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## Lecture 2. Sanitary Pipes and Fittings, Glass Piping, Plastic Tubings, Fittings and Gaskets.

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1. Introduction
2. General points to be considered while designing and layout of sanitary pipe lines

Table 2.1 Outer diameter, thickness and carrying capacities of sanitary pipes

O.D	Thickness	Approx. Capacity (Kg/h)
25.4 mm	1.25 mm	< 2000
38.1 mm	1.25 mm	<7200
50.8 mm	1.25 mm	7200 - 15000
63.5 mm	1.5 mm	15000 - 22700
76.2 mm	1.5 mm	22700 - 36000

Table 2.2 Temperature resistance of various plastic materials for tubing

1	PVC	50°C
2	Polystyrene	65°C
3	Polyethene (linear)	60- 90°C
4	Polypropylene	70 - 100°C
5	Polytetrafluoroethylene	325 - 330°C

3. General Piping design considerations
4. Glass piping
5. Plastic tubing



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## 6. Gaskets

The following are the different types commonly used in dairy and their heat tolerance limits:

- Nitrile rubber (NBR): 130 °C
- Butyl rubber(Butyl): 1400 °C
- Ethelene propelene (EPDM): 165 °C
- Silicon rubber:1750 °C
- Viton:1800 °C



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*Thank You*