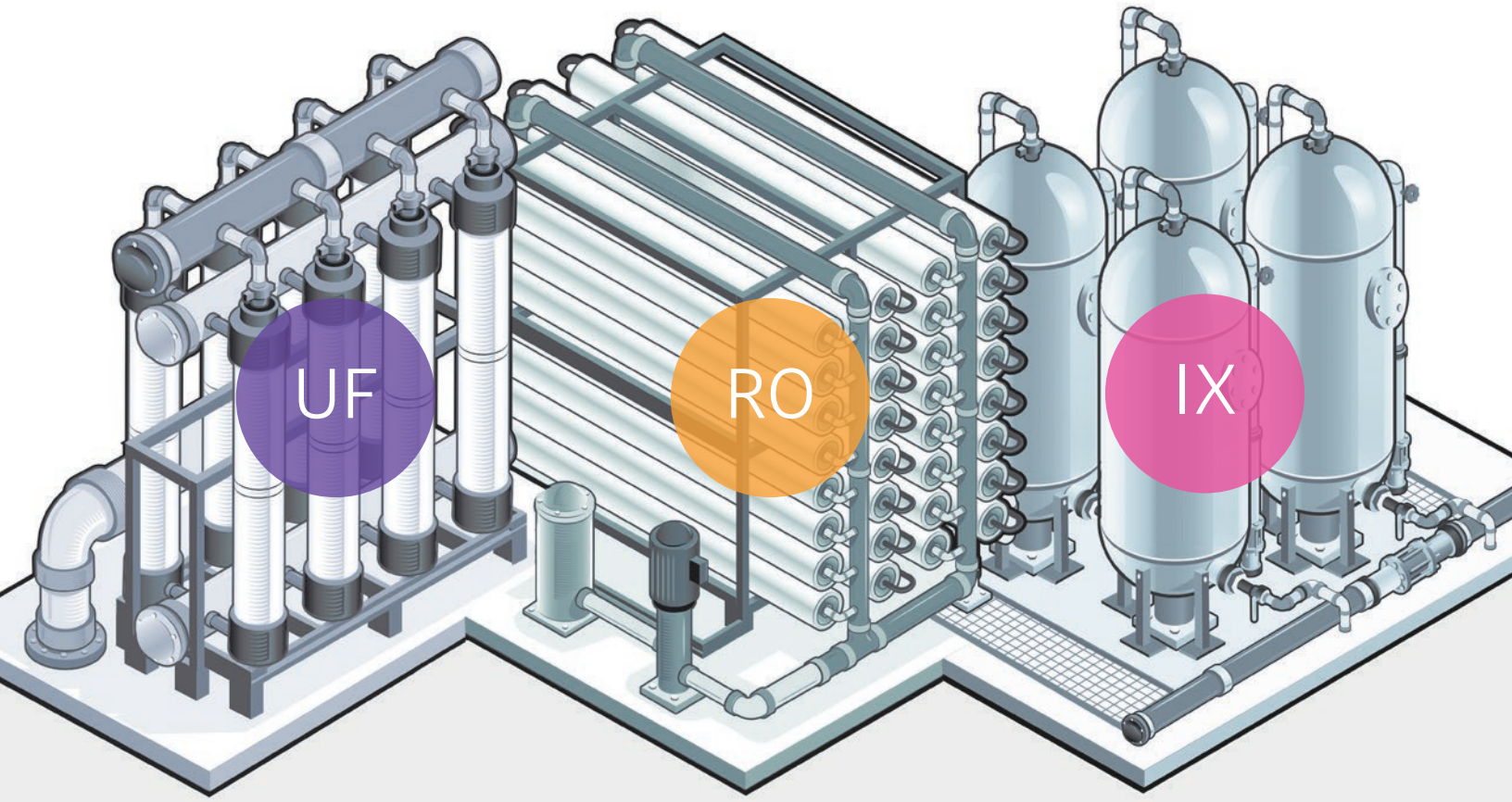
Water Solutions

DUPONT

WAVE Design Software



THREE TECHNOLOGIES ONE TOOL

WAVE (Water Application Value Engine) modeling software from DuPont integrates three leading technologies—ultrafiltration, reverse osmosis and ion exchange—into one comprehensive tool. Its robust range of features and powerful calculation engine let you model more efficiently and accurately, designing better performing multi-technology systems, faster.

- **3 technologies** under one common and user-friendly interface
- **Improved** and consistent algorithms
- **Harmonized data** for all products and processes

Powerful improvements for modeling efficiency.

WAVE upgrades the best features of the well-known ROSA, UFLOW, IXCALC and CADIX programs, while bringing key technologies together in one common, user-friendly, time-saving interface.

Ultrafiltration (UF) Features:

- Includes the latest DuPont UF products: DuPont™ IntegraFlux™ and DuPont™ IntegraPac™ UF Modules with XP Fiber
- Discriminates between drinking vs. non-drinking products
- Updated design guidelines and pressure rating curves
- Membrane integrity testing capabilities
- Ability to specify pH of chemical enhanced backwash (CEB) and clean-in-place (CIP), introduce transmembrane pressure (TMP) slopes for BW/CEB/CIP, design for constant flux vs. constant output, and using RO concentrate for cleaning

Reverse Osmosis (RO) Features:

- Offers the latest DuPont RO products database with calculation improvements, including FilmTec™ Fortilife™ and FilmTec™ ECO Elements
- Improved ISD capability – each element in a pressure vessel can now be uniquely defined
- Split permeate available with ISD
- Bypass, pass- and stage-level concentrate recycle loops
- New system-level hydraulic flow calculator
- Batch modeling with the possibility of simultaneous batch case creation
- Design warnings by element position
- Addition of pressure drop in reports

Ion Exchange (IX) Features:

- Includes the full DuPont IX product line
- Harmonized data for all processes and resins
- Ability to model 13 IX processes including softening, dealkalization, demineralization, RO/IX polishing, condensate polishing, and nitrate removal
- Seven IX regeneration schemes including co-current, water- or air-blocked packed beds, DuPont™ AmberPack™ and DuPont™ AmberLite™ Packed Bed Systems, and internal and external mixed beds

Set, reset and calculate results in just a few clicks.

Software Requirements
- Windows Installer 3.1 or higher
- Microsoft .NET Framework 4.0 Client
- SQL Server Compact Edition 3.5 or higher

Hardware Requirements

Minimum Disk Space required:
- 120 MB (for WAVE Application)
- 50 MB (.Net Framework Client Profile)
- 3 MB (for SQL Server CE)

Operating System Requirements

One of the following OS required:
- Windows XP Service Pack 3
- Windows 10
- Windows Server 2008
- Windows Vista
- Windows 7 Ultimate/Professional/Enterprise/ Home Premium/Home Basic

To learn more about WAVE and download the software for free, visit www.dupont.com/water/resources/design-software.html

Have a question? Contact us at: dupont.com/water/contact-us

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Form No. 45-D01745-en CDP, Rev. 3
October 2021