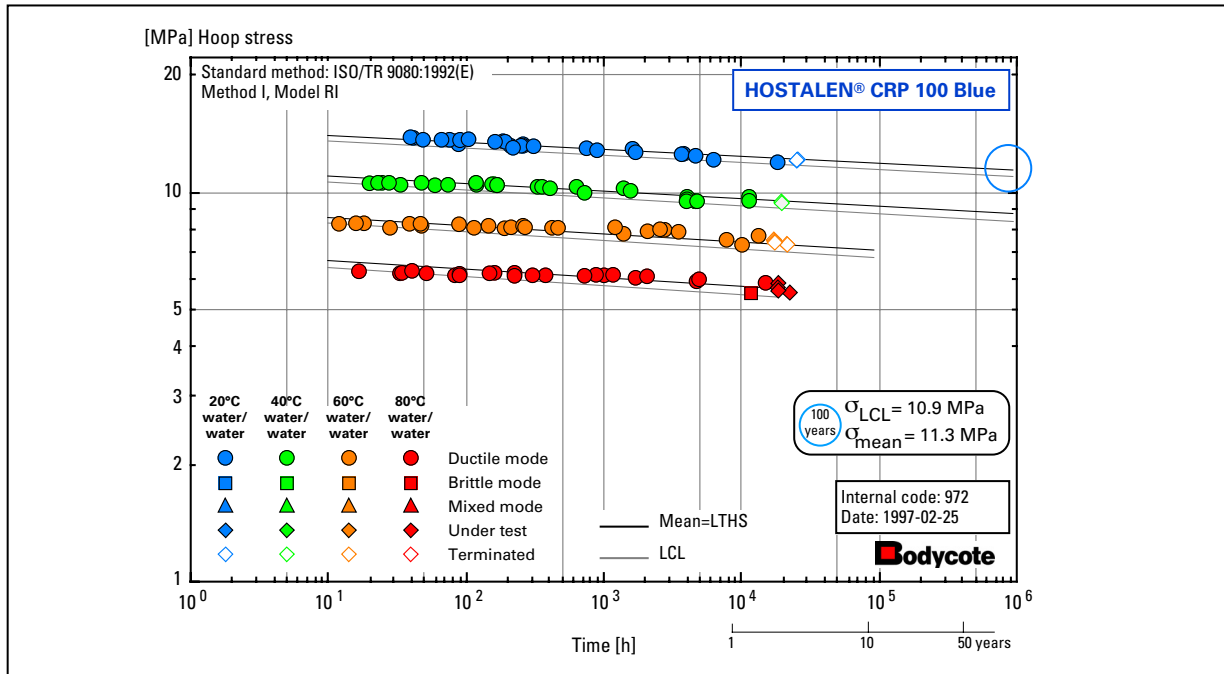


Client: Basell Polyolefins

Regression analysis according to ISO/TR 9080 of the PE pipe grade HOSTALEN® CRP 100 Blue



Introduction

Bodycote Polymer offers accredited testing and evaluation according to ISO 9080, i.e. hydrostatic pressure testing followed by evaluation of the long-term hydrostatic strength and MRS-classification according to ISO 12162.

Task

The aim was to use the Standard Extrapolation Method (SEM) according to ISO/TR 9080:1992(E) in order to obtain a classification of the PE pipe grade HOSTALEN CRP® 100 Blue from Basell Polyolefins.

The work covers hydrostatic pressure testing at 20, 40, 60 and 80°C and a SEM-evaluation according to ISO/TR 9080:1992(E).

Results obtained

The evaluation was performed in accordance with ISO/TR 9080:1992(E). Method I and Model RI gave the lowest lack of fit.

Number of observations

20°C	40°C	60°C	80°C
30	30	31	28

Extrapolated strength values

Temp °C	Time yrs	σ_{LCL} MPa	σ_{LTHS} MPa
20	105	10.9	11.3
40	105	8.40	8.78
60	10.5	6.77	7.09
80	2.10	5.35	5.62

Classification: MRS = 10 MPa

Please contact us for further information!