

Technical Data Sheet

Wire-in-Channel NbTi Superconductor

For applications requiring a high copper-to-superconductor ratio (~5:1 or greater), OST has pioneered an economical fabrication technique used in the production of many thousands of tons of superconductor. By soldering an insert of NbTi and copper into a copper channel of the desired dimensions, we both avoid processing large



quantities of copper and allow standard core wire billet designs to be applied to a variety of final products. The technique naturally yields long continuous lengths, and is suitable for persistent magnets. Wire-in-channel is typically insulated by a polyester braid, which we apply in house. Other insulation schemes are also available.

Standard Products

Ic @4T	Width	x	Height (mm)	Part #
1210	2.56	x	1.77	10.7657
1000	2.94	x	1.59	10.7731
945	2.55	x	1.77	10.7565
875	2.24	x	1.43	10.7738
840	2.94	x	1.59	10.7718
780	2.94	x	1.59	10.7739
780	2.24	x	1.43	10.7719
740	3.39	x	1.95	10.7737
650	3.49	x	2.25	10.7722
600	2.24	x	1.43	10.7783
560	3.39	x	1.95	10.7717
560	2.94	x	1.59	10.7720
560	2.24	x	1.43	10.7721
550	1.95	x	1.37	10.7741

Dimensions shown include insulation. Typical braid builds are 150 microns on the radius. Critical currents shown are guaranteed minima. All superconductors manufactured by OST undergo rigorous in process inspections and final performance tests. The company is certified to ISO9001.



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