

Battery Reconditioning test report HIC-60(12V-50AH) X4

● Battery maker
Hitachi

● Battery model
HIC-60(12V-50Ah)

● Battery estimated age
4-5 years

● AH/5HR
50

Test data Starts: March 13th, 2012
Tests data ends: May 10th, 2012



CELL No.	SPECIFIC GRAVITY	
	Pre Additive	Post additive
1	1.26	1.28
2	1.25	1.27
3	1.25	1.27
4	1.25	1.27
5	1.25	1.27
6	1.26	1.26
7	1.26	1.28
8	1.26	1.27
9	1.27	1.27
10	1.26	1.27
11	1.27	1.29
12	1.26	1.26
13	1.26	1.28
14	1.26	1.28
15	1.26	1.27
16	1.25	1.26
17	1.25	1.27
18	1.00	1.26
19	1.26	1.30
20	1.26	1.29
21	1.26	1.30
22	1.27	1.29
23	1.27	1.28
24	1.26	1.29

CELL No.	VOLTAGE	
	Pre Additive	Post additive
1	12.500	12.890
2		
3		
4		
5		
6		
7	12.470	12.800
8		
9		
10		
11		
12	12.530	12.840
13		
14		
15		
16		
17		
18	12.550	12.930
19		
20		
21		
22		
23		
24		

Forklift count (100kg)	
Pre Additive	Post additive
165 lifts	320 lifts

PRE REFURBISH DATA HIC-60 (12V-50AH) Mitsubishi Transer Forklift Mini



Battery Maker	Battery Model	Battery Age	AH/5HR
HITACHI	HIC-60(12V-50Ah)	4-5 Years old	50

1. Pre refurbish data Gravity/Voltage

Test date																									
2012.03.13																									
Cell No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
SP Gravity	1.26	1.25	1.25	1.25	1.25	1.26	1.26	1.26	1.27	1.26	1.27	1.26	1.26	1.26	1.26	1.25	1.25	1.00	1.26	1.26	1.26	1.27	1.27	1.26	
Voltage	12.50						12.47						12.53						12.55						

Comments: Cell No 3 water level was low. Distilled water was added to normal levels. Cell No18 gravity level is of concern. Possible battery replacement may be necessary if battery is damaged and does not accept charge.

Start time		Lift load kg																							
14:25		100kg																							
Time	15:25	15:45																							
Lifts	135	165																							

Comments: Data was recorded at 30 minute intervals. Tests were halted when forklift could no longer lift load.

POST REFURBISH DATA HITACHI HIC-60(12V-50AH)X4



Forklift Model: NICHYU TRANSER MINI *****S10-250

Battery Maker	Battery Model No		Battery age		AH/5HR
HITACHI	HIC-60(12V-50Ah)		4-5 Years old		50

1. Post Gravity/Voltage Data

DATA RECORDED: May10th, 2012

CELL NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
SP GRAVITY	1.28	1.27	1.27	1.27	1.27	1.26	1.28	1.27	1.27	1.27	1.29	1.26	1.28	1.28	1.27	1.26	1.27	1.26	1.30	1.29	1.30	1.29	1.28	1.29
VOLTAGE	12.890						12.800						12.840						12.930					

Comments:

CELL NO 18 was showing less than average gravity before revival (1.00) as compared to cells of relative gravity. Cell has recovered to normal gravity levels but battery may need replacing in the short term.

2. Lift data results

Test Start Time	Load Weight																							
10:50am	100kg																							
Time	11:20	11:50	12:20	12:50	13																			
Lifts	79	154	235	297	320																			

Comments:

Test data was recorded at 30 minute intervals. After initial March 13th, 2012 tests considerable battery capacity was returned. 155 lift improvement was seen in elapsed 3 month period from 165-320 lifts. Battery is estimated to last 1-2 years with daily average charge cycles.