



Equilibration Blocks	Models 2127 and 2128
Protect platinum thermometers from metal ion contamination	
Graphite block for low cost (Model 2127)	
Platinum liner for maximum contamination protection (Model 2128)	

If you have a fixed-point furnace and would like to use it for annealing or calibrating your SPRTs, Hart has a variety of equilibration blocks designed to turn your fixed-point furnace into an annealing furnace and/or a comparison calibrator.

Unlike other adapters on the market, these blocks are specifically designed to prevent contamination of the platinum element of your SPRTs at high temperatures.

Non-platinum metal ions can cross the barrier provided by the sensor sheathing due to expansion of the lattice structure of the sheathing material at temperatures above 500°C. This contamination is often significant enough to negate any calibration. This defeats the purpose of an SPRT as an interpolating device.

Most contamination risk occurs in furnaces or dry-wells with ordinary metal

blocks. Since all SPRTs require periodic calibration and annealing to relieve the stress in the platinum element caused by mechanical shock and daily usage, every SPRT is exposed to possible contamination during either the calibration process or in the annealing stage. Hart's equilibration blocks prevent the metal ion contamination of SPRTs common in other furnaces.

The **Model 2127** Graphite Block with three wells is an excellent block for comparison calibrations in any of Hart's furnaces up to 1100°C. Well-to-well uniformity is better than 2 mK at 660°C. The Model 2127 is also a good block for annealing.

The **Model 2128** is a high-precision platinum-lined block as preferred by national laboratories. It has well-to-well uniformity better than 1 mK at 660°C and

5 mK at 961°C. The core of the block is nickel, which has efficient heat-conduction characteristics. Each of the three wells in this block is shielded with platinum and quartz tubes to eliminate contamination without the loss of uniformity.

The Model 2128 equilibration block is the best block of its kind for work to 1000°C. It is used by national standards laboratories for comparison calibrations.

Excellent calibration results are achievable with a Hart fixed-point furnace and a platinum-lined block without the use of a freeze-point cell in the furnace.

Specifications	
Dimensions	<b>2127-9114:</b> 54 mm x 510 mm
	<b>2127-9115:</b> 62 mm x 510 mm
	<b>2127-9116:</b> 54 mm x 510 mm
	<b>2128-9114:</b> 54 mm x 495 mm
	<b>2128-9115:</b> 62 mm x 495 mm
Wells	<b>2127:</b> 3, 8 mm ID x 488 mm
	<b>2128:</b> 3, 8 mm ID x 480 mm
Immersion Protection	<b>2127:</b> Last 156 mm in graphite
	<b>2128:</b> Last 165 mm in block Last 420 mm in Pt sheath
Well-to-Well Uniformity	<b>2127:</b> 2 mK at 660°C in 9114
	<b>2128:</b> 1 mK at 660°C in 9115
Temperature Range	<b>2127:</b> up to 1100°C
	<b>2128:</b> up to 1000°C

Ordering Information	
2127-9114	Graphite Block, 9114
2127-9115	Graphite Block, 9115
2127-9116	Graphite Block, 9116
2128-9114	Platinum-Lined Block, 9114
2128-9115	Platinum-Lined Block, 9115
2128-9116	Platinum-Lined Block, 9116