

NCSX June 2007 ETC

TABLE II- Materials and Subcontracts

WBS Number: 172

WBS Title: Base Support Structures

Job Numbers: 1702 and 1752

Job Title: Base Support Structure Design (1702) and Base Support Structure Procurements (1752)

Job Manager: Fred Dahlgren

Materials and Subcontracts (M&S)	Basis of Estimate
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Description:

The base support structure is the main gravity load carrying structure (~250,000lbs) for the entire machine. It must provide the gravity load path from the machine and distribute these loads to the test cell floor. It must also be capable of withstanding horizontal seismic accelerations of 0.13g and vertical accelerations of 0.07g.

Purchased parts:	(ft.)	lbs./ft.	\$/lb.	cost	
4 - W12 x 26 x 24' - 316L stainless steel	96	26	\$7.50	\$18,720.00	Verbal quote StainlessStructurals - recent (early April 2007) - \$/lb
4 - W8 x 15 x 24' - 316L stainless steel	96	15	\$7.50	\$10,800.00	Verbal quote StainlessStructurals - recent (early April 2007) - \$/lb
3/4" - 316L plate 36" x 48" base hub plate	4	95	\$7.50	\$2,850.00	Quote , metal suppliers online - See Table V
3/4" - 316L plate 36" x 48" top & bottom base column bases	4	95	\$7.50	\$2,850.00	Quote , metal suppliers online - See Table V
Weld rod & roto-bores				\$3,000.00	PPPL Shop estimate - see Table V - adjusted by WBS Manager
12 - Inconel 718 hex bolts 1-8 x 2.5" @ \$55 ea.				\$660.00	Quote B&G fabricators - See Table V
12 - Inconel 718 hex nuts 1-8 @ \$38 ea.				\$456.00	Quote B&G fabricators - See Table V
24 - 316 SS flat washers 1.03" ID @\$4.26 ea.				\$102.24	Catalog item McMaster-Carr - see Table V
Total Materials				\$39,438.24	

Labor - PPPL:	hrs.	
Welding (4hrs @ 48 places)	192	PPPL Shop estimate - see Table V - adjusted by WBS Manager
Welding (4hrs @ 24 places)	96	PPPL Shop estimate - see Table V - adjusted by WBS Manager
Cut & Drill plates	75	PPPL Shop estimate - see Table V - adjusted by WBS Manager

Job Totals: 363