

CERTIFICATE OF INSPECTION & TEST

(EN 10204 3.1)

ORIGINAL

ST ST&H CORPORATION
 411-3 Shinwol-ri, Jinryemyun, Gimhae-si Gyungnam, Korea
 Tel: 82.51.744-4680(5 line) Fax: 82.51.744-4670
 E-mail: stcorp@kornet.net

RAW MATERIAL : ASTM A516 STEEL PLATE

Date: **SEP.13.2013**

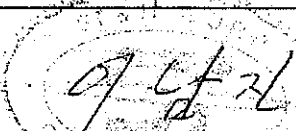
Customer : TUVANSA			Contract No :4169										Certificate No :MNJ8205							
Spec. for Material			Spec. for Inspection										Surface & Dimension		N.D.E		Heat Treatment			
ASTM/ASME A/SA234-11 WPB NACE MR0175 / ISO 15156-2009			ASME B16.9 - 07										GOOD		N/A		NORMALIZED (900 °C X 0.5HR)			
ITEM	STAMP NO.	CHEMICAL COMPOSITION (%)											Tensile Test				Hardness Test(HB)	Hydrostatic Test	C.E	
		C	Si	Mn	P	S	Cr	Mo	Ni	Cu	V	Nb	Y-P MPA	T-S MPA	EL (%)	RA (%)				
SIZE	Q'TY	MIN	0.10	0.29										240	415	30				
		MAX	0.30		1.06	0.05	0.058	0.40	0.15	0.40	0.40	0.08			655			197		0.5
CAP STD			0.18	0.17	0.51	0.012	0.013	0.02	0.01	0.01	0.01	0.01		305	425	30		<197		0.27
6"	200	2460.																		
CAP STD			0.18	0.17	0.51	0.012	0.013	0.02	0.01	0.01	0.01	0.01		305	425	30		<197		0.27
8"	100	2460.																		
CAP STD			0.18	0.18	0.55	0.019	0.012	0.03	0.01	0.01	0.01	0.01		285	435	30		<197		0.28
10"	50	2450																		
CAP STD			0.18	0.18	0.55	0.019	0.012	0.03	0.01	0.01	0.01	0.01		285	435	30		<197		0.28
14"	20	2450																		
CAP STD			0.18	0.18	0.55	0.019	0.012	0.03	0.01	0.01	0.01	0.01		285	435	30		<197		0.28
16"	20	2450																		

We hereby certify that the material herein has been made and tested in accordance with the above specification and also with the requirements called for by the above order.

1MPa = 145.037 psi
 1MPa = 0.145037 ksi
 1psi = 0.00689 MPa
 1ksi = 6.89476 MPa

Reviewed by
 Witnessed by

C.E. = C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15


 Manager of Q.A Dept