Industry

Adhesive Development Jointec

Project meeting May 26th-27th
Paderborn, Germany

Kenneth Andersen
Research & Development
Sika Danmark A/S

Sika®

Sika Danmark A/S

Innovation & Consistency | since 1910

Industry

Outline

PU-156 as reference system

Experiences from the larger scale tests

Improved adhesive formulation

Results

Industry

PU-156 as reference system

PU-156: SikaForce®7737 L50 + SikaForce®7020

From lab-tests:

Good adhesion to steel pipes and coatings

Relatively good mechanical properties

A low Viscosity

Industry

Experiences from large scale tests

Stability – could be improved to avoid the sediment

Curing speed – Cures too slow

Strength vs. flexibility? to be improved?

- From discussion in Salzgitter the strength – OK
- Flexibility could be improved

Industry

Improved Adhesion formulation

PU-3XX series Stabilisation

The best shot chosen for further development

PU-401 K-xxx Curing speed and profile

The best performing products chosen for further development

PU-402 K-xxx Flexibility improved

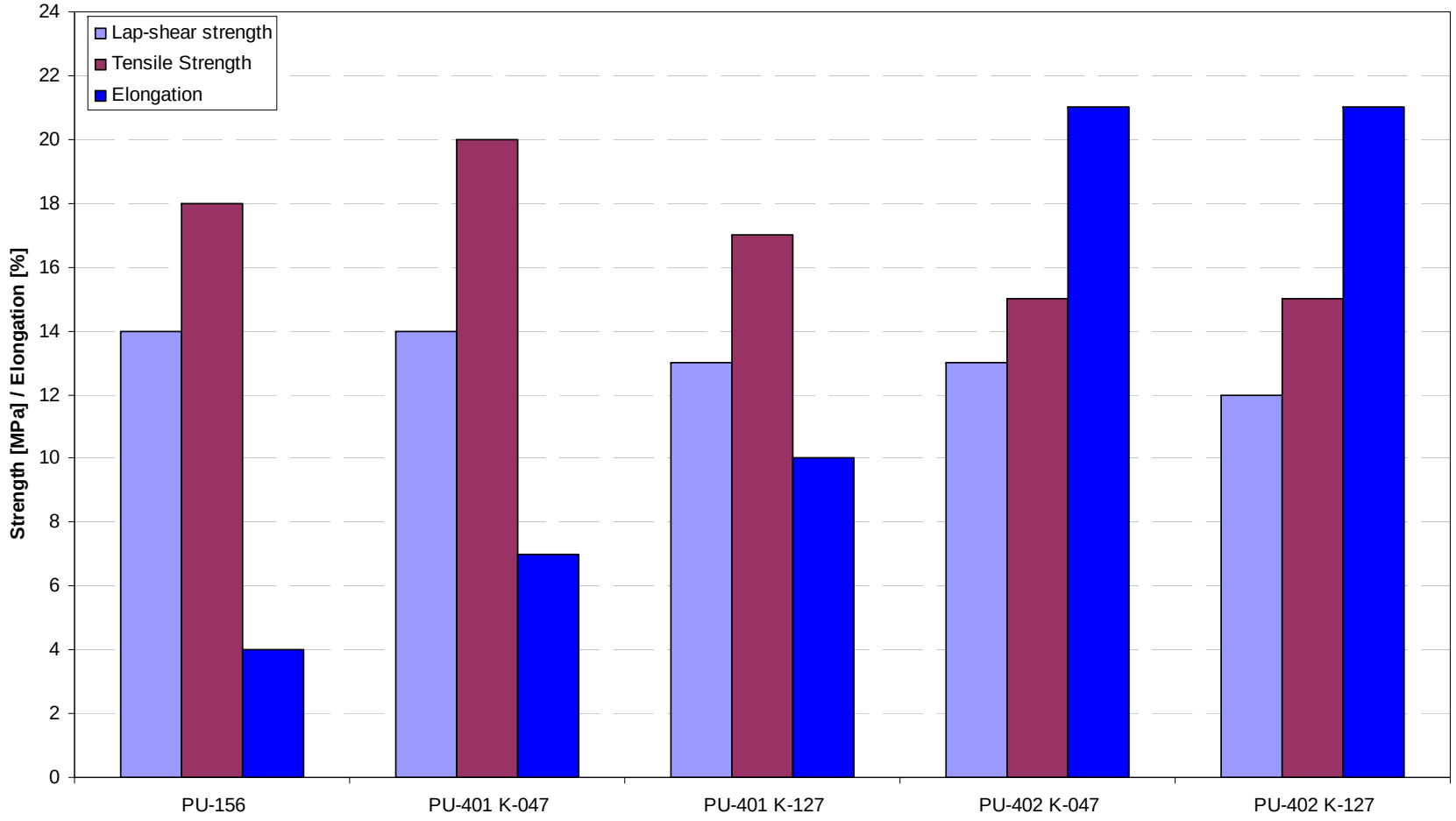
Industry

Results

Adhesive	PU-156	PU-401 K-047	PU-401 K-127	PU-402 K-047	PU-402 K-127
Pot-life	50min	15min	15min	13.5min	14min
Viscosity	3200 mPa.s	8500 mPa.s	7500 mPa.s	6500 mPa.s	8500 mPa.s
Hardness	80 ShD	83 ShD	83 ShD	80 ShD	81 ShD
Tensile strength	18 MPa	20 MPa	17 MPa	15 MPa	15 MPa
Elongation	4 %	7 %	10 %	21 %	21 %
Lap-shear strength	14 MPa	14 MPa	13 MPa	13 MPa	12 MPa

Industry

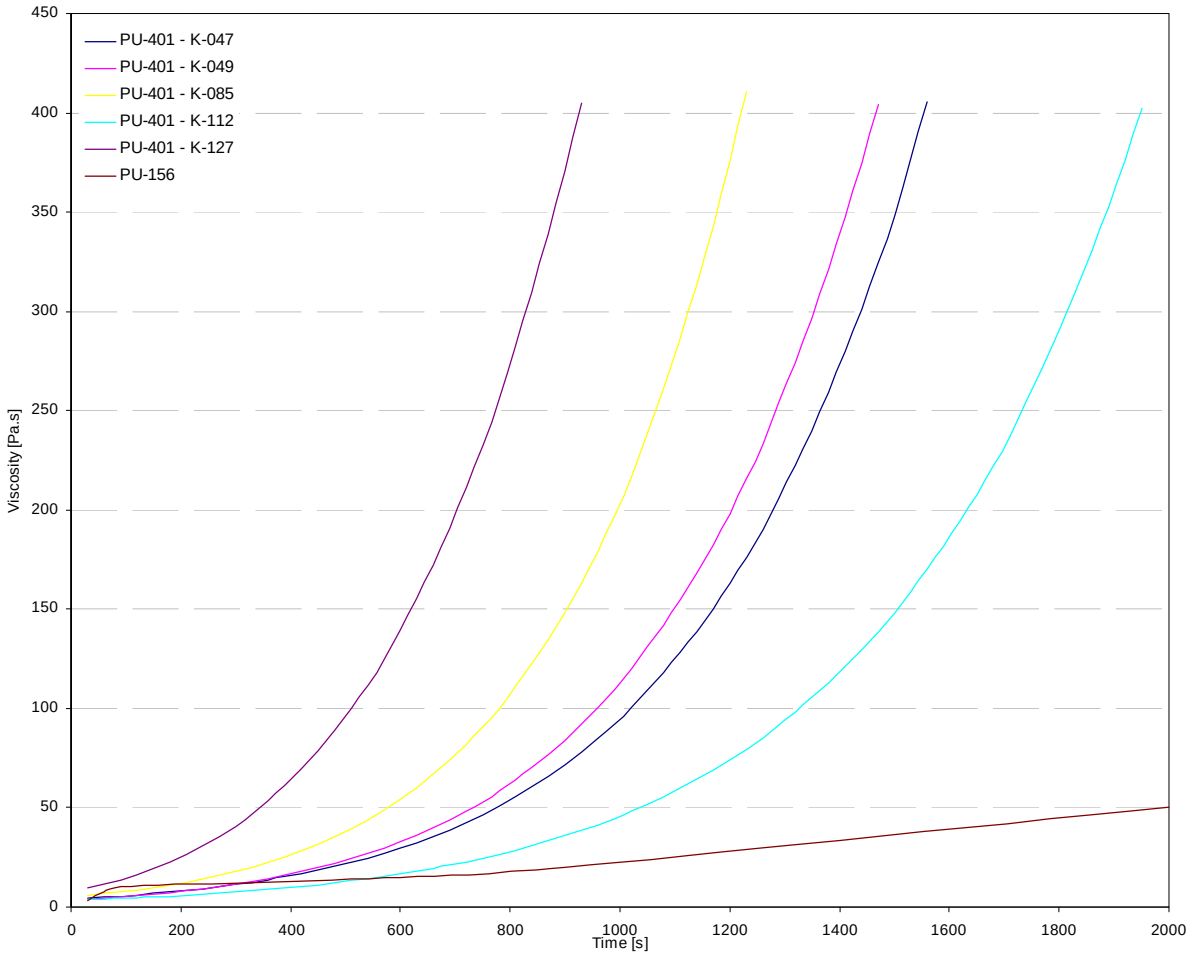
Results



Sika®

Sika Danmark A/S

Industry



Sika Danmark A/S