Daga M	,		
Page No	,		-
Deta H		П	
Dane	1.1	1.1	

Tau Vessel

Vessel Height = 25m

Vessel ID = 2m

Max. operating Pressure = 2 HPa

Design Pressure = 1.05 x Max. operating Pressure

2 - + = 222 midsint Inde but arred

= 1.05 x 2

= 2.1 MPa

Skirt Height = 5m (1931) #

f = 100 MPa = x x x 1.5 = J = 0.85

wind velocity = 150 km/hr

Cs = 0.04 1914 48.00 =

 $t = \frac{1}{2} \frac{1}{2} \frac{1}{100} \frac{10^{4} \times 2}{100} \frac{10^{4} \times 2}{100}$

110 to 110 to 110 10 1 25.015 thm

tr = t + tc Corrosion Allowance

= 25.015+ 2 = 27.015mm

Standard available (near highest) thickness ic 28 mm MM RFUCIO.0 =

Table Vergel
Corroded shell Thickness = t-C
= 28 = 2
= 26 mm
Any. Absorbing Processes a 21180
Axial stress due to pressure
2 1:05 < 2
3p = 10 p Di2 =
4t (Di+t) = things to the
13.0 = T = 2.1 × 106 × 2×2 MM mor = 2
4x 26 x 10-3 (2+0.002)
= 40.34 HPa
A service of the serv
Axial Stress due to dead load:
1 242 + 65 - 58100 M × 0.55 + 2.12 M
let we be the weight of shell for ym length
Ws = TDEXYs
Vs = 7.7 ×10-4
$\omega_{s} = \pi_{x2x26x10^{-3}x} + 7 \times 10^{-4}x(x)$ $= 0.01257 \dots 0.012$
= 0.01254 x MN
Evident R.C. N.

Page No .		
Date	J	

TES FOR WE CHES YE XON/m2 T

= 0.077 x HPa

Weight of liquid supported for distance $\times m$ from $top := \frac{x}{4}D^2 pg \times \frac{1}{4}$

= X x 4 x 1000 x 9.81 x10-6 MN

- 0.03082x HN

Fil = WL = 0.03082X HN
710t 7x2x26x10-3

= 0.1884× HPa

WKT, 520 = 521 + 525 = (0.677 + 0.1887) x HPa = 0.2657 x HPa

Time Period:

 $T = 6.35 \times 10^{-5} \left(\frac{H}{D}\right)^{3/2} \left(\frac{W}{\tau}\right)^{1/2}$

Here w= ws + W, (in kn) Replacing X with H = 25 m $T = 6.35 \times 10^{-5} \left(\frac{25+5}{2}\right)^{3/2} \times \left(\frac{0.04338 \times 10^{3}}{2.1 \times 10^{-3}}\right)^{1/2} \times 10^{-3}$.. T = 0.753s Pw = 0.05 vw where vw is wind velocity in km/hr => Pw = k, k, Pw x Do Total wad due to wind R₁ = 0.7 (for cylindrical surface) $R_2 = 2 \quad (T > 0.55)$ Do = Di + 2t = 2.056 m Pw = 0.4 x 2 x 0.05 x(x) x (150)2 x 2.056 = 3238.2(x) N Mw = Pwx = 1619.1 x2 Nm

	and the base of the probability	-	
Page N	0.		
Date	1		1
	-	- Hamme	Н

7+ (Di+t) Di 7+ D2

ス×26×10⁻³×2²

: 0.0198 x2 MPa

Calculating stress due to sesemic wad

Mg; Cg Wx 2 (3H-x)

3H2

= $0.04 \times (0.04338(x) \times 10^6) \times 2H$ $\frac{2}{3}$ $\frac{2}{3}$

.. Ms = 0.038 x HN

From = 4Ms & 4Ms

7t (Di+t) Di 7tD'

= 4 x 0 · 038 (x) x 10⁶ 7 x 26 x 10⁻³ x 2²

0.2654 x - 41.34 + 0.0198x - x F315.0

= 0.465 × HPa

52 (tensile) = 62p - 5210 + 5214 + 525M = FJ

 $40.34 - 0.2651 \times + 0.0198 \times^{2} + 0.465 \times = 100 \times 85 \times 10^{-2}$

10 MI = 5X

.. 0. 0198 x2 + 0.1995x - 44.66 = 0 :. x = 42.72m (8ince x >0) We , kee x, 7 H Now, 62 (compression) = 620 - 62p + 62wm + 520m = 0.125 Et $0.125 \text{ Et} = 0.125 \times 2 \times 10^5 \times 0.026$ · 20056, = 316.15 HPa ULE X 990 C = pH 0.2657 x - 40.34 + 0.0198 x 2 + 0.465 x = 316.15 0.7307 0.0198x2 + 0-1995x - 356.49 = 0 4 x 2 x 3 x 8 x 5 x 5 X = 117 m 7 H xc = 117m, x= 42-72m Since , X > H => The design is OK 101 1 A BAP 10 1 X ROLL . 1 + 1 1 HAL . 0 - 12.0+