

## Stabilized Mineral Insulated Cable

The term stabilized, aging, or short-term ordering refers to a thermoelectric hysteresis placed on nickel alloy thermocouple conductors. This is accomplished by a special heat treating procedure. This heat treating procedure is done on selected lots of MIC, in order to place the greatest amount of shift in electromotive force (emf) of the material, prior to use. Stabilized material will have a minimized shift in calibration during use. Material which has been stabilized produces a higher emf output as compared to standard material.

Additional information about stabilized material:

- Stabilizing is useful to approximately 1600°F (871°C). If material is used above this temperature, the nickel alloy will be re-annealed and will return to its original calibration output.
- The calibration tolerance on this material is offered as standard limits of error +/- 2.2°C or +/- 3/4%, whichever is greater up to 871°C. Typically the shift in emf output during use is less than 1/2 of the shift experienced by standard material.
- The surface finish will be discolored due to the stabilizing heat treating procedure.
- Delivery time is longer than standard material, as specially selected lots of material are required to produce stabilized material.
- Price is typically higher due to the special handling required.

Normal Cable (left) vs. Stabilized Cable (right).



Note the dull, mottled appearance of the stabilized material.