Connection Compatibility Tables

The Connection Compatibility Table (element name CCTA) holds a list of all the compatible connection types for Piping Components in a set project. A CCTA is an administrative element which exists at the same level as CATA in the hierarchy. A CCTA has Connection Compatibility (COCO) elements as its members, each of which has a pair of coded connection types stored as its CTYPE attribute. These connection types are those referred to in the PCON attribute of a Piping Component's P-points.

The commands below give an example of the setting up of a typical connection table.

```
NEW CCTA

NEW COCO /WELDWELD CTYPE WELD WELD     (weld to weld)

NEW COCO /SCRDSCRD CTYPE SCRD SCRD     (screwed to screwed)

NEW COCO /WELDBW CTYPE WELD BW         (weld to butt weld)
```

Note: That ISODRAFT uses the connection codes to derive bolting requirements, and so the connection codes used must conform to certain standards - refer to Appendix B and the ISODRAFT *Reference Guide* for details. Setting up the Connection Compatibility Table should be one of the first tasks to be carried out when commencing a design project using AVEVA E3D™.

If an attempt is made to connect two pipework components in MODEL, then a check is made to see if the p-leave PCON attribute of the first component and the p-arrive PCON attribute of the second component appear as a matching pair in the connection table. If there is such a matching pair then the components are connected, otherwise a similar check is made on the p-leave PCON attributes of each component. If a matching pair is now found, the second component is 'flipped' and connected to the first. If no matching pair is found then an 'incompatible connection type' error message is output and the second component is left in its original position and orientation.