# 3. Processing Method of Batteries

## 3.1 Processing Method of Batteries

**⚠ CAUTION**

The Battery is an industrial waste. This is treated as specially-controlled waste. Dispose of it following the directions given by the manufacturer or according to the Waste Management Law.

## 3.2 Recycling

1. Parts to be recycled
   The batteries used in the Storage System are a sealed Nickel-hydride rechargeable battery.
   These batteries are valuable resources which can be recycled.
   When you replace them or dispose of a used Storage System, please cooperate in the recycling.
   How to dispose of the battery which becomes useless owing to replacement etc. is shown below.

**⚠ DANGER**

- Do not disassemble the case, do not modify it, or do not peel off the label. There are high voltage parts inside: If you attempt any of these actions, you may get an electrical shock or burn.
- Do not disassemble the battery; this may cause short circuits inside or outside of the battery. If the components are exposed to the air, the battery may cause overheat, burst or ignite. Disassembling the battery may expose you to the alkaline solution, which can be dangerous.
- Do not cut the output cable. Do not modify the connector. If you attempt any of these actions, you may get an electrical shock or burn. A short-circuit may cause abnormal chemical reactions inside the battery which leads to overheating, bursting or ignition.
- Follow the instructions when you recharge the battery pack. If you recharge it in a way different from specified here, it may cause the following problems: The battery may become charged excessively; excessive current may be produced; or the battery cannot be recharged. As a result, the battery may leak, become overheated, burst, or ignite.
- Do not use excessive force when you connect the battery pack to the charger or other devices. If you cannot connect it easily, check the positive and negative are correct for the connector. If you connect the battery in reverse, it will be charged incorrectly and abnormal chemical reactions may occur inside. As a result, the battery may become overheated, burst or ignite.
- Do not connect the battery to a power receptacle. If you apply an excessive amount of voltage to the battery, it may produce excessive current making the battery overheat, burst or ignite.
- Do not use or leave the battery where the temperature can become high, such as, near a fire or a heating element. High temperatures may damage the battery's separator, which may cause short circuit, making it overheat, burst or ignite.
- Do not incinerate the battery pack or heat it. If you do so, the insulator may melt, the safety fuse/mechanism may be damaged, or the electrolyte may gush out. As a result, the battery may become burst, explode or ignite.
- Do not connect the negative terminal to the positive with metal wire. Do not carry or store the battery with other metal parts. This may cause a short circuit or produce excessive current which can cause the battery to leak, overheat, burst or ignite.
- Do not let the battery become wet by soaking it in the water or seawater. If the battery gets wet, a short circuit may occur and an excessive amount of current may be produced causing abnormal chemical reactions inside. As a result, the battery may become overheated, burst or ignite.

**⚠ DANGER**

- Do not nail the battery, hit it with a hammer, or stamp on it. The battery may be broken or dented and a short circuit may occur inside. As a result, the battery may become overheated, burst or ignite.
- Do not solder directly to the battery. If you do so, heat will melt the insulator and damage the safety fuse/mechanism. As a result, the battery may leak or may become overheated, burst or ignite.
- Do not recharge the battery where there is a high temperature, such as near a fire.
- This may cause abnormal chemical reactions inside the battery and it may become overheated, burst or ignite. High temperatures may also cause deterioration of performance/life of the battery.
- Do not place the battery pack in the microwave oven or under high pressure. Either of these actions will rapidly heat the battery or break its seals: As a result, the battery may become overheated, burst or ignite.
- If you find anything strange or unusual with the battery when you use/carry/store it, remove the battery from the device and stop using it. For example, strange smells, strange colors, or deformation are a sign you must stop using the battery.
- If it takes longer than the specified time to complete recharging, stop recharging the battery: Otherwise, the battery may become overheated, burst or ignite.
- If the battery leaks and gets into your eyes, immediately flush your eyes with clean water (tap water) and do not rub your eye. Then visit the doctor immediately. If you do not seek any treatment for your eyes, problems may occur later. Because the battery uses highly concentrated alkaline as electrolyte, it may burn or you may lose your sight if it contacts your skin or eyes. If the battery's liquid contacts your skin or eyes, you must flush them with plenty of clean water and visit the doctor at once.

2. Display of recycling mark

The following three-arrow recycling mark shows that the sealed Nickel-hydride rechargeable battery is a part to be recycled. A label bearing the mark is affixed on the battery.

Nickel-hydride rechargeable battery

3. Specifications of lead battery

Table 3-1 Specifications of Sealed Nickel-hydride Rechargeable Battery

| | Battery |
|---|---|
| Manufacturer | FDK TWICELL Co., Ltd. |
| Model | 9HR-4/3FAUHP-HRSD |
| Voltage (V) | 10.8 |
| Capacity (mAh) | 2250 |

4. Disposal and safety in storage
Before storing a sealed Nickel-hydride rechargeable battery, cover its terminals with electric tape, etc. to prevent a short circuit. Store it separately from batteries of other type such as dry battery.