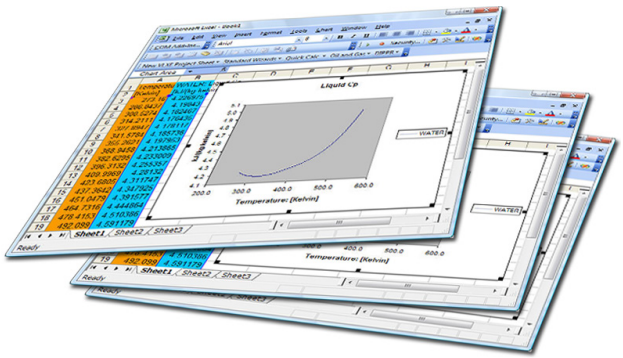
VLXE
Advanced PVT Simplified



Making advanced PVT simple

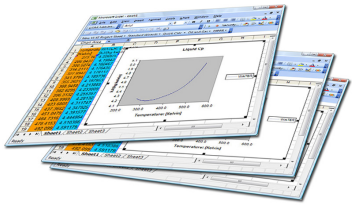
Our product **VLXE|BLEND** allows you to solve any PVT problem with a few clicks in Excel, no matter if you are dealing with a polymer, copolymer, water, oil or fine chemicals. Now leading the market for 10+ years.

Advanced PVT Simplified

VLXE offers unique and market leading calculation and monitoring software for advanced PVT

VLXE was founded in Copenhagen, Denmark, with an initial focus on polymer/copolymer systems. Today our solutions cover all commonly used kinds of complex fluids, offering state-of-the-art thermodynamic models with a short time-span between model development and implementation.

VLXE has been market leading for over 10 years and is known for producing a robust product allowing users to perform advanced PVT calculations for especially the polymer, heavy oils industry and fine chemicals, within Excel and using just a few clicks. To meet the increasing requirements for customization, VLXE also undertakes development of custom software within thermodynamics and Excel programming.



Introducing our product

VLXE is a PVT package aimed at systems with very heavy components. The software, now branded as VLXE|BLEND, is unique as it handles systems that no other PVT package can.

Heavy is a relative term: In the polymer industry 50,000 g/mole is considered a light polymer while it is a very heavy one in the oil and gas industry.

VLXE|BLEND sets no limit for the molar mass of your components and offers a complete range of PVT simulations that includes full VLE, LLE and VLLE support for those systems.

The software has mostly been used on systems with polymers or copolymers, but has also been found useful in the oil and gas and fine chemicals industry. VLXE|BLEND is 100% integrated into Excel, offering an easy learning curve.

Our goal is to remain our position as market leader, so we continually develop and improve the software. Latest development is the support for blends and early 2013 we introduced VLXE|BLEND. Learn why it is so unique on the next pages...

The VLXE timeline

2003:
VLXE is founded by Dr. Torben Laursen. It has always been 100% owned by him.

First version of VLXE released.

2004
Support for copolymer PC-SAFT added.

2005
Support for association and polar term in PC-SAFT added.

2006
Support for SLE for polymer systems added.

2007
Support for surface tension calculations for polymer systems added.

2008
Oil and gas module released.

2012
Support for blends added.

2013
Release of VLXE|BLEND.

Completely rewritten version of VLXE that ensures it will remain state-of-the-art for years to come.

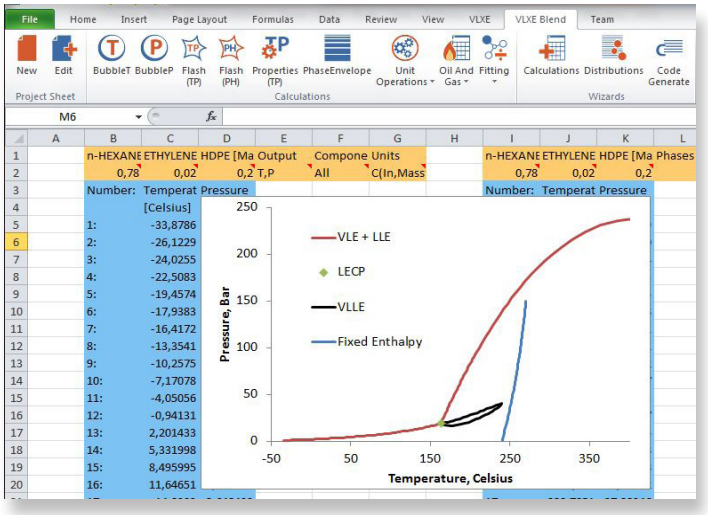
VLXE|BLEND® VLXE|BLEND is an add-on that integrates our powerful PVT & phase equilibrium package into Excel

VLXE|BLEND integrates **DIPPR 801** (a quality source of thermodynamic properties) into Excel and provides a link to the DDB polymer database.

The software comes in one strong package but with many modules for a very flexible and versatile use. You can see the full list of modules on our website.

The best about VLXE|BLEND:

- ☑ Robust VLE, LLE and VLLE calculations
- ☑ Parameters stored inside the workbook
- ☑ All functions come with a wizard
- ☑ Access the databases from within Excel
- ☑ Easy to use Excel interface
- ☑ No limit on molar mass
- ☑ Designed to handle complex fluid
- ☑ Handles a full range of fluids



Phase diagram for a polymer system is shown.

The software in action can be seen on the following videos (click on title below):

VLXE Blend | Oil & gas module

VLXE|BLEND is accessible on our website and may be downloaded.

Example of VLXE use

Preparing process simulations

Application:

- Fitting of solvent and polymer parameters.
- Compare results between several models.
- Determine process temperature and pressure range in order to avoid the 3-phase area.

Robust LLE and VLLE calculations

Application:

- Replace simulator flash in 3-phase area.
- Replace simulator flash in LLE area.

Effect of polydispersity on PVT

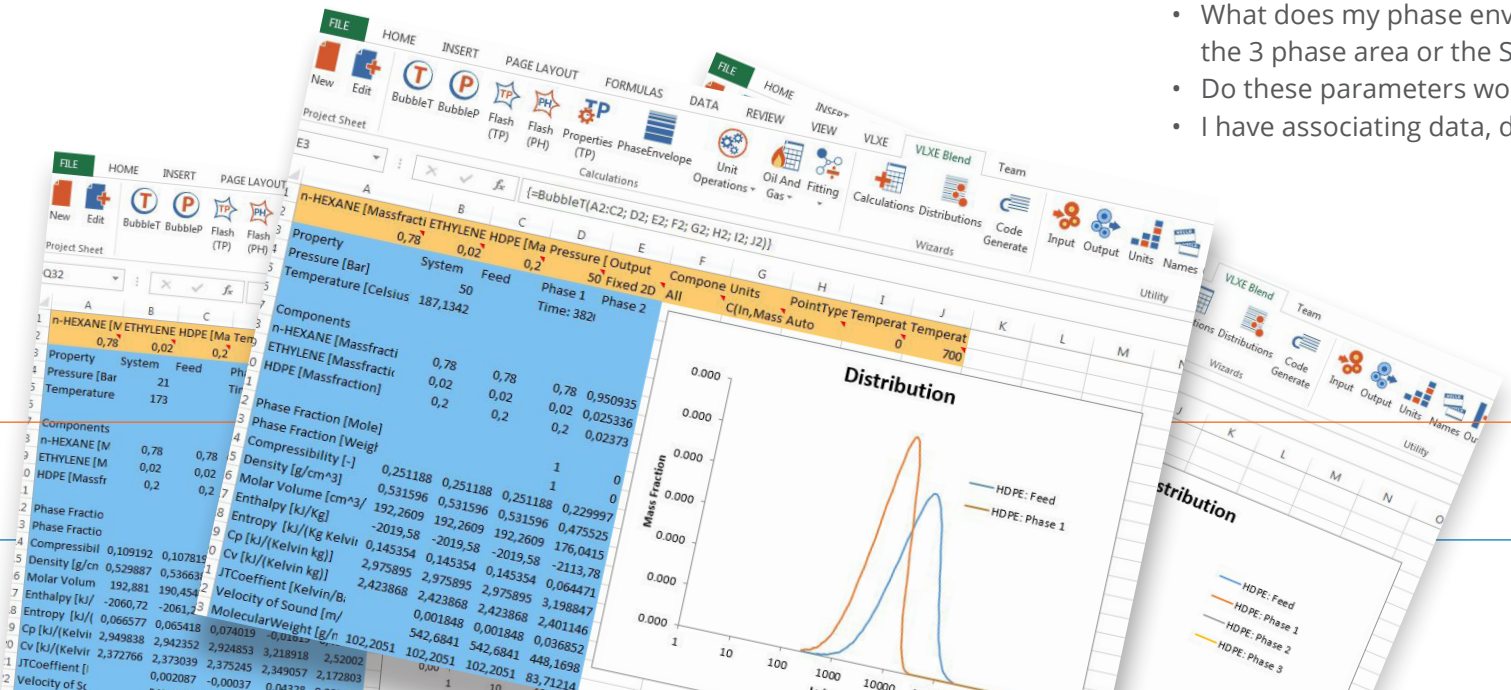
Application:

- How does polydispersity affect my phase boundaries?
- How much polymer in the form of light components is in my gas stream out of the separator?
- How does the polymer distribution change during my separator units?

Solving thermodynamic problems

Application:

- What does my phase envelope look like and where is the 3 phase area or the SLE line.
- Do these parameters work over my process range?
- I have associating data, do they match the model?



"With references like Chevron, ConocoPhillips, Dow Chemicals, ExxonMobil, Merck, Nova Chemicals, Sasol, Statoil and world leading universities VLXE has become a preferred supplier for the industry."

Dr. Torben Laursen, CEO & Founder

Solutions worldwide...

...for Chevron, ConocoPhillips, Dow Chemicals, Exxon-Mobil, Merck, Nova Chemicals, Sasol, Statoil and others.

VLXE ApS
Nordre Frihavnsgade 13A, 2, tv
2100 Copenhagen Ø
Denmark

If you are interested and would like more information, please contact us:

Cell phone:	+45 31 41 01 19
e-mail:	tl@vlxe.com
Homepage:	www.vlxe.com
Skype:	vlxe.Inc

VLXE
Advanced PVT Simplified