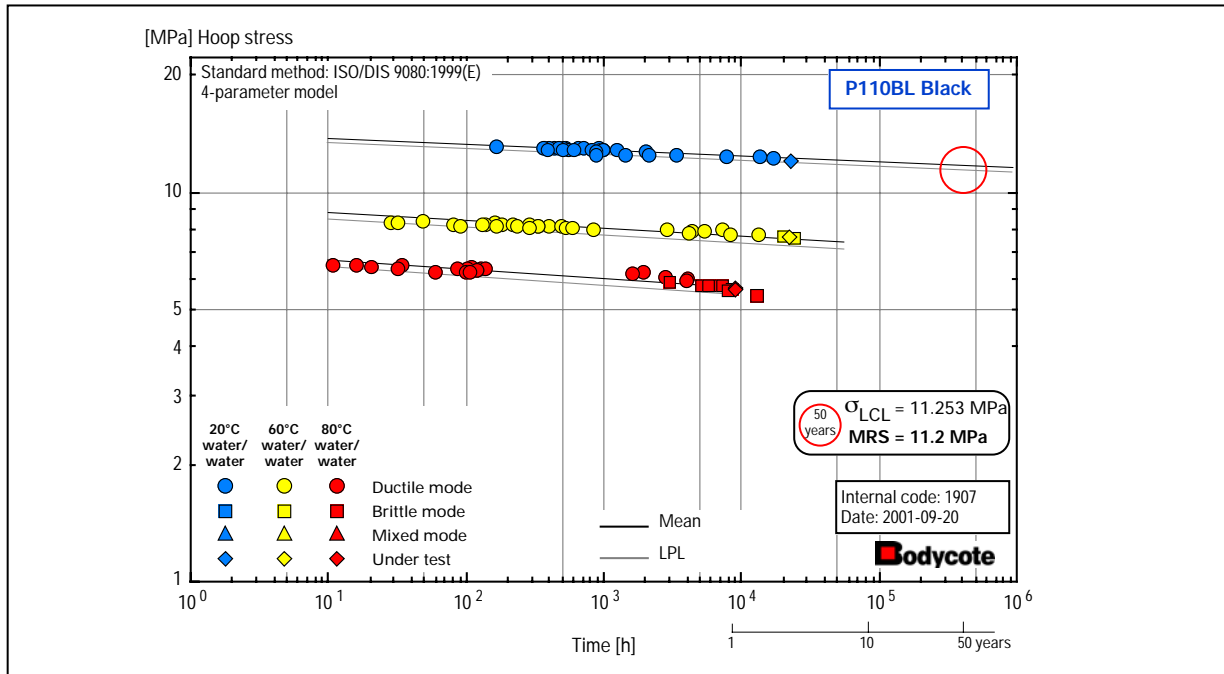


Client: Samsung Atofina Co., Ltd.
**Regression analysis according to ISO/DIS 9080 of
 the PE pipe grade P110BL Black**



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/DIS 9080:1999(E) in order to obtain a classification of the PE pipe grade P110BL Black from Samsung Atofina Co., Ltd.

The work covers hydrostatic pressure testing at 20, 60 and 80°C and a SEM-evaluation according to ISO/DIS 9080:1999(E).

Results obtained

The evaluation was performed in accordance with ISO/DIS 9080:1999(E). The 4-parameter model gave the best fit.

Number of observations

20°C	60°C	80°C
31	31	30

Extrapolated strength values

Temp °C	Time yrs	σ_{LPL} MPa	σ_{LTHS} MPa
20	50.0	11.253	11.551
20	107	11.120	11.420
60	6.42	7.107	7.345
80	1.07	5.452	5.657

Classification: MRS = 11.2 MPa

Please contact us for further information!