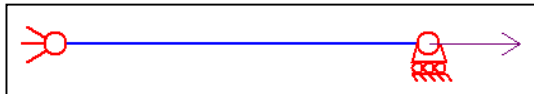


TEST SCHEDULE R 2	EN 1993-1-1: 2005 (EUROCODE 3)	Sargon ©, Cescoplus ©
RESISTANCE	TENSION	EC3.RES.NP.002



Program: WEURO © version October 2007 for Sargon and Cescoplus

Keywords: EN 1993, Eurocode 3, example, validation, benchmark, reliability, quality control, error measure. **Parole chiave:** Eurocodice 3, esempio, validazione, test, affidabilità, controllo di qualità, misura dell'errore

Tv=exploitation target value, **Cv**=exploitation computed value

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BEAM		
Length [mm]	Left end	Right end
1000	HINGE	SIMPLY SUPPORTED

LOAD		
Type	Value	Point of application
TENSION	N=1.000.000N	RIGHT END

MATERIAL	A441/40					
f_y [N/mm ²]	f_u [N/mm ²]	E [N/mm ²]	ν	γ_{M0}	γ_{M1}	γ_{M2}
276	414	2,000e+05	0,3	1,1	1,1	1,25

CROSS-SECTION	HE 100 M	CLASS: N* →1			
A [mm ²]	J ₂ [mm ⁴]	J ₃ [mm ⁴]	J _t [mm ⁴]	W ₂ [mm ³]	W ₃ [mm ³]
5324	1,143e+07	3,992e+06	6,821e+05	1,904e+05	7,531e04
W _{pl2} [mm ³]	W _{pl3} [mm ³]	i ₂ [mm]	i ₃ [mm]	i _t [mm]	
2,358e+05	1,163e+05	46,3	27,4	30,6	
h	b	t _w	t _f	r	
120	106	12	20	12	

OTHER DATA					
% red A _{net}	A _{net} [mm ²]				
0,95	5.057,8				

TARGET VALUES BASED ON PRELIMINAR COMPUTATIONS

$$N_{p/Rd} = A \cdot f_y / \gamma_{M0}, \quad N_{u/Rd} = 0,9 \cdot A_{net} \cdot f_u / \gamma_{M2}, \quad N_{t/Rd} = \min(N_{p/Rd}, N_{u/Rd})$$

$N_{p/Rd}$ [N]	$N_{u/Rd}$ [N]	$N_{t/Rd}$ [N]	$T_v = N / N_{t/Rd}$
1.335.840	1.507.629	1.335.840	7,486E-01

CHECKER'S RESULTS (COMPUTED VALUES) AND COMPARISON WITH THE TARGET

Cv	(Cv - Tv)/Tv.
7,486E-01	0,000E+00