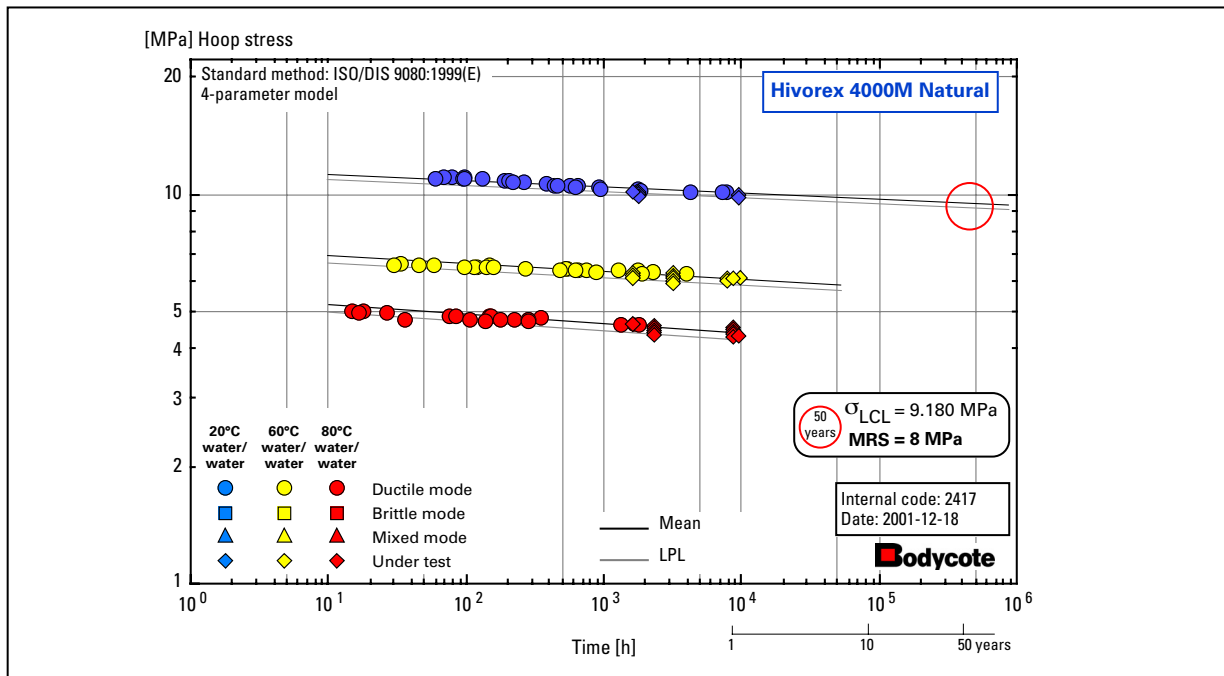


Client: Honam Petrochemical Corporation
**Regression analysis according to ISO/DIS 9080 of
the PE pipe grade Hivorex 4000M Natural**



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 Hivorex 4000M Natural from Honam Petrochemical Corporation.

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
30	36	32

Extrapolated strength values

Temp °C	Time yrs	σ_{LPL} MPa	σ_{LTHS} MPa
20	50.0	9.180	9.416
20	101	9.077	9.315
60	6.08	5.607	5.784
80	1.01	4.232	4.382

Classification: MRS = 8 MPa

Please contact us for further information!