

1 **GENERAL**

1.1 **REFERENCES**

- .1 American Society of Mechanical Engineers (ASME).
 - .1 ASME B40.100-05, Pressure Gauges and Gauge Attachments.
 - .2 ASME B40.200-08, Thermometers, Direct Reading and Remote Reading.
- .2 Canadian General Standards Board (CGSB).
 - .1 CAN/CGSB-14.4-M88, Thermometers, Liquid-in-Glass, Self Indicating, Commercial/Industrial Type.
 - .2 CAN/CGSB-14.5-M88, Thermometers, Bimetallic, Self-Indicating, Commercial/Industrial Type.

1.2 **SUBMITTALS**

- .1 Submittals in accordance with Section 01 00 10 – General Instructions.
- .2 Submit shop drawings and product data.
- .3 Submit manufacturer's product data for following items:
 - .1 Thermometers.
 - .2 Pressure gauges.
 - .3 Stop cocks.
 - .4 Wells.

1.3 **HEALTH AND SAFETY**

- .1 Do construction occupational health and safety in accordance with Section 01 35 29.06 – Health and Safety Requirements.

2 **PRODUCTS**

2.1 **GENERAL**

- .1 Design point to be at mid point of scale or range.
- .2 Ranges: as required.

2.2 **DIRECT READING THERMOMETERS**

- .1 Industrial, variable angle type, liquid filled, 125mm scale length: to CAN/CGSB 14.4 ASME B40.200.

2.3 **THERMOMETER WELLS**

- .1 Copper pipe: copper or bronze.

2.4 **PRESSURE GAUGES**

- .1 112mm, dial type: to ASME B40.100, Grade 2A, phosphor bronze bourdon tube having 0.5% accuracy full scale unless otherwise specified.

- .2 Provide:
 - .1 Gasketed pressure relief back with solid front.
 - .2 Bronze stop cock.

3 EXECUTION

3.1 GENERAL

- .1 Install so they can be easily read from floor or platform.

3.2 THERMOMETERS

- .1 Install in wells on piping. Provide heat conductive material inside well.
- .2 Install in locations as indicated.
- .3 Install wells as indicated only for balancing purposes.
- .4 Use extensions where thermometers are installed through insulation.

3.3 PRESSURE GAUGES

- .1 Install in following locations:
 - .1 Upstream and downstream of control valves.
 - .2 In other locations as indicated.
- .2 Install gauge cocks for balancing purposes, as indicated.
- .3 Use extensions where pressure gauges are installed through insulation.

3.4 NAMEPLATES

- .1 Install engraved lamicoid nameplates as specified in Section 23 05 53.01 – Mechanical Identification, identifying medium.