SPECIFICATION LINE LINEAR FLOW command

Synopsis

The SPECIFICATION LINE LINEAR FLOW command is used to describe specifications involving fluid flow distributed along a line associated with a two-dimensional flow-mechanical or flow-mechanical-thermal analysis.

Syntax

The following syntax is used to describe a linearly distributed flow across a boundary:

\[
\text{SPECification LINE LINear FLOW NODEs #:##} \\
(\text{History ##}) (\text{Q Begin #.#}) (\text{Q End #.#})
\]

Explanatory Notes

The LINEAR keyword implies that the flux is distributed linearly. As such, the SPECIFICATION LINE LINEAR FLOW command should be used only in conjunction with linear continuum elements suitable for coupled flow-mechanical analyses (e.g., Q4P4c, Q5P4c, T4P3c).

For positive (i.e., fluid input to an element) values of flow specified along exterior boundaries, the node points must be specified in a counterclockwise order; along an interior boundary (or “hole”) these nodes must be specified in a clockwise order (in both cases, a standard right-handed coordinate system is assumed).

Examples of Command Usage