Model tests vs. In-plant tests or monitoring

Data quantity (description quality) in common model tests and in prototype multidimensional vibro-acoustic cavitation tests
Operating range
Model: only 2 points useful in practice

Prototype: detailed description
Model tests vs. In-plant tests or monitoring

In a typical model cavitation test, much less useful data for practical operation of the prototype is obtained than can be obtained by means of an in-plant multidimensional vibro-acoustic monitor or a test.

In some cases, not all types of cavitation can be seen in a model test. All can be heard and assessed in a good, multidimensional in-plant vibro-acoustic test.

There are strong scale effects in incipient cavitation modelling. Thus, cavitation should be checked on the prototype.

Turbine cavitation performance varies in time, making continuous control necessary.