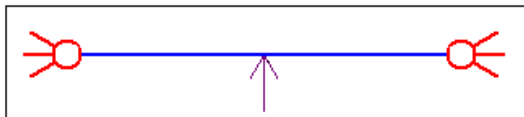


TEST SCHEDULE R 23	EN 1993-1-1: 2005 (EUROCODE 3)	Sargon ©, Cescoplus ©
RESISTANCE	SHEAR – AXIS 3	EC3.RES.T3.003



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
1000	HINGE	HINGE

LOAD		
Type	Value	Point of application
SHEAR FORCE T_3	$T=150.000N$	MIDDLE POINT

MATERIAL	S490					
f_y [N/mm ²]	f_u [N/mm ²]	E [N/mm ²]	ν	γ_{M0}	γ_{M1}	γ_{M2}
490	570	2,10E+05	0,3	1,1	1,1	1,25

CROSS SECTION	O 54x3,2				
A [mm ²]	J_2 [mm ⁴]	J_3 [mm ⁴]	J_t [mm ⁴]	W_2 [mm ³]	W_3 [mm ³]
510,7	1,654e+05	1,654e+05	3,308e+05	6,126e+03	6,126e+03
W_{pl2} [mm ³]	W_{pl3} [mm ³]	i_2 [mm]	i_3 [mm]	i_t [mm]	
8,269E+03	8,269E+03	18	18	0	

OTHER DATA				
$A_v=2A/\pi$ [mm ²]				
325,12				

TARGET VALUES BASED ON PRELIMINAR COMPUTATIONS

$$V_{pl,Rd}=A_v \cdot (f_y / \sqrt{3}) / \gamma_{M0}$$

$Tv=T / V_{pl,Rd}$
8,970E-01

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

Cv	$(Cv-Tv)/Tv$
8,970E-01	0,000E+00

Only member's extreme sections were considered in the check in order to get bending moment $M_2=0$, always

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