REMANUFACTURING versus Rebuilding to a "B-Level" Specification

NES Worldwide's "Standard" Remanufacturing	**Rebuild to a *"B-Level" Quality Specification* only**
Blanket Purchase Order Issued for each model	Blanket Purchase Order Issued for each model
Monthly order releases are acknowledged & weekly production schedules are modified accordingly	Monthly order releases are acknowledged & weekly production schedules are modified accordingly
Processor hulks pulled from inventory racks & brought to breakdown & power-wash area to begin the "standard remanufacturing process"	Processor hulks pulled from inventory racks & brought to breakdown & power-wash area for "rebuild" process.
Each unit is stripped completely to the frame and component level. All parts are inspected and a determination made on their suitability for reuse. Worn or damaged parts are discarded. Reusable parts are cleaned, power-washed and/or sandblasted as required.	The sheet metal is removed from the "top half" of the unit. The base of the unit is cleaned, and the components removed for testing. Any dents or scratches on the sheet metal processor BASE and framework are "touched-up" visually. All parts are inspected and a determination made on their suitability for reuse. Worn or damaged parts are discarded. Reusable parts are cleaned, power-washed and/or sandblasted as required.
The processor's poly tank & developer lid are removed from the unit, thoroughly pressure washed & scoured to remove as much residual tank staining as possible. The developer mesh bed is removed & replaced with new.	The processor's poly tank and developer cover are removed, pressure washed, and cleaned. The developer mesh bed is washed, and reused.
Sheet metal and framework are sanded and repainted using a powder-coat and bake process for high finish quality, and superior chemical & abrasion resistance.	*Upper sheet metal panels only* are sanded and repainted using a powder-coat and bake process for high finish quality, and superior chemical & abrasion resistance.
Rollers are typically recovered. Brushes or scrubbing pads or covers are automatically replaced.	Top rollers will be recovered, bottom rollers reused. Brushes or scrubbing pads or covers are automatically replaced.
All pumps (recirculating, replenishment and fill) are typically replaced. All Viton seals are used for best chemical resistance	Gum pump replaced. Poppets are replaced on dev re-plen pumps Wet end is replaced on dev recirc Fill pump is cleaned and checked All Viton seals are used for best chemical resistance
Motors and drive components are inspected & repaired, rebuilt or replaced as necessary Drive plate is completely removed, repainted, and new bearings, gears, and chain are installed.	Motors and drive components are removed from the base of the processor & thoroughly tested. Wire looms are left in place in the base frame assembly of the processor. They are inspected & repaired, rebuilt or replaced as necessary—from a visual inspection of the component.
All tubing and clamps are replaced.	All tubing and clamps are replaced.
Plexi covers, decals, logos and other finish items are new	Plexi-glass covers are only replaced if cracked. Otherwise they are thoroughly cleaned & reused. Decals, logos and other finish items are new.
The cleaned, refinished and new components are consolidated in the breakdown area and sent to the build station as a complete kit	The cleaned, refinished and new components are consolidated in the breakdown area and sent to the build station as a complete kit
The build technician assembles the processor per the work order instructions using a build checklist	The build technician assembles the processor per the work order instructions using a build checklist
Once the unit is assembled and checked by the technician it is then filled with water for a wet test. At this point the machine is run through numerous cycles while the pressure settings, speeds, cycle times, flow rates, etc. are checked and set. Final fit and finish is checked	Once the unit is assembled and checked by the technician it is then filled with water for a wet test. At this point the machine is run through numerous cycles while the pressure settings, speeds, cycle times, flow rates, etc. are checked and set. Final fit and finish is checked.
When satisfactory to the build technician, it is then made available for final Quality Control inspection	When satisfactory to the build technician, it is then made available for final Quality Control inspection.
Using a predetermined model-specific Q.C. checklist, each machine is rechecked by the QC manager for all operations, settings, appearance and finish. Each section is checked off and the form initialed	Using a predetermined model-specific Q.C. checklist, each machine is rechecked by the QC manager for all operations, settings, appearance and finish. Each section is checked off and the form initialed.
When a **processor** has passed QC inspection it is then drained, wet vacuumed, cleaned and polished.	When a **processor** has passed QC inspection it is then drained, wet vacuumed, cleaned and polished.

Then the unit is sent to the final packing area where it is bolted to a skid base, covered with protective wrapping, shrink-wrapped and crated along with a spare parts kit & the associated entry & exit tables and hardware.	Then the unit is sent to the final packing area where it is bolted to a skid base, covered with protective wrapping, shrink-wrapped and crated along with a limited spare parts kit & the associated entry & exit tables & hardware. (Note: Entrance & Exit tables will be included ONLY if they were originally returned with the "core." This will be highlighted on the initial "Condition Report.")
Once crated, it is labeled on four sides with the model and serial number. We also affix fluorescent labels indicating "shipped from", "fragile", "do not topload", etc.	Once crated, it is labeled on four sides with the model and serial number. We also affix fluorescent labels indicating "shipped from", "fragile", "do not topload", etc.
If scheduled for shipment it is marked with a shipping address & arrangements are made for pickup.	If scheduled for shipment it is marked with a shipping address & arrangements are made for pickup.

"LEVEL B" Rebuild Analysis

The process of rebuilding to a "B Level" saves costs by eliminating the sanding & repainting of the equipment base, the replacement of certain parts & recovering of rollers—although *the total rebuild labor hours increases slightly* in order to clean the "partially disassembled" unit, touch-up paint, and clean and "tumble" the reused parts (instead of replacing).

Reusing (instead of recovering) rollers presents additional quality issues that NES Worldwide thinks OEMs should avoid. There are technical issues caused by reusing old transport rollers—which may now exceed target Shore A durometer for hardness. Also, the rollers *may not be crowned* for optimal processing results. Because of the inherent risks associated with using a mixture of older, harder, stained rollers and newer, softer, potentially different outer diameter rollers, it is the technical recommendation of NES Worldwide that OEMs recover all plate transport rollers.

"LEVEL B" Rebuild Unit Pricing

As compared to the cost of a fully remanufactured processor, the **"Level B" cost savings included three key elements:**

1.) Providing only "touch-up" paint for the base of the processor eliminated a key cost element, but the wiring harness must still be inspected to ensure no "renegade modifications" were completed at the last customer site that might compromise safety. All electrical components must still be removed from the base frame & bench tested for "proper Q1 functionality" before being kitted for later re-assembly on the unit.

2.) Reusing certain parts saved on replacement part costs—but increases total labor hours for clean & prep. Instead of simply replacing old worn & chemical-encrusted parts with new, they must be cleaned & tumbled. This will increase the labor hours slightly, which partially offsets some of the parts cost savings.

3.) *Recovering only 6 select rollers* in critical positions will save additional costs (but at a possible technical risk).

"LEVEL A+" Remanufacturing (for "White Glove" Customer Service)

Certain National Account customers or "white glove" accounts demand (or expect to receive) only "New" equipment as a part of their multi---year supply agreement for printing plates. A much lower cost option is to provide an "A+ Level Remanufacturing" of the units. The process of rebuilding to an "A+ Level" saves OEMs money—as compared to new—by providing equipment with the appearance of new (at slightly more than half the cost). NES Worldwide simply remanufactures the equipment using its normal "A Level" specification---------but replaces the processor's tank and anti--ox cover with NEW POLY material. This way, when the "White Glove" customer sees the equipment being installed, the processor won't have ANY residual staining in the developer tank to show that it is remanufactured. It will look NEW! And (if the processor was originally manufactured by NES Worldwide) it comes with the *same one year parts warranty!*