Tracers provide heat for piping which must be protected from freezing, and for process piping which must be maintained at a minimum temperature. The two most common types are (1) tubing which runs horizontally along the length of the piping, and (2) electrical cables or tape coiled around the pipe. Tracers may be thermally connected to the pipe by means of heat transfer cement, or simply banded to the pipe.

The exact type and length of tracing should be indicated in the specification as it may affect the size of pipe insulation necessary and/or the application time which must be estimated.

The insulation material chosen should insulate efficiently at the temperature of the tracer as well as that of the pipe. Jacketing materials must be weather-proof if tracing is located outdoors.

The illustrations show the use of oversized pipe insulation on traced piping. Other applications include the use of wrap insulations and specially made extended leg pipe insulations.

Detail A — Tubing tracer without heat transfer cement.
Detail B — Double tubing tracer without heat transfer cement.
Detail C — Tubing tracer with heat transfer cement.
Detail D — Electrical cable/tape tracer.

Materials: Pipe insulation, heat transfer cement, channels and bands.
1. Pipe.
2. Tubing tracer.
3. Insulation with appropriate jacketing.
5. Channel (optional).
6. Bands securing the channel to the pipe.
7. Double tracer.
8. Electrical cable or tape tracer.