

**CHLORIDE**  
HIGH  
PERFORMANCE

PLANTÉ  
ENCLOSED  
CELLS  
YAP, YCP AND YHP

**CHLORIDE**

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 (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

#### Design features

**POSITIVE PLATES** are 8mm thick pure lead grids for longer life and to provide sufficient material to ensure that there is no fall-off of capacity throughout the life of the cell.

**NEGATIVE PLATES** are of industrial pasted grid construction, for balanced performance and life.

**SEPARATORS**, of Porvic 2 (sintered microporous PVC), form a complete diaphragm between the plates. The separators are chemically inert with a high degree of porosity, which ensures minimum internal resistance.

#### VISUAL INSPECTION

**CONTAINERS**, moulded from transparent styrene acrylonitrile (SAN) to provide optimum transparency and very high insulating qualities, eliminating the need for separate cell insulators.

**CELL LIDS** are moulded from opaque SAN 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 gases.

#### Technical details

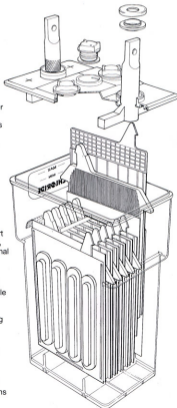
##### VOLTAGE

The nominal voltage is 2 volts per cell, ie a nominal 110 V battery will have 55 cells. On discharge, the recommended final voltage at which the discharge should be terminated depends on the discharge rate. For example, discharge curves indicate that the final voltage for the three hour rate of discharge is 1,8 volts.

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 10-hour rate of discharge although the capacity which can be taken from a cell will vary the discharge rate, as indicated in the capacity table. Capacity is also affected by temperature.



##### Vent Plugs

Designed to eliminate spray but give free exit of gases.

##### Cell Pillars and Connectors

Each one designed specifically for the job. Give minimum resistance - maximum current flow.

##### Cell Lids

Opaque SAN.

##### Negative Plates

Pasted grids. Provide perfect balance with the positive to give maximum performance.

##### Separators

Sintered microporous p.v.c. gives minimum resistance.

##### Positive Plates

Constructed of pure lead to ensure that there is no fall-off in capacity throughout their long life.

##### Cell Containers

Transparent SAN. Electrolyte level and cell condition clearly seen.

**PREMIER QUALITY**

Confirms to BS 6290 1984 standards and manufactured to SABS 0157 quality standards.

**NATIONWIDE AFTER-SALES SUPPORT**

After-sales support to ensure sound technical backup.

**PROVEN RELIABILITY**

Used successfully, achieving claimed life, in numerous applications.

**CUSTOMER CARE**

Every Chloride standby cell carries a comprehensive product warranty backed by the industry leader.

**PRODUCT RANGE**

Backed by dedicated sales and service support and a wide distribution network, CBSEA offers a comprehensive range of batteries, power systems and related products covering every facet of automotive and industrial applications. Types of products available are as follows:



- **Batteries**

Lead acid (flooded and sealed) and nickel cadmium batteries for the following applications:

- Automobiles
- Motorcycles
- Golf carts
- Boats
- Forklifts
- Standby power
- Train lighting
- Submarines



- **Power Systems**

- Traction battery chargers
- Float-cum-boost chargers for standby power.
- Thyristor fired power supplies
- UPS systems
- Switch mode power supplies
- Emergency lighting systems



- **Battery fuel gauges and speed controllers**



- **Battery connectors**

**Jumbohan Marketing Sdn Bhd**

(032510-1)  
No. 12, Jalan Haji Salleh, Sentul, 51100 Kuala Lumpur.  
P.O. Box 5-6, Sentul, 51700 Kuala Lumpur, Malaysia.  
Tel: 03-40419333 (16 Lines) Fax: (603) 40419314 / 0606  
E-mail: jumbohand@tm.net.my  
Website: www.jumbohan.com

CHLORIDE BATTERIES S & E ASIA PTE LIMITED

100, Selegie Road, Seng Guan Town Singapore 029504  
Tel: 65 6344 2222 Fax: 65 6344 1475 65 6344 0219



#### 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. We recommend a float charge setting of 2,25 volts per cell at 25°C

A simple hydrometer reading indicates the state of charge. A fully charged cell will have a specific gravity of 1,210.

#### 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%.

#### 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 two terminals.

PLANTE, CAPACITIES, WEIGHTS AND DIMENSIONS

Type	Capacity in ampere-hours when discharged in:			Initial Charge current Amps	Weight		Approx. quantity of acid 1,21 bag	External dimensions of cell container			Overall height of cells mm	Centre of cells mm	Width of single row stagger or stand mm	Width of double row stagger or stand mm
	10 hours				Cell compl. filled	acid only		Length mm	Width mm	Height mm				
	1,80	1,75	1 hour		Kg	Kg								
Final voltage	1,85	1,80	1,75				litres							
WP 5	16	13	8,6	1	3,8	1,16	0,96	76	130	212	290	83	300	508
WP 8	32	26	18,5	2	6,3	1,89	1,56	114	130	212	290	121	300	508
WP 13	48	38,5	26,5	3	10,0	3,4	2,83	190	130	212	290	140	388	666
WP 17	64	52	39	4	11,45	3,25	2,89	190	130	212	290	140	388	666
WP 21	80	64	49	5	13,6	3,8	3,16	208	130	212	290	140	388	666
YCP 9	107	86	65	7	18,6	5,5	4,5	134	283	349	423	140	480	718
YCP 11	134	107	82	8,5	22,2	7,8	6,2	132	283	349	423	178	480	718
YCP 13	161	129	98	10	24,9	7,2	5,8	132	283	349	423	178	480	718
YCP 17	214	172	131	14	30,6	8,7	7,2	210	283	349	423	209	496	662
YCP 21	268	215	163	17	38,9	10,4	8,6	248	283	349	423	209	426	712
YCP 25	322	258	196	21	43,4	12,1	10,0	296	283	349	423	209	464	818
YCP 29	375	301	229	24	54,4	16,2	13,4	362	283	349	423	209	542	974
YCP 33	429	344	262	28	68,4	15,5	12,8	382	283	349	423	209	542	974
YCP 35	455	365	278	32	80,4	15,1	12,1	362	283	349	423	209	542	974
WP 11	636	438	327	36	95,2	32,2	27,1	230	388	582	682	255	378	968
WP 13	643	526	392	42	106,2	30,6	25,7	230	388	582	682	255	378	968
WP 15	758	614	458	49	133,5	45,3	38,1	306	388	582	682	308	378	968
WP 17	858	702	523	56	144,5	43,7	36,7	306	388	582	682	308	378	968
WP 19	965	789	589	63	155,5	42,1	35,4	306	388	582	682	308	378	968
WP 21	1072	877	654	70	178,3	53,3	44,8	357	388	582	682	304	360	948
WP 23	1178	965	719	77	196,4	51,8	43,5	357	388	582	682	304	360	948
WP 25	1286	1052	785	84	218,0	68,8	56,1	433	388	582	682	304	425	1099
WP 27	1394	1140	850	91	229,0	65,2	54,8	433	388	582	682	304	425	1099
WP 29	1501	1229	915	98	240,1	63,7	53,5	433	388	582	682	304	425	1099
WP 31	1608	1315	981	105	258,3	79,3	66,8	509	388	582	682	304	518	1249
WP 33	1715	1403	1048	112	279,2	77,8	65,2	509	388	582	682	304	518	1249
WP 35	1822	1491	1112	119	296,2	86,8	63,9	509	388	582	682	304	518	1249
WP 37	1930	1579	1177	126	318,2	91,4	76,8	585	388	582	682	304	588	1401
WP 39	2037	1666	1242	133	329,2	89,8	75,5	585	388	582	682	304	588	1401
WP 41	2144	1754	1308	140	340,2	88,2	74,1	585	388	582	682	304	588	1401

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