

Run

To run a calibration simulation, from the **Run** menu, select **Start**. While running the calibration routine, the Calibrator reports calibration information as shown in the Run tab dialog box. If the simulation run was unsuccessful, a descriptive message will appear in the message area explaining what needs to be corrected in the input data.

Calibrator - Steady State Mode

Mode Run Help

Roughness Group Demand Group Pipe Status Junction Pressure Pipe Flow Run Run Summary Export Results

Trial Progress

Current Trial : Maximum Trial : N/A

Fitness Statistics of Current Generation

Maximum : Minimum : Average :

Simulation Performance

Convergence Method : Fitness Threshold : N/A Best Fitness Reached : N/A

Result Time Stamp :

> INFO: junction pressure measurement/result of calibration analysis.
> INFO: calibration analysis trial progress information.
> INFO: calibration iteration summary.
> INFO: calibration analysis trial progress information.

Main Menu

Mode Run Help

Mode - Choose a mode (Steady State, Fire Flow, or Extended Period) for Calibrator.

Run - Go to **Run** to **Start** and **Stop** the trial. You can also choose **Options....** to view the Calibration Options dialog box:

Calibration Options
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	Measurement Unit	Weighting Factor	Evaluation Threshold (%)
Pressure :	Psi <input type="text"/>	1 <input type="text"/>	5 <input type="text"/>
Level/Head :	Feet <input type="text"/>	1 <input type="text"/>	5 <input type="text"/>
Flow :	Gallon / Minute <input type="text"/>	1 <input type="text"/>	5 <input type="text"/>

Termination Criteria

Fitness Threshold (%) :	1 <input type="text"/>	Maximum Trials :	50000 <input type="text"/>
Least Fitness Improvement (%) :	0.1 <input type="text"/>		
Least Improvement Generation :	100 <input type="text"/>	<input type="button" value="Advanced GA Options ..."/>	

Convergence Method (Fitness Measurement) :

- Type #1 : AVERAGE of the absolute values of $w(1 - P_{sim}/P_{obs})^2$
- Type #2 : AVERAGE of the absolute values of $w(1 - P_{sim}/P_{obs})$
- Type #3 : MAXIMUM of the absolute values of $w(1 - P_{sim}/P_{obs})$

Calibration Time :

Help - Click to go to **Contents**, **Index**, or **About Calibrator** to find more information on Calibrator.

Trial Progress

This section of this dialog box represents the progress of the current optimization. It displays the current trial and the maximum trial limit.

Fitness Statistics

This section of the dialog box represents the accuracy of the current optimization. This section shows the Maximum, Minimum, and Average fitness statistic for the current simulation. Please review the fitness statistics carefully. The fitness statistic will be a value between zero and one. The smaller the fitness value, the better the correlation between the observed and the calculated values. If the fitness is a value large, the calculated values may have little correlation to the observed data and you may need to review the input criteria and re-run the calibration simulation.

Simulation Performance

This section of the dialog box represents the performance of the current optimization. It will be updated continually as the algorithm moves towards completion. This section shows the current Convergence Method, The Fitness Threshold, and the Best Fitness reached during the simulation.

Result Time Stamp

This value represents the current date and time when the last successful optimization was completed.