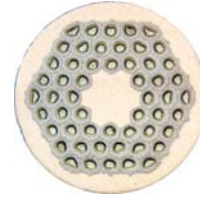


## Restacked Rod Process Nb<sub>3</sub>Sn Superconductor



Internal tin routes for producing Nb<sub>3</sub>Sn have long yielded superior current densities to the bronze process. Now OST's Restacked Rod Process allows consistent high performance to be delivered in a robust internal tin conductor.

This product replaces the Modified Jelly Roll product previously offered.

Stabilizer	Copper
Non copper volume	53% +/- 3%
RRR of Cu	>40
Twist pitch , dia. < 1mm	12 ± 4 mm
Twist pitch , dia. ≥ 1 mm	40 ± 10 mm
Bare size tolerance	± 5 μm
Insulation	S-Glass braid
Insulation build	130 μm (nominal)
Ins. size tolerance	± 15 μm

### Standard Sizes and Ratings

Bare diam. (mm)	.5	.6	.7	.8	.9	1.0	1.2	1.4	1.5
Ic at 4.2K (A)									
10 Tesla	217								
12 Tesla	146	210	286	373	472	583			
14 Tesla	91	130	177	232	293	362			
16 Tesla		75	102	133	169	208	320	436	501
18 Tesla							180	245	281
20 Tesla							81	110	126

*Critical currents shown are guaranteed minima, measured on a titanium mandrel with a voltage criterion of .1μv/cm, and using the OST recommended heat treatment schedule. Typical values are 15-20% higher. All superconductors manufactured by OST undergo rigorous in process inspections and final performance tests. The company is certified to ISO9001-2000.*

**Oxford Instruments  
Superconducting Technology**  
600 Milik Street  
PO Box 429  
Carteret, NJ, 07008, USA  
Tel: 732-541-1300 Fax: 732-541-7769  
www.oxford-instruments.com  
e-mail: sales@ost.oxinst.com



August 2005

