

# Sample project

The Parametric Simulation sample projects are available in the `<install_root>/samples/simulation/Parametrics` directory. The SysML Parametric diagrams and InstanceSpecifications are as follows

- `simple_parametrics.mdzip`: basic Parametric Simulation.
- The `CylinderPipe.mdzip` sample: demonstrates how to deal with multiple values. It shows the calculation for the cost of raw materials that will be used to manufacture the cylinder pipes. It also demonstrates the use of `OpaqueBehaviorAction` to simulate the parametric.
- The `ActParIntegrate.mdzip` sample: demonstrates the use of `OpaqueBehavior` to simulate the parametric.
- `SCARA manipulator.mdzip`: demonstrate the use of Parametric Simulation to evaluate the position of end-effector of the SCARA manipulator from the given angles of actuators.
- `MotionAnalysis.mdzip` and `SpringDisplacementUsingTimevariable.mdzip`: show how to use Time Series Chart for plotting the runtime values.
- `Trade-Study for Brayton Cycle.mdzip`: this sample shows you how to perform a trade-study.
- `Forward Contract Valuation.mdzip`: a dynamic constraint usage in Parametric Simulation.



## Note

All of the sample projects of the Parametric Simulation engine include a Simulation Configurations package that contains two `SimulationConfig` elements for normal and silent simulation. You can select this `SimulationConfig` class to start the Parametric Simulation engine.

## Related pages

- [Specifying the language for the expression](#)
- [Value binding](#)
- [Evaluating expressions](#)
- [Evaluation with causality](#)
- [Dynamic constraint](#)
- [Manual value updates using the Parametric Evaluator](#)
- [Communicating with evaluators through simulation console](#)
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