

TABLE I

Comparative Output Figures obtained by the two methods of testing

| Test No. | Laboratory designation of the make of cells | No. of cells tested | Testing method | No. of discharges per week | No. of days required to complete the test | Average characteristics | | | | Increase in W.H. capacity obtained with the B.S. Specification method % |
|----------|---|---------------------|----------------|----------------------------|---|------------------------------|--------------------------|----------------|-------------|---|
| | | | | | | Initial open circuit voltage | Internal resistance ohms | Polarisation % | Output W.H. | |
| 1 | A | 3 | B.S.S. | 6 | 34 | 1.56 | 0.205 | 17.15 | 4.13 | 22.0 |
| 2 | A | 3 | Automatic | 11 | 16 | 1.56 | 0.215 | 17.15 | 3.36 | |
| 3 | B | 3 | B.S.S. | 6 | 25 | 1.56 | 0.225 | 21.50 | 2.57 | 16.3 |
| 4 | B | 3 | Automatic | 11 | 15 | 1.56 | 0.250 | 21.05 | 2.21 | |
| 5 | C | 4 | B.S.S. | 6 | 26 | 1.56 | 0.200 | 21.40 | 2.90 | 17.4 |
| 6 | C | 6 | Automatic | 11 | 16 | 1.56 | 0.215 | 21.85 | 2.47 | |
| 7 | D | 6 | B.S.S. | 6 | 31 | 1.56 | 0.230 | 17.90 | 3.25 | 20.4 |
| 8 | D | 6 | Automatic | 11 | 12 | 1.56 | 0.230 | 17.90 | 2.70 | |

Average = 19.3

In the last column of this table is given the percentage by which the output obtained by the double-discharge method, using the automatic device, has to be increased in order to calculate the output obtainable if the B.S. Specification method had been used. This correction varies between 16 and 23 per cent., giving an average of 19.3 per cent. In practice, therefore, the output of experimental cells obtained by double-discharge method, using the automatic device, requires to be increased by this factor in order to estimate the probable value which might have been obtained by the B.S. Specification method. The probable error of this estimation will be less than 3 per cent., which is very small compared with the normal

variations that occur from cell to cell. Table I also shows the saving in time effected by the use of the double-discharge method, which on the average amounts to about 50 per cent. This saving in time, besides making the results of experiments available in a shorter period, virtually doubles the capacity of the testing equipment, thereby enabling twice as many cells to be tested in a given period of time.

The device as it stands has been designed to test dry cells under certain particular conditions. It may, however, be modified at will to give any desired cycle of switching operations involving different timing for on and off intervals.

Indian Science Congress, 1940

THE Twenty-seventh Annual Meeting of the Indian Science Congress will be held in Madras from January 2nd to 8th, 1940. His Excellency John Francis Ashley, Lord Erskine, G.C.I.E., Governor of Madras, has consented to be the Patron of the Meeting. Professor B. Sahni, M.A., Sc.D., F.N.I., F.R.S., Professor of Botany, University of Lucknow, will be President.

Intending members are requested to send their subscriptions to the Congress, to the Treasurer, Indian Science Congress Association, 92, Upper Circular Road, Calcutta.

Papers intended for being read at the session should be forwarded together with three copies

of an abstract so as to reach the General Secretary, mentioning the Section, before which the paper is intended to be read, not later than September 15th, 1939. Abstracts should be typewritten and must not exceed 200 words. They should not include formulæ or diagrams.

No abstracts will be printed unless accompanied by the full paper at the time of submission.

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