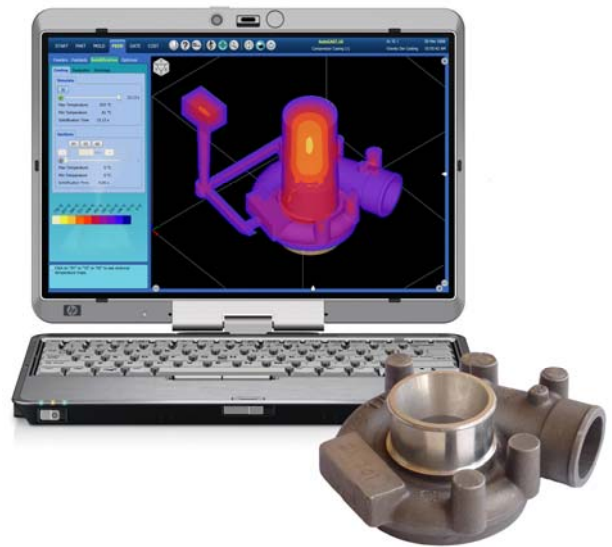


## Casting Methods Design Software Showcased at Foundry Expos

The world's fastest and easiest-to-use software program for casting methods design has now become even more powerful. AutoCAST-X (Release 10) was launched at IFEX 2008 Chennai and recently showcased at IFEX 2010 Ahmedabad with live simulation of visitors' castings. The new release includes part thickness analysis, instant multi-cavity mold layout, automatic optimization of feeders and gating systems, cost analysis, and image-embedded method reports. The databases include all major casting alloys and processes. The program handles tiny jewellery parts to complex automobile engine blocks, and even huge press cylinders weighing tons.



Specifically developed for the latest 64-bit Windows operating systems including Windows 7, the program creates meshes as small as 0.1% of mold size, giving accurate results for even large thin-wall castings within minutes. Unlike other casting software, AutoCAST-X seamlessly integrates design, modeling and optimization of methods (feeders and gating). This allows casting engineers to analyze several layouts and complete a project within a few hours. The 'cool-look' intuitive interface gently guides the user, pointing out forgotten steps and overlooked errors. Even users without prior computer experience can learn to use it within a day.

Starting from 1998, AutoCAST has been implemented in over 40 ferrous and non-ferrous foundries, engineering and R&D institutes, and CAD/CAM firms. In addition, more than 100 organisations have used the consulting services to troubleshoot and optimize their castings. They benefit from a well-established technical support network with simulation consultants based at Mumbai, Pune, Kolhapur, Coimbatore, Bangalore, Howrah, Indore, and other foundry clusters.

The software has been developed by Advanced Reasoning Technologies Pvt. Ltd., Mumbai, in collaboration with Indian Institute of Technology, Bombay and other R&D institutes. New features in AutoCAST-X (compared to earlier versions of AutoCAST R1 to R9) include the following:

- New cool-look user interface, making it easy to use with just half-day training
- Improved accuracy of 0.1% mold size, especially useful for large and thin wall castings
- Part thickness imaging with sensor to measure local thickness in any section
- Stepped and multi-plane (mold with 3 or more pieces) parting line definition
- Interactive core hole identification, to overcome problems with faulty 3D models
- Multi-cavity mold layout, layout modification, and mold size optimization
- Design and modelling of multi-neck feeders for multi-cavity molds
- New feedaids: internal chills, padding, and fins; all these can be solid or hollow
- Animation (with play and pause) of casting solidification with actual temperature values
- Automatic optimization of riser size (riser will grow in size until desired quality is achieved)
- More freedom in gating design (ex. gates can be directly connected to sprue or riser)
- Estimation of tooling, materials and energy costs, and cost comparisons
- Formatted method report with casting image; the report can be saved or printed
- New controls like part transparency, smooth rotation, measure, and background color
- Entire project (with all layouts) is automatically saved as a zip file, useful for backup.