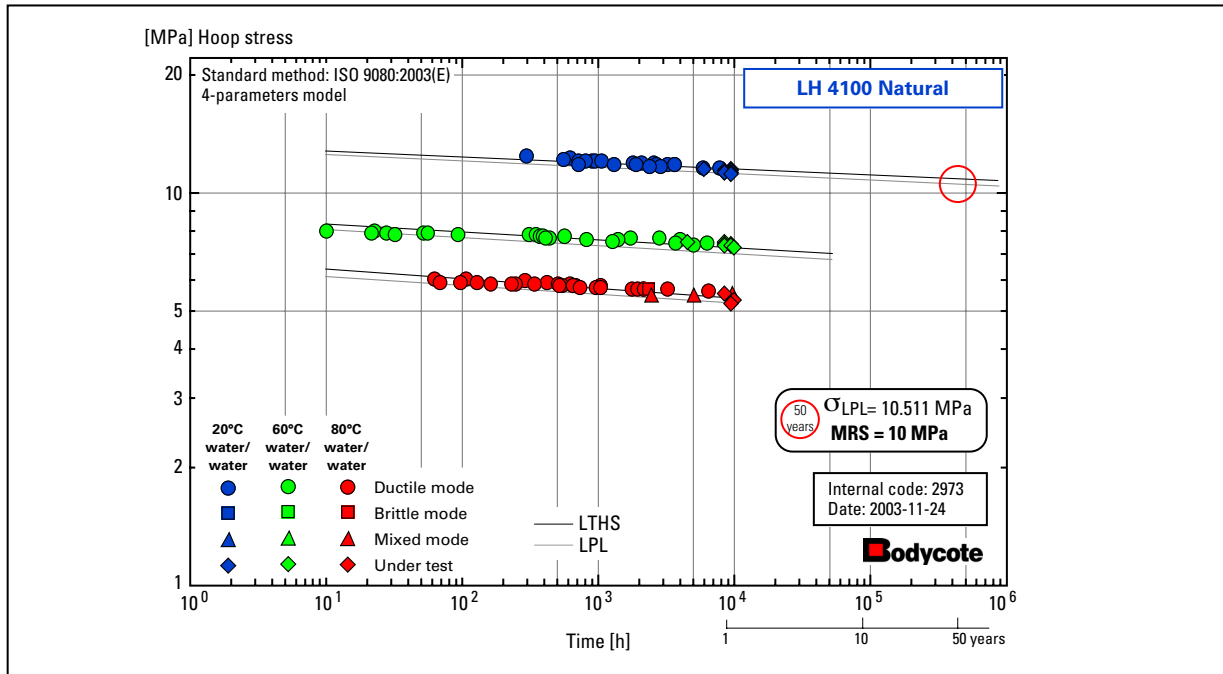


Client: Daelim Industrial Co., Ltd.

# Regression analysis according to ISO 9080 of the PE pipe grade LH 4100 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 9080:2003(E) in order to obtain a classification of the PE pipe grade LH 4100 Natural from Daelim Industrial Co., Ltd.

The work covers hydrostatic pressure testing at 20, 60 and 80°C and a SEM-evaluation according to ISO 9080:2003(E).

## Results obtained

The evaluation was performed in accordance with ISO 9080:2003(E). The 4-parameter model gave the best fit.

### Number of observations

20°C	60°C	80°C
30	32	34

### Extrapolated strength values

Temp °C	Time yrs	$\sigma_{LPL}$ MPa	$\sigma_{LTHS}$ MPa
20	50.0	10.511	10.815
20	100	10.392	10.700
60	6.00	6.730	6.975
80	1.00	5.222	5.431

**Classification: MRS = 10 MPa**

Please contact us for further information!