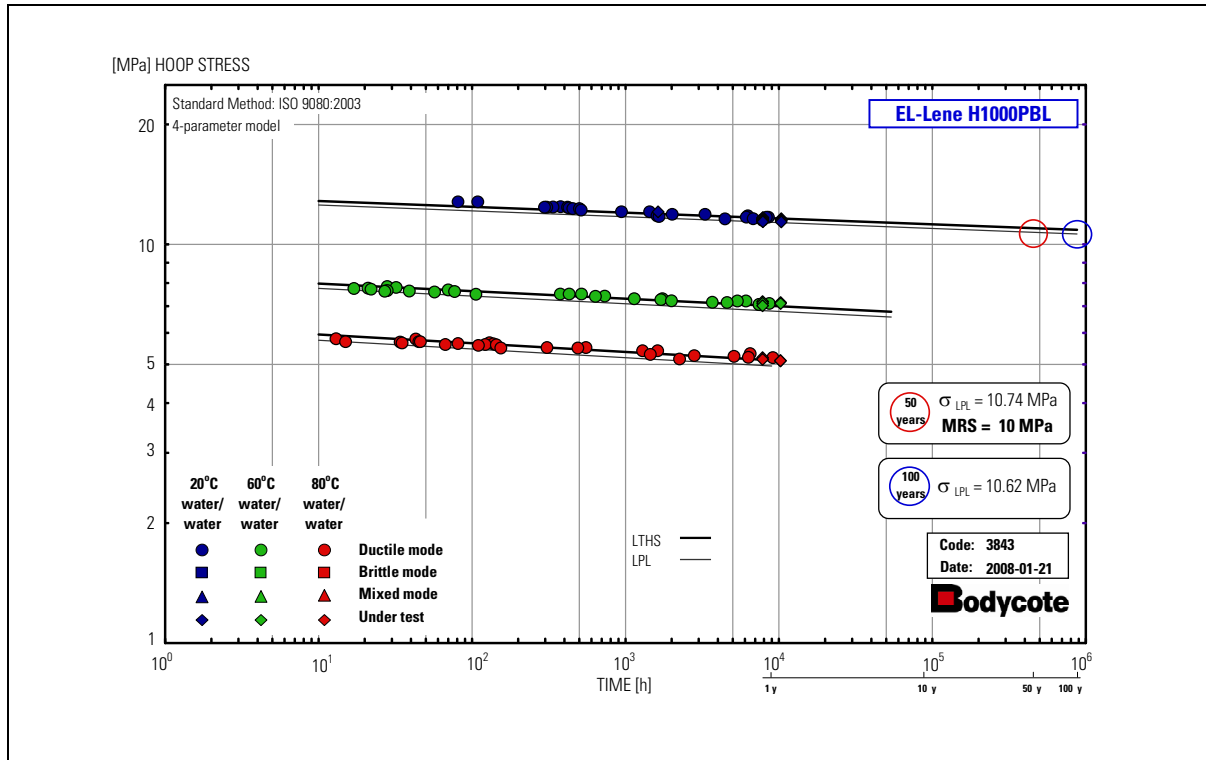


Client: Thai Polyethylene Co., Ltd.

# Regression analysis according to ISO 9080 of the PE pipe compound EL-Lene H1000PBL



## 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 in order to obtain a classification of the PE pipe compound EL-Lene H1000PBL from Thai Polyethylene Co., Ltd.

The work covers hydrostatic pressure testing at 20, 60 and 80°C and evaluation according to ISO 9080:2003. Detailed information can be found in Bodycote Report P-07/157a.

## Results obtained

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

### Number of observations

20°C	60°C	80°C
30	33	31

### Extrapolated strength values

Temp °C	Time Yrs	$\sigma_{LPL}$ MPa	$\sigma_{LTHS}$ MPa
20	50.0	10.735	10.988
20	100	10.623	10.877
60	6.15	6.575	6.775
80	1.03	4.954	5.124

**Classification: MRS = 10 MPa**

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