Cylinder modeling

Thickness

Clavarinos Equation

Clavarinos equation is used to determine the wall thickness of a cylinder. This is equation is applicable to cylinders with closed ends made of ductile materials. It is based on maximum principal strain theory.



*Fig 1.2 Clavarinos Formula*

Where:

P is the internal pressure, N/m2

D is the internal diameter, m

S is the allowable tensile stress, N/m2

t is the thickness of the material shell, m

µ is the poison’s ratio

References

Edge, E. (2021). Clavarinos equation thick-walled cylinders of ductile material Calculator and formula. Retrieved 7 August 2021, from <https://www.engineersedge.com/calculators/clavarinos_equation_thickwalled_cylinders_15620.htm>