

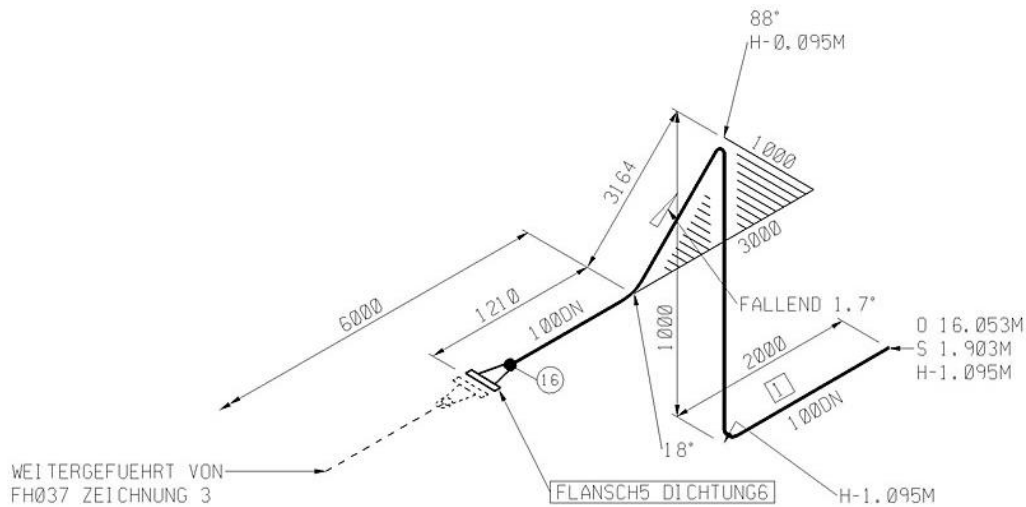
Pipe Line Isometric Drawings and P & ID Drawings



Pipe Isometrics : Are drawings which shows details of Process pipe lines in a single line presentation , with details of pipes, pipe connections (valves, flanges, nipples, reducers, end cap, elbow, etc), along with the dimensions and direction of pipe line.

Example of a Pipe Line Isometric Drawings is given below in figure-A

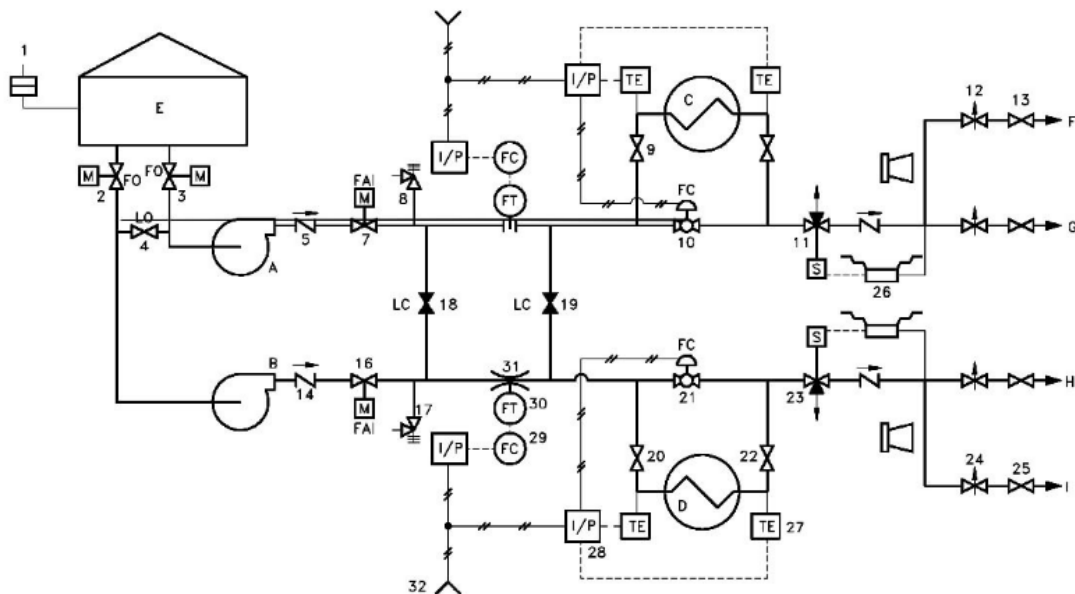
Figure A: Example of Pipe Isometric Drawing



P & ID : is called as **Piping and Instrumentation Drawing**, is a pictorial representation of Pipeline in a single line diagram along with processing Equipments/ Instruments and storage tanks .

Example of a P & ID is given below in figure-B

Figure B : Example of P & ID (Piping and Instrumentation Drawing)



This Blog gives a detail study of P&ID and Pipe Isometrics, with details of

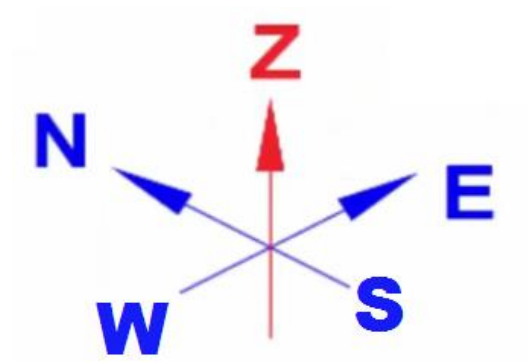
- What is P&ID Drawing
- What is an isometric drawing

- Symbols of Pipe Line Isometric Drawings
- What is pipe rolling / off-set

We shall learn from the basics,

Directions:

Direction symbol is given on top of Pipe Line Isometric drawing to determine the directions of pipelines



Line Number :

Line number is given to each individual pipe line and the number is applicable for its whole length, until it joints to another pipeline or a equipment.

Spool Number :

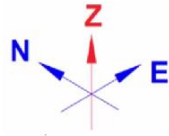
Spool number are sub divisions of Line number given during fabrication to facilitate transportation of pipelines, the spools are connected on-site to complete the line.

Rolling / Offset :

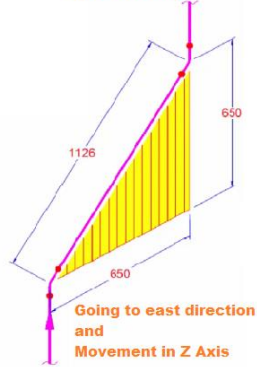
Rolling or otherwise called as **offset** gives us the exact detail of change in direction of pipeline,

There are three types of rolling, the hatch lines in the right angled triangle nearby denotes the type of rolling :

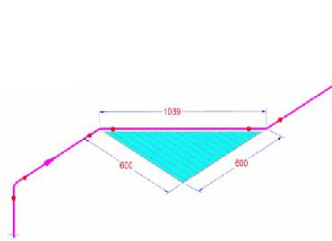
- Vertical rolling (with vertical hatch lines)
- Horizontal rolling (with horizontal hatch lines)
- Vertical & horizontal rolling (with both vertical and horizontal hatch lines- 2 triangles)



Vertical Rolling

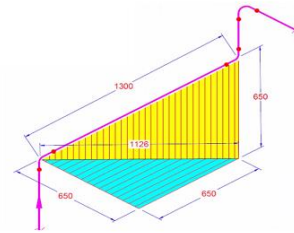


Horizontal Rolling



Line Going from South to East
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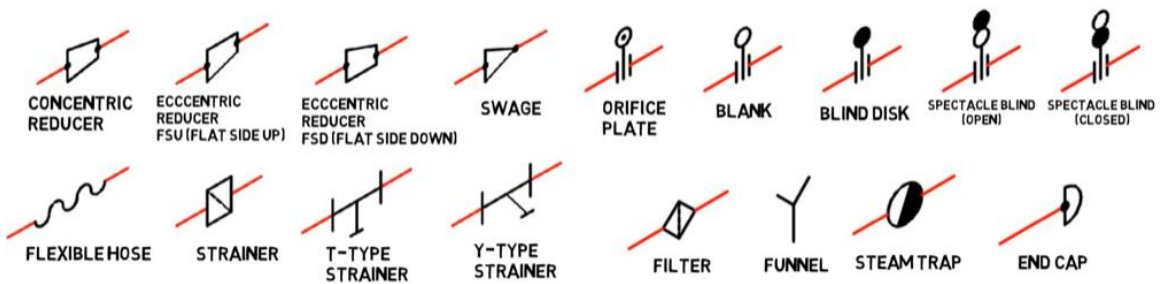
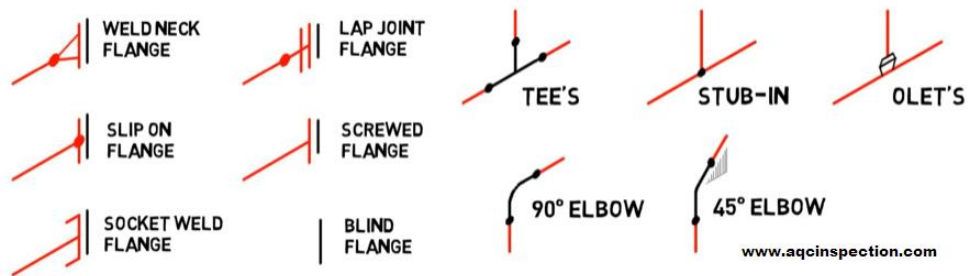
Vertical & Horizontal Rolling

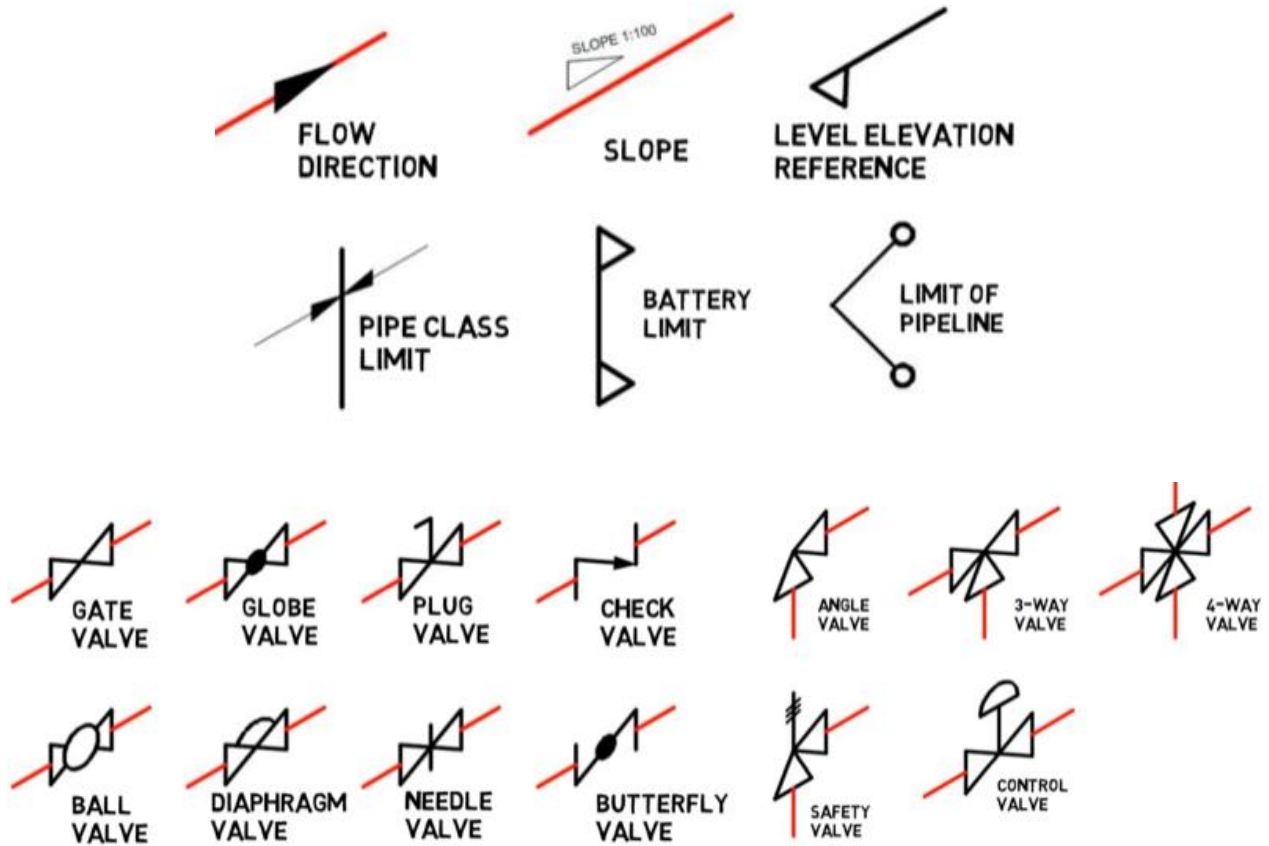


Line going from South to East but pipe movement in both Z axis and Horizontal direction

Symbols :

Basic isometric pipeline connection symbols are given below:





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