

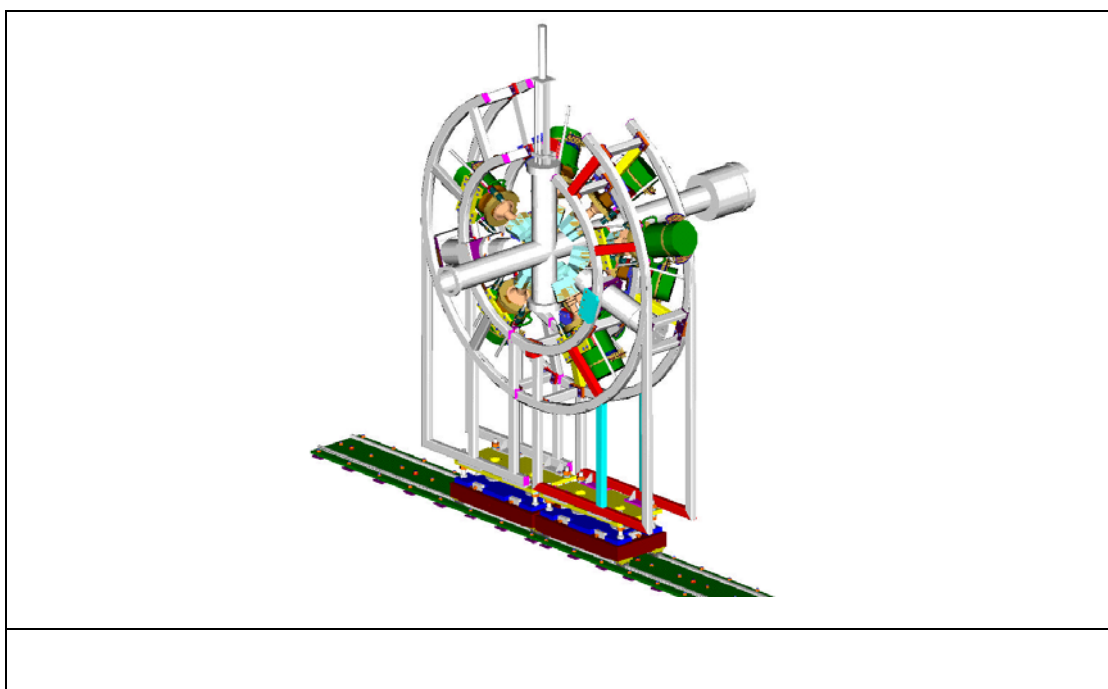
RISING Design Status Update

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28th July 2004

Design

The design phase of the second Rising fast beam set-up, which involves including the Miniball detectors, is complete and detailed drawings of all the components have been produced. It is currently in its final stage where assembly drawings are being detailed to assist in the assembly of Miniball. These drawings will be stored on the engineering drawing registry at Daresbury.



Manufacture

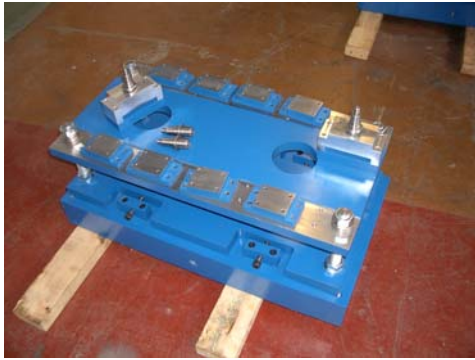
The manufacture of mechanical components is almost complete. The only outstanding item is the detector support brackets, which have been manufactured but are awaiting to be analysed before assembly. These components are expected to be completed by/ before Friday 6th of August.

Bought out Items

Orders have been placed for all the bought out items. Currently outstanding is the guide rails for the detectors. An order has been placed and the given delivery date was 23/07. Inquires are being made with the suppliers regarding the delivery.

Assembly

The trial assembly of all components has commenced at Daresbury. Liverpool University have carried out the sub assembly of the frame support base.



First frame support carriage manufactured and assembled by Liverpool University workshops.



Second Frame support carriage manufactured and assembled by Liverpool University workshops.



Support frames, supplied by Stan Deans, ready for assembly in the Daresbury assembly area.

Capital cost

The cost to date is detailed in the table below. The capital current total is 23.6k€. These funds have been committed by the University of Liverpool.

Item	Cost with VAT	Cost euro
motion mechanics	£1,625.71	2,419.04 €
manufactured components	£7,578.75	11,390.86 €
hepco coupling	£117.50	176.60 €
accessories	£1,175.00	1,762.50 €
materials	£2,314.75	3,479.07 €
Hector mounts	£587.50	881.25 €
Delivery & packaging	£2,350.00	3,525.00 €
Additional effort costs	£3,400.00	5,110.20 €
Total	£19,149.21	28,744.52 €

Staff Effort Cost

Mechanical designer Daresbury: 5 months

Project Engineer Daresbury: 2.25 months

Technical effort at Daresbury: 1 month

Workshop/technical staff at Liverpool University: 2 Months

Time Scales

The project is running to the following plan. The main dates to note are,

Assembly at Daresbury complete on 13/08

Delivery to GSI on 23/08

S4 area/ floor plates at GSI, ready by 23/08

Assembly by GSI staff ready for first detector 03/09

ID	Task Name	Duration	Qtr 1, 2004			Qtr 2, 2004			Qtr 3, 2004			
			Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
1	Projectstart	0 days		◆ 01/12								
2	Feasibility	1 wk		■								
3	preliminary design review	0 days		◆ 05/12								
4	design	40 days		■	■	■						
5	Design of array	40 days		■	■	■						
8	Design of array support	40 days		■	■	■						
11	Detailing	45 days				■	■	■				
20	final design review	0 days						◆ 19/04				
21	procurement	90 days					■	■	■	■	■	
34	manufacture	90 days					■	■	■	■	■	
35	Manufacture of array	50 days					■	■	■	■		
40	Manufacture array support	90 days					■	■	■	■	■	
45	assembly DL	9 days									■	■
55	Design & assembly at DL complete ready for shipping	0 days										◆ 13/08
56	assemble at GSI	39 days								■	■	■
61	Project complete ready for detectors installation	0 days										◆ 03/09

