# SEC NICKEL CADMIUM BATTERIES

# NICKEL CADMIUM - POCKET PLATE LIMITED WARRANTY

### ONE YEAR WARRANTY

SEC Industrial Battery Company (SEC) guarantees that SEC Nickel Cadmium Pocket Plate batteries will perform as per published ratings and will be free from defects in material or workmanship for 15 (fifteen) months after date of shipment or 12 (twelve) months after installation, which ever is less. The batteries shall be stored at 20°C or below. User shall promptly (within 14 (fourteen) days) report in writing any alleged defects to SEC and permit examination by the service personnel. If SEC finds the batteries to be defective in performance, materials or workmanship, SEC may at its discretion, either repair the batteries or provide a replacement without charge.

#### CONDITIONS FOR ONE YEAR WARRANTY

The batteries shall only be used in continuous float service at 20°C and be operated and maintained in accordance with SEC's Installation and Operating Instructions as provided with the battery. Battery records at the time of installation and at least twice per year shall be kept with the battery for examination by SEC personnel. The rectifier shall be temperature compensated, be able to sustain the system voltage within +/- 0.01 vpc of the specified level at all times with records being kept at least twice per year.

The required battery float voltage levels are as listed below: -

1) Charging voltage and temperature +/- 0.01 volts per cell:

nperature	Float Voltage
15°C	1.45 VPC
20°C	1.43 VPC
25°C	1.43 VPC
30°C	1.42 VPC
35°C	1.41 VPC

- 2) When operated at these voltages an equalization charge is not necessary. The battery can be recharged at 1.45 to 1.55 volts per cell for 12 to 24 hours maximum to accomplish recharge from any known discharge.
- 3) Periodic equalization will be required if batteries are floated at lower than recommended float voltages.

#### Charge voltage should never be allowed to exceed 1.65 vpc.

- 4) Temperature spread between cells shall not exceed 3 degrees Celsius.
- The 1 (one) year battery warranty period shall be adjusted based on actual operating conditions such as temperature and frequency of discharge as published by SEC. The Warranty period will be reduced by 25% for every 4°C increase in operating temperature above 20°C the base temperature.
- Registration, Installation, full details of rectifiers and periodic maintenance records, at time of installation\* and at least every 6 (six) months, are to be maintained by the user for submission to SEC as required to support any warranty adjustment claims, which must be made within 1 (one) months of failure. \*These records must be sent to SEC within 3 months of the Installation date.

If SEC finds that the batteries have not satisfied this warranty, SEC agrees to repair or replace the batteries, ex works/warehouse, Costs for; SEC representative travel and expenses will be the responsibility of the purchaser. This Warranty covers replacement batteries ex works/warehouse only.

In no event shall user return batteries to SEC without SEC's prior written authorisation.

## LIMITATIONS ON WARRANTY

The 1 (one) year warranty as to performance, material and workmanship is in lieu of all other warranties, expressed or implied including any warranty of merchantability or fitness for a particular purpose. In no event shall SEC be liable for any special, incidental, or consequential damages.

# **SEC Industrial Battery Company**

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