From S.F. Hoerner, Fluid-Dynamic Drag, p 3-17

Figure 32 (near). Drag coefficients of various 3dimensional bodies (40) at R'numbers between 10⁴ and 10⁶. Note: (•) tested on wind-tunnel floor.

Figure 33 (right). Drag coefficients (41) of 2dimensional shapes (between walls) at R between 10⁴ and 10⁶. Note: (+) in subcritical flow.

¶ (37) Information on rear-side pressure of plates:

a) On disks and small-aspect-ratio plates see: NACA (36,

a); AVA Ergebnisse IV; reference (40,f).

b) On plates between walls see: (12), (35,a) and (40,f). ¶ (40) Experimental results on three-dimensional bodies:

a) Doetsch, Parachute Models, Lufo 1938 p.577.

b) NACA, Cup Anemometer, Tech Rpt 513 (1935).

c) AVA, Hemispherical Bodies, Ergebnisse IV (1932).

d) Eiffel, Recherches a Tour Eiffel, Paris 1907.

e) Hemispherical Cup at $R_d = 2 \cdot 10^5$, ARC RM 712 (1919).

f) Irminger and Nokkentved, Elementary Bodies and Buildings, Kopenhagen 1930 and 1936; Transl'n by Jarvis.

¶ (41) Sections (tested between plates or walls):

a) Lindsey, Simple Shapes, NACA T. Rpt 619 (1940).

b) Junkers Wind-Tunnel, Report Ströte V.9609 (1940).

c) Interference Between Struts, NACA T. Rpt 468 (1933).

d) Delany-Sorensen, Various Shapes, NACA T.Note 3038.

e) AVA Göttingen, Ergebnisse II (1923) and III (1926).

f) Junkers Wind-Tunnel Result on Angle Profile.

g) Reported by Barth, Zt.Flugwissen 1954 p.309.

¶ (42) Free-streamline (cavitation) theory:

a) Kirchhoff, Free Jet Theory, Crelle 1869 (see Lamb).

b) Bobyleff, Russian Phys.-Chem. Society 1881 (see Lamb).

c) Riabouchinsky-Plesset-Schafer, Journal Appl.Physics 1948

p.934, and Review Modern Physics 1948 p.228.

d) Reichardt, Laws of Cavities, German ZWB UM 6628,

¶ (43) Neef, Dive Brakes, Fieseler Tunnel Rpt 22 (1941).

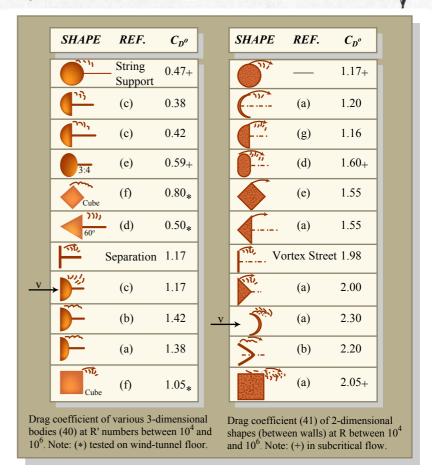


Figure by MIT OCW.