ioMosaic

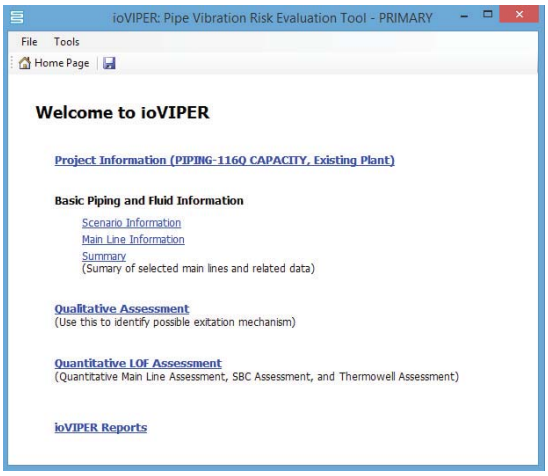
Minimizing risk. Maximizing potential.®

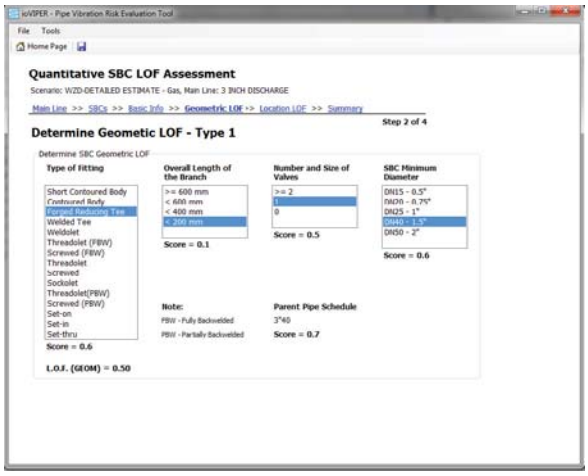
ioViper™ Component

For pipe vibration analysis

ioViper™ is a software tool for evaluating vibration induced fatigue in process and relief pipework. The program utilizes the methodologies outlined in the 2nd edition of the "Guidelines for the Avoidance of Vibration Induced Fatigue Failure and Process Pipework" published by the Energy Institute.

The program is designed to automate the established methods and mitigation measures, considered for both new and existing process systems. As a component of Process Safety Office™, ioViper™ directly integrates with the SuperChems™ component where mechanical data and simulation fluid properties are readily available.





ioVIPER Report - Main Lines

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Project: 01DA103-08A - POWER FAILURE - 01PSV0116Q CAPACITY

Scenario	Main Line	Pipe Size	Flow Induced Turb.	Mech. Excit.	Recip. Pumps & Compressors	Rotating Stall	Flow Induced Excit.	High Freq. Acoustic Excit.	Surge	Cavitation	Main LOF
01DA103-08A - POWER FAILURE - 01PSV0116Q CAPACITY - Gas											
	01PSV0116Q PIPING.IN.00										
		6"40	0.129	0.4	1.0	1.0	1.0	0.29	0.272		1.0
	01PSV0116Q PIPING.OUT.02										
		8"40	0.499	0.4	1.0	0.2	1.0	0.29	0.575		1.0
	01PSV0116Q PIPING.OUT.03										
		8"40	0.142	0.6	0.4	0.2	0.2	0.29	0.228		1.0
	01PSV0116Q PIPING.OUT.04										
		8"40	0.507	0.9	0.4	0.2	0.2	0.29	0.461		1.0
	01PSV0116Q PIPING.OUT.05										
		8"40	0.075	0.2	0.4	1.0	1.0	0.29	0.114		1.0