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Rev: C Project: PRESSURE DYNAMICS - SHELL PRELUDE HPU

Calculation: MATERIAL PROPERTIES

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C 23/02	DES	CRIPTION				CALC	CHK	API	
23/02	2/2012 <				>	DHE	< >	<	>
1. Object To determ used in de 2. Refere	ine the maxi sign.	imum equivalent stres	s levels allov	wable for	each o	f the m	ateria	als	
ID REFERE	ENCE	PUBLISHI	ER .	DATE/REV	DESCR	IPTION_			
01 STD FOR	CERTIFICATIO		SKE VERITAS	NOV 2008	OFFSH	ORE CO			
3. Variab Variabl <u>e</u>	les:	<u>Description</u>				Source			
R _{p0.2} :=195	5 MPa	Minimum Yield Stress	s for NV 316	L		REF 02 2, TAB			N
						Z, IAD	LL D	4	
4. Calcula	ation of Allo	owable Stresses:				2, TAD			
4. Calcula		owable Stresses: O FOR COMPLIANCE:	RE	EF 02		Z, TAU			
4. Calcula	STANDARD			F 02 / 316L		Z, TAD			
4. Calcula	STANDARD	FOR COMPLIANCE: SPECIFICATION:	NV			2, 140			
4. Calcula	STANDARE MATERIAL SIZE LIMIT	FOR COMPLIANCE: SPECIFICATION:	NV	/ 316L ONE		2, 140			
4. Calcula	STANDARE MATERIAL SIZE LIMIT	FOR COMPLIANCE: SPECIFICATION: TATIONS: REFERENCE: Where Re is the spectors at room temporary	N\ M [*] cified minimu erature in MF	/ 316L ONE I um yield			REF 0		.5
$R_e \coloneqq R_{p0.2}$	STANDARE MATERIAL SIZE LIMIT	O FOR COMPLIANCE: SPECIFICATION: TATIONS: REFERENCE: Where Re is the spector stress at room tempor Note: 0.2% proof str	N\ M [*] cified minimu erature in MF	/ 316L ONE I um yield	ess		REF 0	1, 1	
$R_e \coloneqq R_{p0.2}$ $C \coloneqq R_e$	STANDARE MATERIAL SIZE LIMIT MATERIAL	O FOR COMPLIANCE: SPECIFICATION: TATIONS: REFERENCE: Where Re is the spector stress at room temper Note: 0.2% proof stress to stress the spector stress at room temper Note: 0.2% proof stress stres	N\ M [*] cified minimu erature in MF ess taken as	/ 316L ONE I um yield	ess		REF O	1, 1	.2.
$R_e \coloneqq R_{p0.2}$ $C \coloneqq R_e$ $\sigma_e \coloneqq 0.85$	STANDARE MATERIAL SIZE LIMIT MATERIAL	O FOR COMPLIANCE: SPECIFICATION: TATIONS: REFERENCE: Where Re is the spector stress at room tempor Note: 0.2% proof str	N\ M [*] cified minimu erature in MF ess taken as	/ 316L ONE I um yield	ess		REF 0	1, 1	.2.
$egin{aligned} & \mathbf{R_e} \coloneqq \mathbf{R_{p0.2}} \ & \mathbf{C} \coloneqq \mathbf{R_e} \ & \mathbf{\sigma_e} \coloneqq 0.85 & \mathbf{\sigma_e} = 165.75 \ & \mathbf{S. Conclusion} \end{aligned}$	STANDARE MATERIAL SIZE LIMIT MATERIAL C 5 MPa	O FOR COMPLIANCE: SPECIFICATION: TATIONS: REFERENCE: Where Re is the spector stress at room temper Note: 0.2% proof stress to stress the spector stress at room temper Note: 0.2% proof stress stres	N\ M ² cified minimu erature in MF ess taken as	/ 316L DNE I um yield Pa s yield stre			REF O	1, 1 1, 4 1, 4	.2.
$egin{aligned} & \mathbf{R_e} \coloneqq \mathbf{R_{p0.2}} \ & \mathbf{C} \coloneqq \mathbf{R_e} \ & \mathbf{\sigma_e} \coloneqq 0.85 & \mathbf{\sigma_e} = 165.75 \ & \mathbf{5. \ Conclusion} \end{aligned}$	STANDARE MATERIAL SIZE LIMIT MATERIAL C 5 MPa	O FOR COMPLIANCE: SPECIFICATION: TATIONS: REFERENCE: Where Re is the spectores at room temporal Note: 0.2% proof str. For steel Allowable stress limit	N\ M ² cified minimu erature in MF ess taken as	/ 316L DNE I um yield Pa s yield stre			REF O	1, 1 1, 4 1, 4	.2.