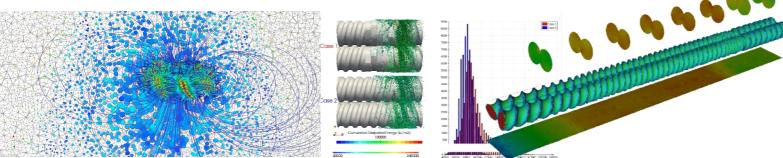
The solution for Twin-Screw extrusion Local numerical analysis





Features 3D efficiency functionnalities for twin-screw extruders local analysis. XimeX-TSE simulates your own equipment

with user's meshfree SCC specific technology: no numerical skills required!

## Local analysis focused

Modeling the mixing processes for

- getting indeep details on the mixing details
- optimizing the processes

# Quantifying the mixing efficiency

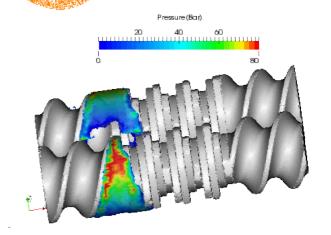
With a particles analysis, XimeX-TSE quantifies the mixing efficiency on given zones by identifying dispersive/distributive mixing criteria

## Process optimization at the finger tips

**XimeX-TSE** simulations scan the optimization potentiality of a couple process/products

### Spreading the simulation benefits

With fully parallelized computation, XimeX-TSE provides fast and reliable results for spreading the simulation benefits in a glance



Control the Process to Control the Product





XimeX-TSE is designed on the basis of XimeX strategic Initiative: A research project dedicated to mixing processes simulation platform, lead with a pool of industrials companies and supported by SCC and CEMEF lab from MinesParisTech.

#### Numerical technology

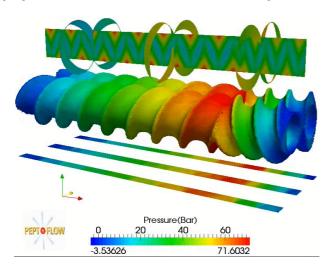
The XimeX development platform introduces a single mesh multi domain developed at Cemef (Cimlib®). This allows to adress easily complex geometries and kinematics. No more troubles to generate meshes!

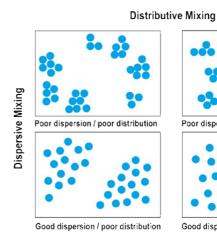
#### Material Rheology

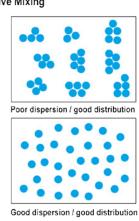
When adressing mixing objectives, rheology of material is the key point. XimeX uses a Cemef designed algorithm to solve FEM problems even with extremely complex rheologies (threshold, non newtonian...)

#### **Process Optimization**

Computation accuracy is used for testing the whole functioning window for a given equipment. This makes easier the process optimization in a few results analysis.









The particles statistical analysis allows to track particles on the material flow to identify the physical phenomena and quantify the mixing of a given equipment.

Particles can be analysed from different point of views: position, velocity, strech, erosion, entropy ...

#### Control the Process to Control the Product I

Based on a 30-year experience, SCC is your partner in manufacturing processes optimization with applied engineering simulation solutions.

Continuous innovation brought by our R&D collaborations and activity provide our customers the most suitable and efficient process simulation solutions.







Sciences Computers Consultants Headquarter
10 rue du plateau des glières
F-42000 Saint Etienne France
+33 4 77 49 75 80
scc@scconsultants.com
http://www.scconsultants.com



Sciences Computers Consultants Inc. 1455 rue Drummond, Bureau 2B Montréal (Québec) H3G 1W3 +1 (514) 687 4708 scc-mtl@scconsultants.com http://www.scconsultants.com