BACCARA – PRODUCT END-OF-LIFE (EoL) MANAGEMENT GUIDELINES

Version: 1.0
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Effective Date: 10/01/2026
Review Cycle: Annual
Applies to: All Baccara products (valves, coils, PCBs, seals, assemblies, controls, accessories)

1. Purpose

These guidelines provide detailed instructions for customers, OEMs, machine builders, and end-users on how to safely handle, recycle, and dispose of Baccara products at the end of their operational life.

The instructions ensure compliance with ISO 9001:2015 requirements regarding customer communication, environmental responsibilities, and post-delivery activities.

2. Scope

This document applies to all Baccara products including:

- Plastic valve bodies and covers
- Metal components (brass, stainless steel, aluminum, steel)
- Rubber components (EPDM, NBR, FKM, diaphragms, O-rings)
- Electronic components (coils, PCB drivers, controllers, sensors)
- products containing alkaline or lithium-ion batteries
- Complete valve assemblies, subassemblies, and actuator systems

It covers both end users and OEM/machine builders using Baccara components in larger systems.

3. General End-of-Life Principles

1. Safety First – Ensure system is depressurized, isolated, and cleaned.
2. Environmental Responsibility – Separate materials when possible for easier recycling.
3. Legal Compliance – Follow all local and regional regulations.
4. Customer Responsibilities – Customer or OEM must implement appropriate disposal based on these guidelines.

4. Product Categories & End-of-Life Instructions

This section defines disposal and recycling requirements by product type and material composition.

4.1 Category A – Products with Plastic & Metal Components

Typical items: valves, solenoids, manifolds, fittings, covers.
Materials include PA6, PA66, PBT, ABS, PPS, brass, stainless steel, aluminum, steel.

End-of-Life Handling:

- Plastic parts → industrial plastic waste; recyclable depending on local facilities
- Metal parts → recyclable through metal recycling centers
- Rubber parts → non-hazardous industrial waste
- Residual fluids → flush and clean if exposed to oils, fertilizers, chemicals

4.2 Category B – Electrical & Electronic Components

Includes coils, PCB controllers, sensors, wiring harnesses.

End-of-Life Handling:

- Must be disposed as WEEE (electronic waste)
- Coils may be separated into copper/metal for recycling
- PCBs must be sent to authorized e-waste facilities
- Do NOT burn cables, windings, or electronic parts

4.3 Category C – Rubber-Based Components

Includes O-rings, diaphragms, gaskets, seals, bellows.

End-of-Life Handling:

- Rubber cannot be recycled with standard plastics
- Dispose as industrial waste following local guidelines
- No hazardous materials unless specified

4.4 Category D – Complete Assemblies Supplied to OEMs

OEM and machine builders must:

• Integrate Baccara EoL instructions into their machine documentation

• Ensure proper disassembly and recycling during machine end-of-life

• Follow WEEE, RoHS, and applicable industrial equipment regulations

4.5 Category E – Products Containing Alkaline or Lithium-Ion Batteries

Certain Baccara products or assemblies may include alkaline or lithium-ion (Li-ion) batteries,

particularly in wireless controllers, IoT devices, or motorized valves.

End-of-Life Requirements for Battery-Powered Products:

- Batteries MUST NOT be disposed of in general waste streams.
- Batteries MUST be removed from the device before recycling the product.
- Alkaline batteries → dispose through authorized battery recycling collection points.
- Lithium-ion batteries → MUST be delivered to approved hazardous-waste or battery-recycling facilities.
- NEVER expose Li-ion batteries to fire, heat, puncture, or crushing.
- If the battery casing is swollen, leaking, damaged, or corroded, handle with protective gloves and seal it in a non-metallic container before delivery to a hazardous-waste facility.
- OEMs integrating battery-powered components must comply with WEEE and battery-specific directives in their geographic region.

- Transport of used lithium-ion batteries must follow ADR/UN 3480/3481 regulations where applicable.

Environmental and Safety Compliance:

- Batteries contain chemical components that can cause environmental harm if improperly disposed.
- Battery recycling ensures recovery of metals such as lithium, nickel, manganese, and cobalt.
- Follow local/national battery-disposal regulations at all times.

5. Environmental & Regulatory Compliance

Depending on region and product type, the following regulations may apply:

- RoHS – Restriction of Hazardous Substances
- REACH – Chemical compliance
- WEEE – Electronic equipment disposal
- Local environmental laws

Most Baccara products do NOT contain hazardous substances unless stated in datasheets.

6. Customer Segments & Responsibilities

End Users:

- Follow e-waste and recycling instructions
- Dispose plastics and rubber via industrial waste streams
- Recycle metals through scrap facilities

OEMs / Machine Builders:

- Must integrate these instructions into machine documentation
- Ensure correct disassembly and material separation
- Follow WEEE and industrial disposal standards

7. Cleaning Before Disposal

Before disposal:

- Ensure no pressure remains in system
- Disconnect electrical supply
- Flush any liquids, chemicals, oils
- Dry components if needed

This prevents contamination and environmental impact.

8. Prohibited End-of-Life Practices

The following actions are strictly forbidden:

- Burning plastics, rubber, cables
- Disposing electronics with household waste
- Dumping waste outdoors or into water sources
- Disposing of pressurized components

9. Disclaimer

These guidelines reflect typical material compositions.
Local laws always override the instructions in this document.
Customers and OEMs are responsible for complying with regional regulations.

10. Contact Information

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