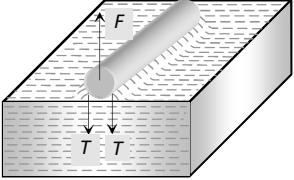
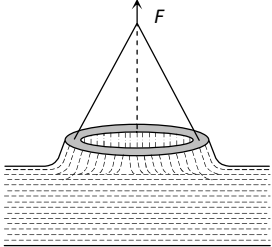
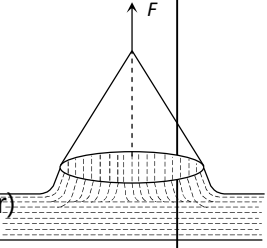
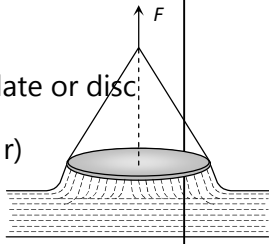


Force Due to Surface Tension.

If a body of weight W is placed on the liquid surface, whose surface tension is T . If F is the minimum force required to pull it away from the water then value of F for different bodies can be calculated by the following table.

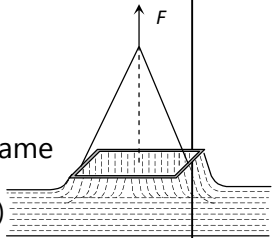
Body	Figure	Force
Needle (Length = l)		$F = 2lT + W$
Hollow disc (Inner radius = r_1 Outer radius = r_2)		$F = 2\pi(r_1 + r_2)T + W$
Thin ring (Radius = r)		$F = 2\pi(r + r)T + W$ $F = 4\pi rT + W$

Circular plate or disc
(Radius = r)



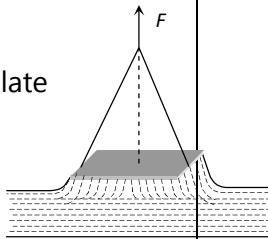
$$F = 2\pi rT + W$$

Square frame
(Side = l)



$$F = 8lT + W$$

Square plate



$$F = 4lT + W$$