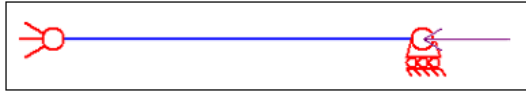


TEST SCHEDULE R 8	EN 1993-1-1: 2005 (EUROCODE 3)	Sargon ©, Cescoplus ©
RESISTANCE	COMPRESSION	EC3.RES.NN.005



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
Authors: Ing. Marco Croci, Ing. Paolo Rugarli

BEAM		
Length [mm]	Left end	Right end
5000	HINGE	SIMPLY SUPPORTED

LOAD		
Type	Value	Point of application
COMPRESSION	N=100.000N	RIGHT END

MATERIAL	A572/42					
f_y [N/mm ²]	f_u [N/mm ²]	E [N/mm ²]	ν	γ_{M0}	γ_{M1}	γ_{M2}
290	414	2,000e+05	0,3	1,1	1,1	1,25

CROSS-SECTION	HE 100 A	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]
2124	3,492E+06	1,338E+06	5,240E+04	7,276E+04	2,676E+04
W _{pl2} [mm ³]	W _{pl3} [mm ³]	i ₂ [mm]	i ₃ [mm]	i _t [mm]	
8,301E+04	4,114E+04	40,6	25,1	28,87	
h	b	t _w	t _f	r	
96	100	5	8	12	

OTHER DATA					

TARGET VALUES BASED ON PRELIMINAR COMPUTATIONS

$$N_{c,Rd} = A \cdot f_y / \gamma_{M0}$$

$T_v = N / N_{c,Rd}$
1,786E-01

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

Cv	(Cv-Tv)/Tv
1,786E-01	9,505E-05