

RCC-MR

DESIGN AND CONSTRUCTION RULES FOR MECHANICAL COMPONENTS OF NUCLEAR INSTALLATIONS

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afcen

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Table A6.6100: criteria RB 3280 which must be complied with

RB 3280 critria	Stress	Allowabl e limits	Non standardized bolting elements or nut height < 0,8 d	Standardized bolting elements using nuts with a usual height (h ≥ 0,8 d)					
				R _{p0,2} parts = R _{p0,2} screw		R _{p0,2} parts > R _{p0,2} screw		R _{p0,2} parts < R _{p0,2} screw	
				Bolts – Tie-rods	Screw – studs	Bolts – Tie-rods	Screw – studs	Bolts – Tie-rods	Screw – studs
RB 3282.11	$(\overline{\sigma_m})_{\text{fictitious}}$	S _{mB}	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	$\overline{\sigma_m}$	2S _{mB}	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	$\overline{\sigma_m + \Phi \sigma_b}$	3S _{mB}	Yes	Yes	Yes	Yes	Yes	Yes	Yes
RB 3282.12	$(\tau_{fv})_{\text{fictitious}}$	0,6.S _{mB}	Yes	No	See note 1	No	See note 1	No	See note 2
	τ_{fv}	1,2.S _{mB}							
	$(\tau_{fp})_{\text{fictitious}}$	0,3.S _m							
	τ_{fp}	0,6.S _m							
	$(\rho_t)_{\text{fictitious}}$	0,5.R _{p0,2}	Yes	No	No	No	No	No	No
	ρ_t	R _{p0,2}							
	$(\tau_t)_{\text{fictitious}}$	0,6.S _{mB}	Yes	No	No	No	No	No	No
	τ_t	1,2.S _{mB}							
	$(\rho_f)_{\text{fictitious}}$	0,5.R _{p0,2}	Yes	No	No	No	No	No	No
	ρ_f	R _{p0,2}							
RB 3283.11		Fatigue curve	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note 1: Compliance is not necessary if $L_e \geq 0,8 d$
Note 2: Only compliance with τ_{fp} is necessary. For information τ_{fp} must then be calculated with length L'_e (A6.5222)
The mechanical properties of the nuts fitted to bolts, tie-rods or studs must be at least equal to those of the threaded rod.