September 2013

DVS – DEUTSCHER VERBAND FÜR SCHWEISSEN UND VERWANDTE VERFAHREN E.V.

Calculation of tanks and apparatus made of thermoplastics – values of the polypropylene material group

Technical Code DVS 2205-1 Supplement 2

Replaces DVS 2205-1, Supplement 1 (August 1996), Supplement 2 (August 1996), Supplement 3 (August 1996) and Supplement 10 (July 2005).

This supplement includes characteristic values for the PP-H, PP-B and PP-R materials.

Contents:

DVS, Technical Committee, Working Group "Joining of Plastics"

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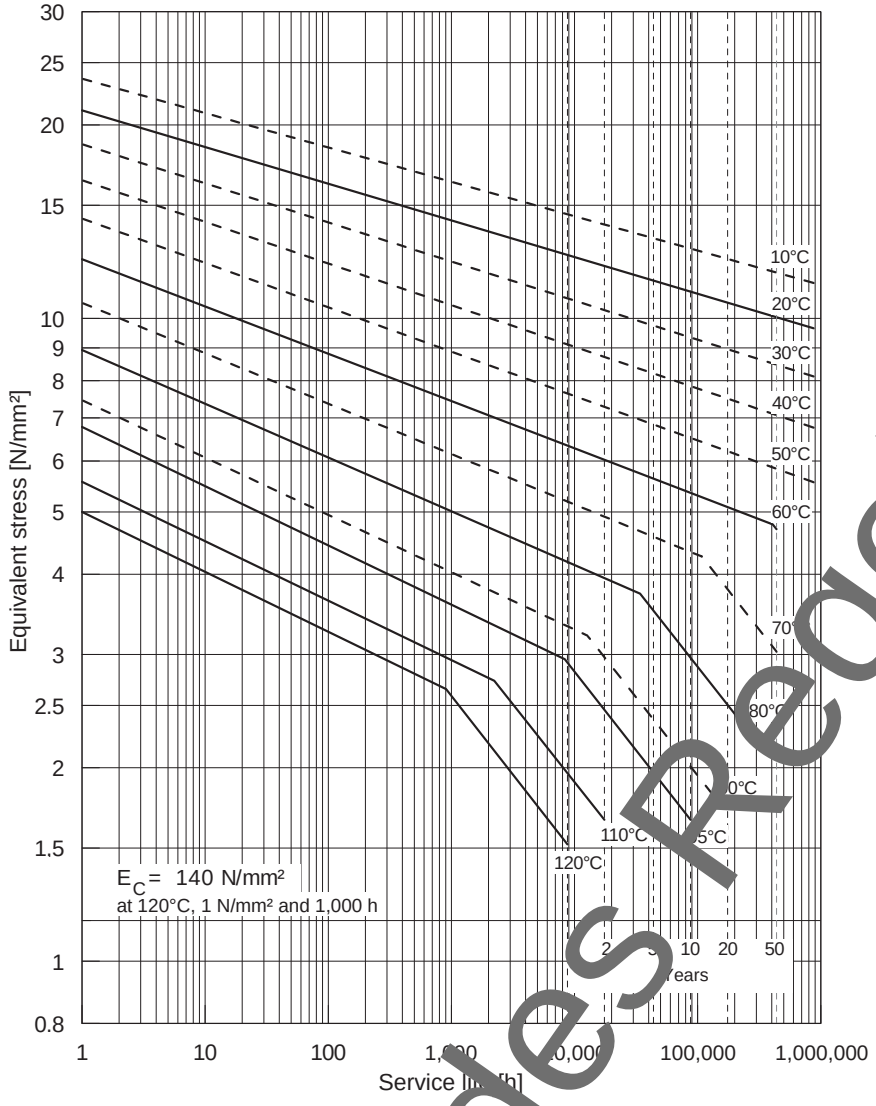
1 PP-H, polypropylene homopolymer

1.1 Creep curves for pipes



Straight line equations:

$\log(t) = A + B/T \times \log(\sigma) + C/T + D \times \log(\sigma)$ $\log(t) = a + b \times \log(\sigma)$

Coefficients of the straight lines at 10 - 95°C Coefficients of the straight lines:

Flat branches	Steep branches	Flat branches	Steep branches
A_1 = -46.3645	A_2 = -18.387	110°C	
B_1 = -9,601.1	B_2 = 0	a_1 = 8.06621	= 5.15457
C_1 = 20,381.55	C_2 = 8,918.5	b_1 = -10.8149	b_2 = -4.13903
D_1 = 15.24	D_2 = -4.1	120	
		a_1 = 7.[illegible]89	a_2 = 4.6841
		b_1 = -10.72[illegible]	b_2 = -4.0779