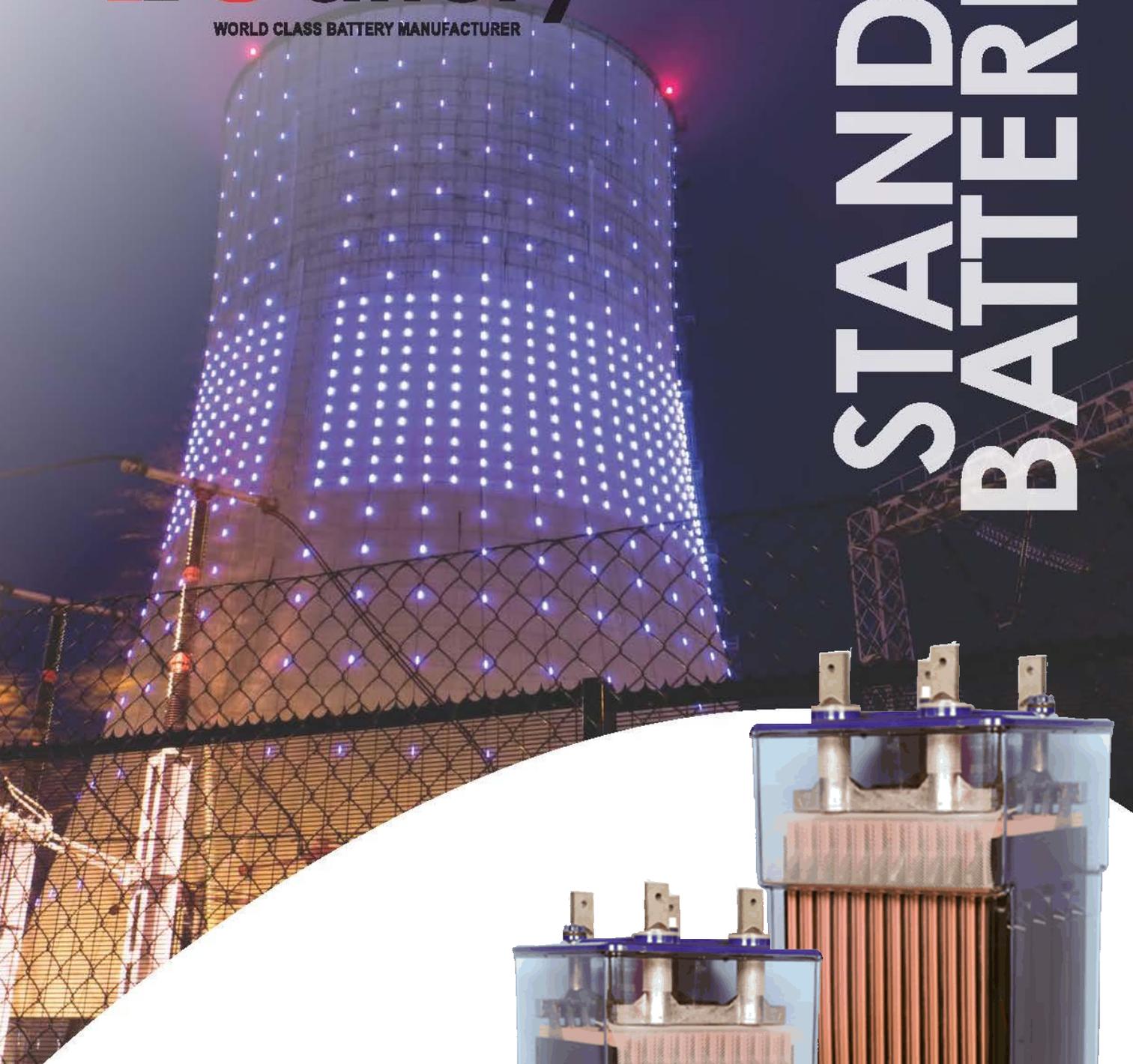


STANDBY BATTERIES



**Planté Cells
YAP, YCP
and
YHP**



PRODUCT AND SERVICE BENEFITS

- **Locally-Manufactured Range**
Manufactured by a South African company, proven under South African conditions.
- **Premier Quality**
Conforms to BS 6290 2000 and SANS IEC 60896-11:2003 standards and manufactured to ISO 9001: 2008 quality standards
- **Nationwide After-Sales Support**
Countrywide network of branches and agencies, with access to information to ensure sound technical backup.
- **Proven Reliability**
Used successfully, achieving claimed life, in numerous applications.
- **Customer Care**
Every standby cell carries a comprehensive product warranty.

DESIGN FEATURES

Designed for all standby duties including power stations, telephone exchanges, switchgear operation, telecommunications, emergency lighting and diesel starting.

Noteworthy advantages of these cells are:

- Ease of inspection, test and maintenance (a hydrometer reading indicates the state of charge.)
- Lower internal resistance which provides increased performance at high rates of discharge.
- No falling-off of capacity with age.
- Life expectancy of 20 years or longer.
- Designed for float-charge operation, always ready for use.

POSITIVE PLATE

Pure lead grids of 8mm and 10mm for YCP and YHP respectively, ensures that there is no fall-off of capacity throughout the life of the cell.

NEGATIVE PLATE

Industrial pasted grid construction, for balanced performance and life.

SEPARATORS

Made of microporous rubber, for exceptionally long life and have high degree of porosity, ensuring minimum internal resistance

TECHNICAL DETAILS

FLOAT CHARGING

As these cells are designed for standby applications they should be float charged to ensure that they remain fully charged, ready for instant use, at all times. Correct float voltage settings may vary depending upon operational differences but as a guideline 2.25 volts per cell at 25°C may be used as a level of charge which will minimise the need for equalising charges whilst providing acceptable life. The installation and maintenance manual should be read for further information.

SPECIFIC GRAVITY

A simple hydrometer reading indicates the state of charge. A fully charged cell will have a specific gravity of 1.210.

VOLTAGE

The nominal voltage is 2 volts per cell, i.e. a nominal 110V battery will have 55 cells. On discharge, the recommended final voltage at which the discharge should be terminated depends on the discharge rate. It is not recommended to continue discharging the cells once the final voltage has been reached as the voltage will fall away at an increasing rate with minimal gain of discharge duration and the risk of over-discharge.

CAPACITY

The capacity of these cells is normally rated at the 10hour rate of discharge although the capacity which can be taken from a cell will vary depending on the discharge rate, as indicated in the capacity table. Capacity is also affected by the cell temperature.

INSTALLATION

These cells can be connected either edge to edge or face to face. The standard method of connection is to follow the shortest distance between the negative post on one cell and the positive post on the next cell.

RECHARGING

The cell's ampere hour efficiency is 90%. To fully recharge the cells the amount of charge required is equal to the amount of discharge in ampere hours plus 11%.

TRANSPARENT CONTAINERS

Moulded from transparent styrene acrylonitrile (SAN) to provide optimum transparency and very high insulating qualities.

CELL LIDS

Moulded from opaque SAN. Are permanently sealed to the container.

VENT PLUGS

Are of a special design which effectively returns all acid spray to the cell, but allows free exit of oxygen and hydrogen gasses.

Planté, Capacities, Weights and Dimensions

Type	* Capacity in amp hours at 25°C when discharged in				Initial Charge Current	Weight (±3%)		Approx Quantity of filling acid 1.195sg	External dimensions of cell container			Overall height of cells	Centres of cells	Width of single row stillage or stand	Width of double row stillage or stand
	10 Hours	5 Hours	3 Hours	1 Hour		Cell compl. filled	Filling acid only 1.195sg		Length	Width	Height				
Final Voltage	1.80	1.80	1.80	1.75	Amps	Kg	Kg	Litres	m m	m m	m m	m m	m m	m m	m m
YAP 5	16	14	13	9.8	1	3.8	1.2	0.96	76	133	212	260	83	330	508
YAP 9	32	28	26	19.5	2	6.3	1.9	1.56	114	133	212	260	121	330	508
YAP 13	48	42	38.5	29.5	2.9	10	3.4	2.83	190	133	212	260	140	388	666
YAP 17	64	56	52	39	3.8	11.5	3.2	2.68	190	133	212	260	140	388	666
YAP 21	80	70	64	49	4.8	13.6	3.8	3.16	228	133	212	260	140	388	666
YCP 7	75	66	60	46	4.5	11.0	6.5	5.4	134	203	349	423	140	400	710
YCP 9	107	94.5	86	65	6.4	18.6	5.4	4.5	134	203	349	423	140	400	710
YCP 11	134	118	107	82	8.0	22.7	7.4	6.2	172	203	349	423	178	400	710
YCP 13	161	141.5	129	98	9.7	24.9	7.1	5.9	172	203	349	423	178	400	710
YCP 17	214	188.5	172	131	12.8	30.6	8.6	7.2	210	203	349	423	209	406	662
YCP 21	268	235.5	215	163	16.1	36.9	10.3	8.6	248	203	349	423	209	426	742
YCP 25	322	283	258	196	19.3	43.4	12.0	10	286	203	349	423	209	464	818
YCP 29	375	330	301	229	22.5	54.4	16.0	13.4	362	203	349	423	209	542	974
YCP 33	429	377	344	262	25.7	58.4	15.3	12.8	362	203	349	423	209	542	974
YCP 35	455	400.5	365	278	27.3	62.4	14.6	12.2	362	203	349	423	209	542	974
YHP 11	600	465	408	272	36.0	95.2	32.4	27.1	230	368	592	682	240	370	969
YHP 13	720	555	489	327	43.2	106.2	30.7	25.7	230	368	592	682	240	370	969
YHP 15	840	650	571	381	50.4	133.5	45.5	38.1	306	368	592	682	315	370	969
YHP 17	960	740	653	436	57.6	144.5	43.9	36.7	306	368	592	682	315	370	969
YHP 19	1080	835	735	490	64.8	155.5	42.3	35.4	306	368	592	682	315	370	969
YHP 21	1200	925	816	545	72.0	179.3	53.5	44.8	357	368	592	682	379	360	949
YHP 23	1320	1020	898	599	79.2	190.4	52.0	43.5	357	368	592	682	379	360	949
YHP 25	1440	1110	979	654	86.4	218	67.0	56.1	433	368	592	682	379	435	1099
YHP 27	1560	1205	1061	708	93.6	229	65.5	54.8	433	368	592	682	379	435	1099
YHP 29	1680	1295	1143	762	100.8	240.1	64.0	53.5	433	368	592	682	379	435	1099
YHP 31	1800	1390	1224	817	108.0	268.3	79.6	66.6	509	368	592	682	379	510	1249
YHP 33	1920	1480	1306	871	115.2	279.2	77.9	65.2	509	368	592	682	379	510	1249
YHP 35	2040	1575	1387	926	122.4	290.2	76.4	63.9	509	368	592	682	379	510	1249
YHP 37	2160	1665	1469	980	129.6	318.2	91.8	76.8	585	368	592	682	379	586	1401
YHP 39	2280	1760	1550	1035	136.8	329.2	90.2	75.5	585	368	592	682	379	586	1401
YHP 41	2400	1850	1632	1089	144.0	340.2	88.5	74.1	585	368	592	682	379	586	1401

The length of a stand is n x cell centre where n is the number of cells in a row.

* Capacities published for the 10h, 5h, 3h and 1h discharges are applicable for lead post cell types. For discharge rates quicker than 1 hour, copper inserted posts are required.

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