Piping Progress Measurement
(In Dia and In Meter)

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Revision 0

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A. Piping Fabrication - Progress Measurement (Inch Dia)

In construction projects **Inch Dia** unit of Measure is used to measure the progress of Piping Spool fabrication.

The weld joint of the pipe size is converted to the equivalent inch dia of welding

Examples:

1. One welding joint of 8 inch diameter pipe = 8 Inch Dia
2. Two welding joints of 12 inch diameter pipe = 24 Inch Dia

B. Erection and Hydrotesting – Progress Measurement (Inch Meter)

In construction projects **Inch Meter** unit of Measure is used to measure the progress of Piping Erection and Hydrotesting.

The length of pipe erected or hydrotested of the pipe size is converted to the equivalent inch Meter of erection or hydrotesting.

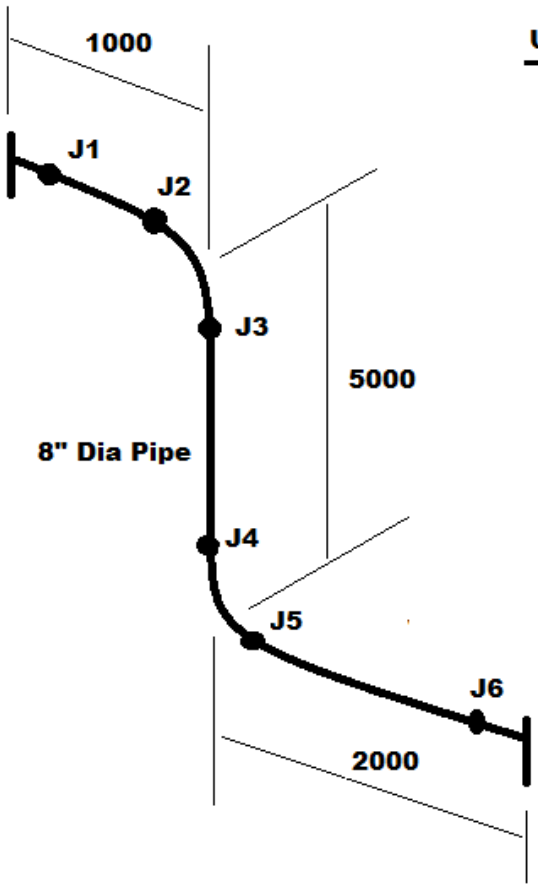
Examples:

1. 10 Meter of 8 inch diameter pipe Erected or Hydrotested = 80 Inch Meter
2. 12 Meter of 6 inch diameter pipe Erected or Hydrotested = 72 Inch Meter

C. Unit Piping

Unit piping are piping work carried out to connect two equipments in the process and utility areas.

The piping in these areas is more complex in terms of erection and welding of site joints.



Unit Piping

1. Fabrication

6 Joints of 8 Inch Diameter
= 6 X 8
= 48 Inch Dia

2. Erection and Hydrotecting

8 Meters of 8 Inch Diamater Pipe
= 8 X 8
= 64 Inch Meter

I. Guide Lines For Estimation of manpower (Above Ground Piping)

Sr. No.	Fabrication Material	Productivity per welder day on single shift basis	Normal Welder Gang
a)	Carbon Steel Piping	20 Inch Dia	1 Fitter 1 Welder 1 Gas Cutter 2 Riggers 2 Helpers
b)	Stainless Steel Piping	16 Inch Dia	
c)	Alloy Steel Piping	14 Inch	

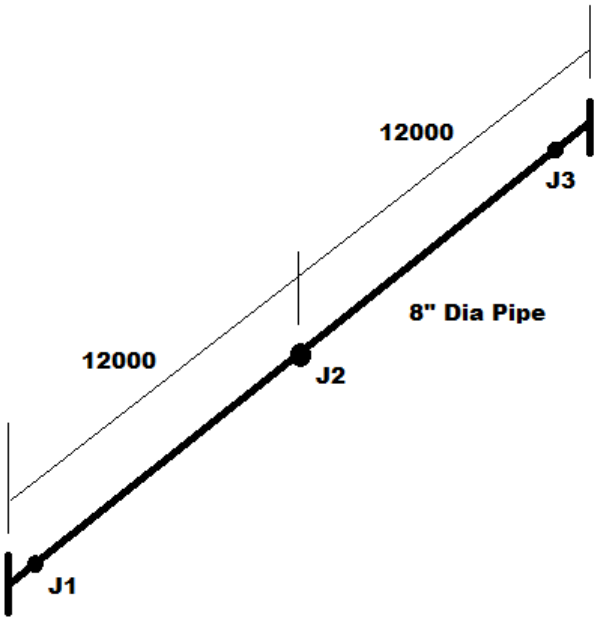
II. Weightage Factor for Piping Above Ground

a.	Pre-Fabrication	-	30%
b.	Erection / Welding	-	70%
c.	Fixing valves	-	80%
d.	Supporting	-	90%
e.	Testing	-	100%

D. Pipe Rack or Cross Country Piping

Pipe Rack or Cross Country piping are piping work carried out to connect two units and are usually straight.

The piping in these areas is less complex when compared with Unit Piping



1. Fabrication

3 Joints of 8" Diameter Pipe
= 3 x 8
= 24 Inch Dia

2. Erection or Hydrotesting

24 Meters of 8 Inch Diameter Pipe
= 24 X 8
= 192 Inch Meter

Observation:

- In Unit Piping there is more welding and less of erection
- In Piperack or Cross Country there is less of welding and more of Pipe Laying