



# MATERIAL TEST RESULT

MESSRS	UNIMECH ENGINEERING (M) SDN. BHD.
JOB NAME	
JOB No.	
P.O.No.	APO-2004-0009
PRODUCT CODE	

Certificate No.  
1020332040-011-01-01-Z1

Date : 2020/07/10



Figure	UTKM1	Valve No.	
	Material ASTM A 351 Gr. CF8M	Item No.	14
	Charge No.	Display No.	Name of Parts
1	K04RM		BODY
2	K97RM		BODY
3	K96RM		BODY
4			

**CHEMICAL COMPOSITION %**

Element	C	Mn	Si	S	P	Ni	Cr	Mo								
Spec.	Max	Max	Max	Max	Max	9.0	18.0	2.0								
	0.08	1.50	1.50	0.040	0.040	12.0	21.0	3.0								
1	0.05	0.89	1.27	0.009	0.022	9.4	18.1	2.0								
2	0.05	0.92	1.21	0.007	0.034	9.2	18.2	2.1								
3	0.06	1.08	1.05	0.007	0.034	9.3	18.1	2.1								
4																
Element																
Spec.																
1																
2																
3																
4																

**TENSION TEST**

**IMPACT TEST**

Item			Tensile str.	Yield str.	Elongation				
Unit			MPa	MPa	%				
Spec.			Min	Min	Min				
1			485	205	30				
2			571	357	38				
3			579	352	49				
4			587	369	46				

Item									
Unit									
Spec.									
1									
2									
3									
4									

**HEAT TREATMENT °C**

Spec.	Min 1040° C WQ
1	ST:1080° C*110min WQ
2	ST:1080° C* 110min WQ
3	ST:1080° C* 110min WQ
4	

N:Normalizing      A:Annealing      T:Tempering      Q:Quenching      AC:Air Cooling  
 WQ:Water Quenching      OQ:Oil Quenching      WC:Water Cooling      FC:Furnace Cooling      ST:Solution Treatment

**REMARKS**

EN10204 Type 2.2

Reviewed by \_\_\_\_\_

**KITZ CORPORATION**  
 QC Manager