

Simulation of Mixing Processes Off Center Impellers

VisiMix Ltd.

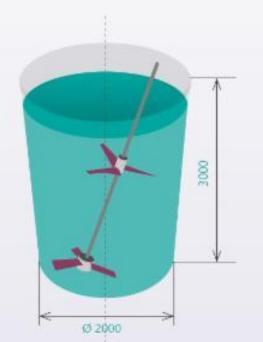
PO Box 45170, Jerusalem, 91450, Israel Tel: 972 - 2 - 5870123 | Fax: 972 - 2 - 5870206 E-mail: info@visimix.com



New Release!!

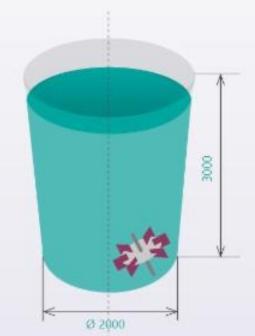


You are invited to register for the VisiMix Off Center Impellers



WEBINAR

on April 10th | 2019 at 9:00 am EDT







Content

- **>>** Introduction
- >> New Version
 - Off Center Impeller Options
 - **Example**
 - > Input
 - Results



About Us

VisiMix.Ltd is a unique software enabling chemical engineers, process engineers and R&D personnel to characterize and visualize mixing processes via a simple, user friendly interface.



Our products allow significant savings in time and costs by drastically reducing the need for trial-and-error. They have been successfully adopted by hundreds of companies.



About Us



Technology - Simulation of Mixing Processes

- The First and the only tool in the Industry
- Reliable and accurate results
- Based on More Than 300 Man Years of R&D and Industry Experience
- Replacing Pilot Experiments
- Accelerated Time-to-Market process
- User Friendly and easily accessible



About Us

- VisiMix is based on a physical models supported by empirical data, in a way that solves momentum balances depending on the existing equipment.
- The phenomena of the flow in the vessel is taken into account using many theories such as the Mixing Length of Prandtl theory, Kolmogorov theory and many others describing one or more phase systems.
- Considering this and all the experimental coefficients that were evaluated, it is possible to calculate many mixing parameters corresponding to a specific process using VisiMix and their influence in the process.





Customers & Markets

































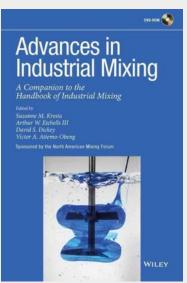




Customers Citation

"VisiMix has, in the last 20 years, set the standard in the Chemical and Allied Industries for calculations of general process mixing in stirred vessels including scale-down and scale-up. The newly announced enhancements help to solidify VisiMix's market leadership in this field."

Dr. **Victor Atiemo-Obeng**, AICHE Fellow, Retiree from the Dow Chemical Company, and Co-Editor of the "Handbook of Industrial Mixing" (Wikey-Interscience) and "Advances in Industrial Mixing" (Wikey-Interscience).





VisiMix Orientation



The VisiMix Demonstration Tools:

- ✓ VisiMix Turbulent Examples & User Guide
- ✓ VisiMix Laminar Examples & User Guide
- ✓ VisiMix Different Impellers Examples & User Guide
- ✓ VisiMix RSDE— Examples & User Guide
- ✓ VisiMix Turbulent SV Trial & Education
- ✓ VisiMix Review of Mathematical Models
- ✓ Selected Verification Examples
 The Comparison between Published Experimental Data and VisiMix Calculations

http://www.visimix.com



Millions Saved By Using VisiMix! Benefit Examples Reported by Customers.

VisiMix LTD, is pleased to provide you with some very important new information on VisiMix Savings, which we have compiled for publication. These documents, show <u>savings of millions of dollars per year</u>. Please click the links directly below to view the following savings examples:

Mixing Calculations in Development (Saved - \$1,000,000)

Productivity Improvement In API Company (Saved - \$1,600,000)

RSD Application in a Chemical Reaction Process (Saved - \$250,000)

Control Morphology and P.S. in Energetic Material Processes (Saved - \$900,000)

Troubleshooting for Crystallization Processes (Saved \$2,000,000)

Troubleshooting in Life Science Industry (Saved €900,000)

Three Phase System – Solid-Liquid-Liquid (Saved €1,200,000)

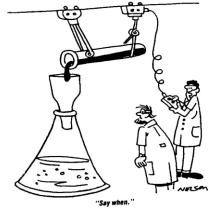
Improve Dissolution of Organic Solid (Saved €1,200,000)

<u>Physical Properties of the Final Product (Solid) – Ensuring Regulatory Compliance of \$20,000,000 Sales</u>

We also invite you to view some highlights from our very successful <u>International</u> <u>Conference in Boston</u> and Atlanta that took place in 2011 and 2014 which united users and future users of the VisiMix Software to share some insights into the various uses and benefits of the software.

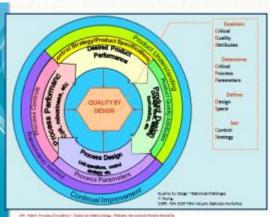
Data and Results Management

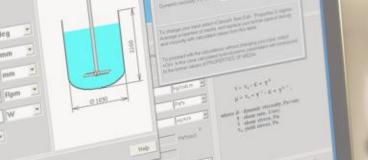




Production

QbD



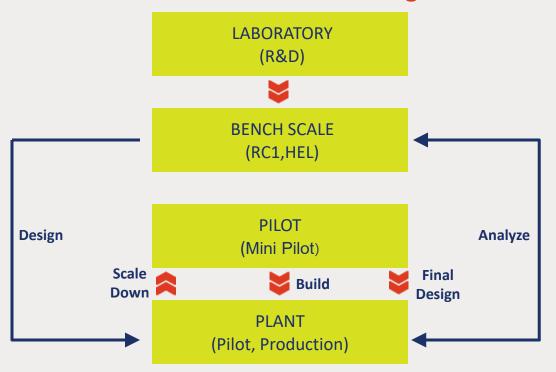


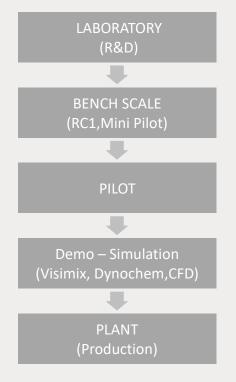


QbD Methodology

(J.M. Berty, CEP, 1979)

New Process with Mixing









Plans for Support (On-site seminars and meetings) & Webinars

- >>> Basic Training --- E TUTORIAL IS ALL THE PLACES
- >>> Personal Support on going
- Generation of Justification Document
- >> Seminar On Site
- On Going Support





VisiMix Background

Established in 1995

1995-1998 – Developed the VisiMix Turbulent Product

1998-2000 – Developed the VisiMix Laminar Product

2000-2003 - Developed the VisiMix Different Impellers Product

2003-2004 – Developed the VisiXcel Product

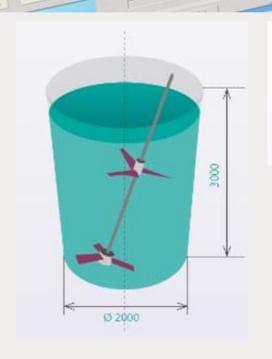
2007-2010 – Developed the VisiMix RSD Product

2011-2013 – Developed the VisiMix Emulsification Product

2014-2017 – Developed the VisiMix 3D, Generic Hydrofoils Blades and Alternative impellers

Today VisiMix has More than 250 Customers

2019 - VisiMix Off Center Impellers

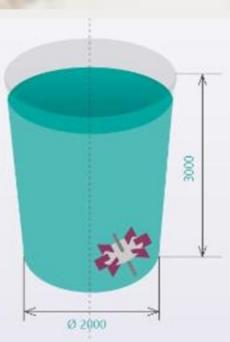


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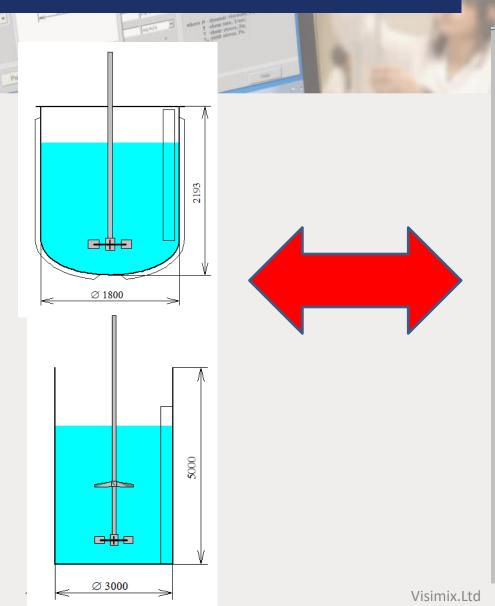


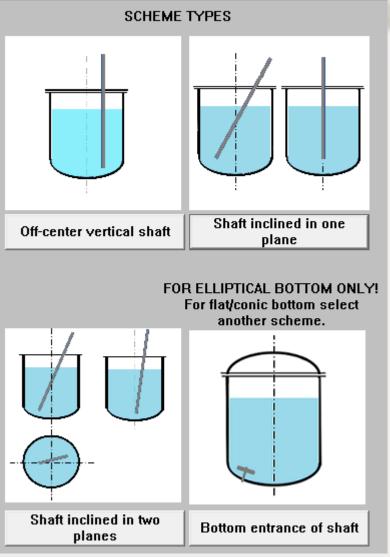




Off Center Impeller Options









VisiMix Off Center Impellers

- ➤ The first release of the program allows for entering of mixing devices with :
 - one or two impellers (identical or different)
 - vertical and inclined head-entering shafts
 - bottom-entering mixing devices with single impeller.
- The program outputs include
 - > main parameters of hydrodynamics (power, flow velocities, etc.)
 - turbulence (maximum and other local values, etc.)
 - heat transfer corresponding

Conclusion

- Using VisiMix Products support you can
 - understand better your processes
 - Reduce dramatically your Scaling up processes and Scaling down
 - Save a huge amount of Time & Money (\$1,000,000 +)
- > The VisiMix Products are friendly and easy to use with very quick results.
- The VisiMix results are based on a systematic and seriously experimental checking and found very reliable.
- VisiMix Projects Parameters and Data Base allows you to share and transfer the data with colleagues in the company.

Special price – VisiMix Off Center





Thank you for your attention











Thank You

For your attention

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PO Box 45170, Jerusalem, 91450, Israel Tel: 972 - 2 - 5870123 | Fax: 972 - 2 - 5870206 E-mail: info@visimix.com

