

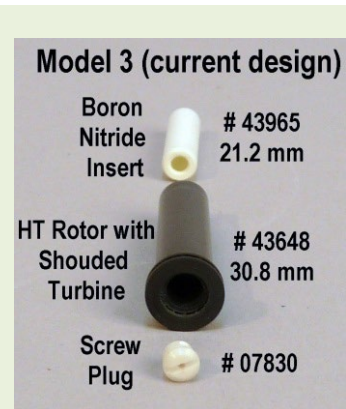
For information on the *Doty High Temperature Probe*: <http://dotynmr.com/ht-mas/>





Choosing the correct high temperature parts is somewhat challenging. Over the years, high temperature spinner designs have changed. There have been three different rotors with distinct turbines. Adding to the uncertainty, some early probes were later upgraded to more recent spinner models. The Boron Nitride inserts have been made in 3 different lengths. **Checking the length and design of the rotor and also the length of the boron nitride inserts can assist in selecting the correct accessories for your probe.**

The high temperature rotor assembly consists of 1) an outer rotor (usually made of silicon nitride) with turbine blades, and 2) a threaded boron nitride insert which is held in place and, sealed with 3) a screw plug. The screw plugs are made of zirconia and Macor. Screw plugs for MAS have a small vent hole in the center to allow outgassing. Some venting is usually needed to avoid explosion of the boron nitride insert as the temperature rises.

Wideline HT parts are also available. A ceramic non-fluted (no turbine blades) outer sleeve holds the insert. Although wide-line Macor plugs do not have an out-gassing hole, they are not entirely sealed.

For air sensitive samples, use nitrogen for spinning or for Room Temperature (RT) gas.



<p>700°C Model 3 (Current Design) Rotor Length = 30.8 mm BN Insert Length = 21.2 mm</p>  <p>HT Rotors With Shrouded Turbine</p>	# 43648	Shrouded Silicon Nitride Rotor _ ~6 KHz (See Probe Manual) (One rotor is used for many samples, as the samples are packed into interchangeable boron nitride inserts)	\$2200
	# 43965	Boron Nitride Insert: 21.2 mm length by 5.4 mm OD	\$100
<p>700°C Model 2 Rotor Length = 30.8 mm BN Insert Length = 19.8 mm</p>  <p>Silicon Nitride HT Rotor</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Discontinued</p>	43981	HT Silicon Nitride Rotor* _ ~ 5 KHz (See Probe Manual)	\$2200
	# 07890-B	Boron Nitride Insert: 19.8 mm length by 6 mm OD	\$100
<p>650°C Model 1 Rotor Length = 20 mm BN Insert Length = 16.4 mm</p>  <p>HT Rotors and Inserts</p>	# 07532	HT Silicon Nitride Rotor* _ at 500°C/3.5 KHz (See Probe Manual)	\$1430
	# 07530	HT Zirconia Rotor*	\$1430
	# 07890	Rounded Boron Nitride Insert (first generation)	\$88
	# 07890-A	Boron Nitride Insert: 16.4 mm length by 6 mm OD	\$88
	# 07548	HT Outer Ceramic Sleeve for Wideline *	\$330
<p>Screw Plugs</p>  <p>Zirconia Macor Wideline # 07830 # 08140 # 08140-W</p>	# 07830	Zirconia HT Screw Plugs – Vented	\$330
	# 08140	Macor HT Screw Plugs – Vented	\$88
	# 08140-W	Macor HT Wideline Screw Plugs -Unvented	\$88

* One rotor (or outer ceramic sleeve) is used for many samples, as the samples are packed into interchangeable boron nitride inserts.

All prices US\$. Foreign prices higher, plus taxes.