

DATA SHEET FOR THE DRAG AND LIFT LABORATORY

Part 1: Cylinder and Strut Measurements

1.1 Free Stream Velocity

Pitot at 25 cm (Pa)	
Static (Pa)	

1.2 Cylinder Surface Pressure

Angle (°)	Pressure (Pa)
0	
10	
20	
30	
40	
50	
60	
70	
80	
90	
120	
150	
180	
-150	
-120	
-90	
-80	
-70	
-60	
-50	
-40	
-30	
-20	
-10	

1.3 Cylinder Base Pressure (Cylinder at 180°)

Centre-line tap (Pa)	
Middle tap (Pa)	
Tap Closest to Wall (Pa)	

1.4 Cylinder and Strut Wake

y (cm)	Cylinder	Strut
25		
24		
23		
22		
21		
20		
19.5		
19		
18.5		
18		
17.5		
17		
16.5		
16		
15.5		
15		
14.5		
14		
13		
12		
11		
10		
Static		

Note: Use the pressure at $y = 25$ cm and the static pressure to calculate the free stream velocity

Part 2: Wing Measurements

2.1 Free Stream Velocity

Pitot at 25 cm (Pa)	
Static (Pa)	

2.2 Wing Surface Pressure

Tap	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 7.5^\circ$	$\alpha = 10^\circ$
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					