

# AEROTECH/KBA M1450W

## CERTIFIED VALUES

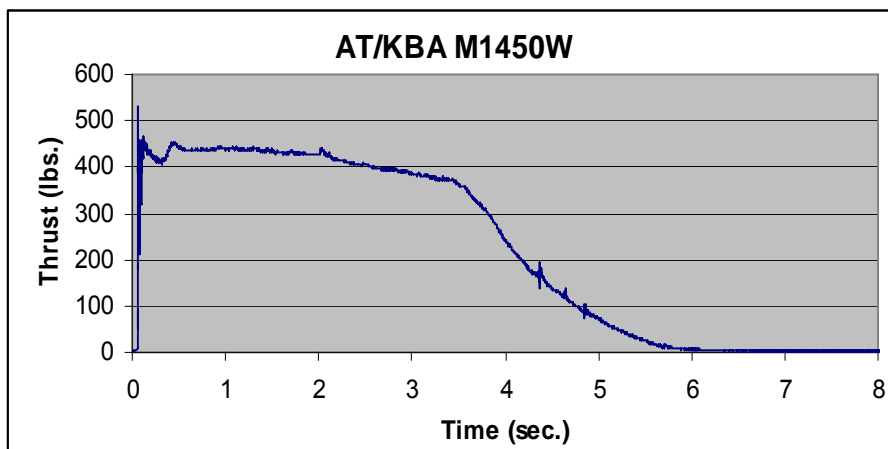
**Total Impulse:** 7813 Newton-seconds  
**Delays:** Plugged  
**Propellant Type:** White Lightning  
**Propellant Mass:** 4150 grams  
**Casing Dimensions:** 75mm × 1039mm  
**Certification Date:** July 11, 2007  
**Certification Type:** High Power Rocket Motor

## STATIC TEST DATA

**Date Tested:** June 16, 2007  
**Total Impulse:** 7813 Newton-seconds ( $\sigma$  80)  
**Peak Thrust:** 2134 Newtons ( $\sigma$  91)  
**Burn Time:** 5.46 seconds ( $\sigma$  0.11)  
**Average Thrust:** 1432 Newtons ( $\sigma$  43)  
**Mass After Firing:** 2846.0 grams

<b>Delay Time(sec.)</b>	<b>Plugged</b>		
<b>Average Measured Delay(sec.)</b>	P		
<b>Initial Mass (gm.)</b>	7615		

## TYPICAL THRUST-TIME CURVE



## REMARKS

Certified for use in AMW 75-7600 hardware only.  
 No substitutions allowed



Data File #	Engine	Total Impulse	Max Thrust	Avg Thrust	Burn Time	Delay Time	Init Weight	Fired Weight
070616W10	KBA-M1450	7869.0	2198.0	1462.0	5.38	Plugged	7623.0	2848.3
070616W14	KBA-M1450	7756.0	2070.0	1401.0	5.54	Plugged	7607.0	2844.2
Average		7812.5	2134.0	1431.5	5.46		7615.0	2846.3
Std Dev		79.903	90.510	43.134	0.110			
Std Dev %		1.0%	4.2%	3.0%	2.0%			
<b>Range</b>	<b>Indicated</b>	<b>Actual</b>	<b>Actual</b>					
	Plugged	Plugged	Plugged					

; @File: 070616w10.txt, @Pts-I: 2863, @Pts-O: 31, @Sm: 5, @CO: 5%  
; @TI: 7826.54, @TIa: 7810.08, @Tle: 0.0%, @ThMax: 2190.92, @ThAvg: 1458.193, @Tb: 5.356  
; Exported using ThrustCurveTool, www.ThrustGear.com  
M1450 75 1039 Plugged 4.15 7615.0 RCS/AT

0.028 15.18052  
0.03 146.8054  
0.032 383.824  
0.042 1287.269  
0.044 1280.63  
0.052 1642.995  
0.056 1582.638  
0.066 1806.894  
0.068 1935.742  
0.078 2113.8  
0.094 2179.98  
0.22 1966.057  
0.402 1894.682  
0.8 1882.045  
1.048 1957.846  
1.9979 1948.557  
2.9099 1804.418  
3.5319 1601.54  
3.7719 1235.988  
4.2198 718.142  
4.3238 735.04  
4.3358 657.983  
4.3478 810.83  
4.3578 817.858  
4.4218 633.099  
4.6038 496.793  
4.6158 545.051  
4.6698 419.3  
4.7358 355.661  
5.3858 108.681  
5.7238 0.0