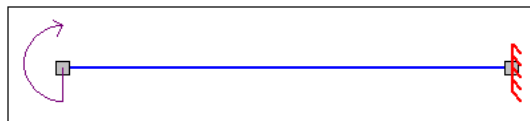


TEST SCHEDULE R 19	EN 1993-1-1: 2005 (EUROCODE 3)	Sargon ©, Cescoplus ©
RESISTANCE	BENDING - AXIS 3	EC3.RES.M3.002



Program: WEURO © version October 2007 for Sargon and Cescoplus
Keywords: EN 1993, Eurocode 3, example, validation, benchmark, reliability, quality control, error measure. **Parole chiave:** Eurocode 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	
1000		FREE			FIXED	
LOAD						
Type		Value		Point of application		
BENDING MOMENT M_3		M=10.000.000Nmm		LEFT END		
MATERIAL		A242/50				
f_v [N/mm ²]	f_u [N/mm ²]	E [N/mm ²]	ν	γ_{M0}	γ_{M1}	γ_{M2}
345	483	2,000e+05	0,3	1,1	1,1	1,25
CROSS SECTION						
2 UPNH 140 10		CLASS: $M_3 \rightarrow 1$				
A [mm ²]	J_2 [mm ⁴]	J_3 [mm ⁴]	J_t [mm ⁴]	W_2 [mm ³]	W_3 [mm ³]	
4073	1,209E+07	3,323E+06	1,051E+05	1,728e+05	5,112e+04	
W_{pl2} [mm ³]	W_{pl3} [mm ³]	i_2 [mm]	i_3 [mm]	i_t [mm]	d	
1,728e+05	9,188E+04	54,49	28,56	17,32	10	
h	b	t_w	t_f	r	$r1$	
140	60	7	10	10	5	
OTHER DATA						

TARGET VALUES BASED ON PRELIMINAR COMPUTATIONS

$$M_{pl,Rd} = W_{pl} \cdot f_y / \gamma_{M0}$$

$T_v = M / M_{pl,Rd}$
3,470E-01

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

C_v	$(T_v - C_v) / C_v$
3,470E-01	0,000E+00