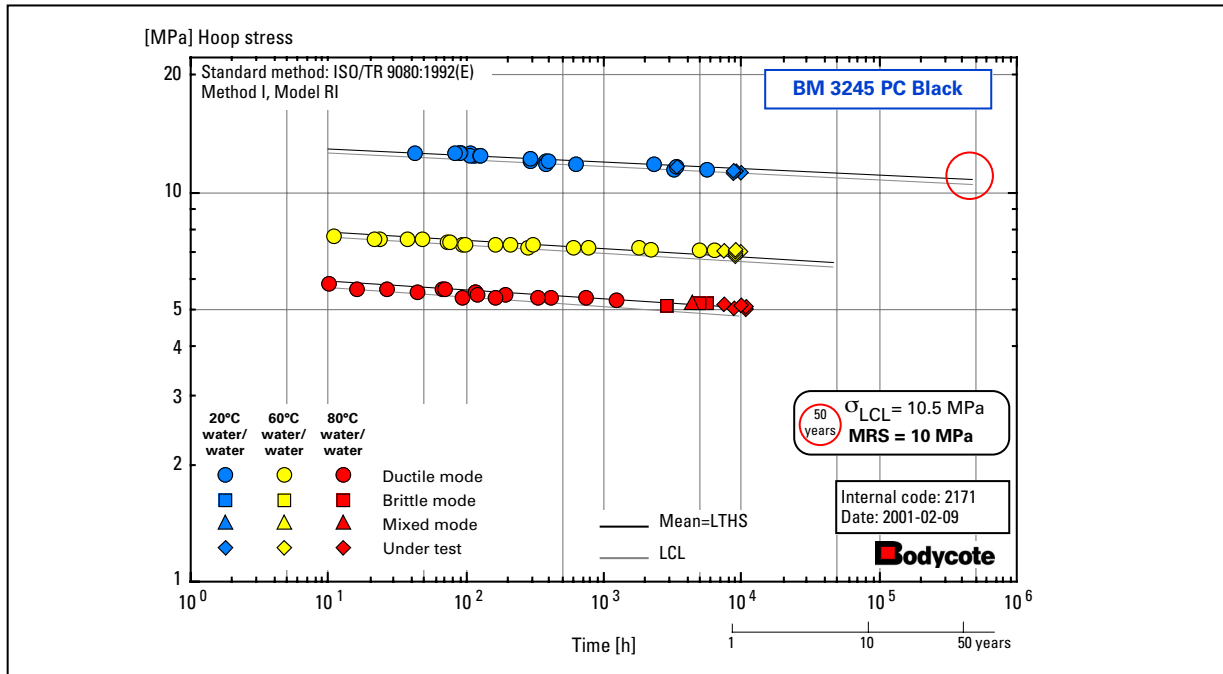


Client: IRPC Public Company Limited

Regression analysis according to ISO/TR 9080 of the PE pipe grade BM 3245 PC Black



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 BM 3245 PC Black from IRPC Public Company Limited.

The work covers hydrostatic pressure testing at 20, 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	60°C	80°C
25	25	25

Extrapolated strength values

Temp °C	Time yrs	σ_{LCL} MPa	σ_{LTHS} MPa
20	50.0	10.5	10.8
20	54.1	10.5	10.8
60	5.41	6.36	6.60
80	1.08	4.82	5.02

Classification: MRS = 10 MPa

Please contact us for further information!