		VULCAN THREADED				1-3/4"-5 LOW CARBON STEEL THREADED ROD								
		PRODUCTS				MELTED AND MANUFACTURED IN THE								
							02 4 5 1		ITED STAT					
6		VULCAN THREADED PRODUCTS				2"-4.5 LOW CARBON STEEL THREADED ROD MELTED AND MANUFACTURED IN THE								
		TRODUCTS				UNITED STATES								
7		VULCAN THREADED				2-1/4"-4 LOW CARBON STEEL THREADED ROD								
		PRODUCTS				MELTED AND MANUFACTURED IN THE								
						UNITED STATES								
8	8 VULCAN THREADED PRODUCTS				2-1/2"-4 LOW CARBON STEEL THREADED ROD MELTED AND MANUFACTURED IN THE									
			KODUCIS			UNITED STATES								
ITEM	HE	AT#	CARBON	MANG .	PH	IOS.	SULPHUR	SILICON	CHROM.	NICKEL	MOLY.	COPPER		
1	5899	I1120	.20	.80	.0	15	.026	.22	.10	.09	.03	.43		
2	5899	I5771	.17	.70		02	.036	.16	.12	.10	.04	.41		
3	3199	I3248	.20	.60	.0	12	.040	.21	.11	.09	.04	.37		
4	3199	I3251	.18	.60	.0	12	.037	.21	.13	.10	.04	.33		
5	151	1115	.14	.78	.0	08	.023	.21	.07	.15	.034	.37		
6	-	1438	.17	.82		05	.017	.23	.06	.09	.016	.21		
7		952	.18	.77		01	.03	.22						
8	640)723	.18	.70	.(02	.04	.22						
HEA	T #	PSI MIN PS		YIELD	-		NGATION	REDUCTIO OF AREA						
				PSI MIN		8" GAGE MIN %		MIN %	`					
5899I		77,400		52,100		27								
5899I5771		72,400		49,600		24								
3199I3248				48,408		25								
3199I3251		-		48,408		23								
151115		68,000		46,900		47								
151438		70,100		49,700 85,400			52 16							
<u>681952</u> 640723		92,300 89,500		85,400 80,550			15							
0407	45						-	A TRUE COPY	-					

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