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| GP 03-03-10 | Strainers for Mechanical Equipment | July 2001 |
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# Strainers for Mechanical Equipment

## GP 03-03-10

### Scope

[I] This Global Practice (GP) covers the design and application of temporary and permanent strainers for the protection of mechanical equipment.

[I] This Practice does not cover metal screen or porous media filters with openings finer than 150 µm.

[I] An asterisk (\*) indicates that additional information is required. If a job is contracted, this additional information is furnished in the Job Specification.

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## 1. Required References

This section has been customized for another business sector.

## 2. General

- 1) [I] The design and application of strainers for mechanical equipment not specifically covered by other Practices shall be per the requirements given herein.
- 2) [M] Strainers shall be located between the inlet flange and the equipment isolation block valve.

## 3. Design

### 3.1. Common Requirements for Temporary and Permanent Strainers

- 1) [M] Selection of strainer type and orientation of the strainer element relative to process flow shall ensure that collected solids or foreign material can not fall back into the line.
- 2) [R] Strainers shall be designed and fabricated to prevent their damage due to vibration, differential pressure, pulsating flow, or impact of objects. Screen of mesh size 20 or finer shall be reinforced with perforated plate, or heavier screen and steel bars.
- 3) [S] Strainer bodies shall be suitable for the line service classification.
- 4) [R], [M] Material for screen and perforated plate shall be per Section 3.
- 5) [R] Mesh size of strainers shall be selected to stop all objects that could cause plugging or mechanical damage. See Section 3 for usual maximums for normal operation.
- 6) [O] Strainer open area shall be not less than two times the inlet pipe cross-sectional area.
- 7) [M] Cone or basket type strainers shall be provided with identification tabs that protrude from the holding pipe flanges.

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