

# HP Renew Program

Quality remanufactured HP products, backed by original HP warranty

## **HP Renew Refurbishment Process**

HP sets very stringent quality standards across the entire technology portfolio to meet the high expectations of our discerning customers. With HP Renew products, you have our commitment of the same uncompromising high-quality and performance that is expected from new HP products.

The vast majority of HP Renew products are from our HP demonstration equipment pool. All HP Renew products are certified to have passed our rigorous HP Renew refurbishment and quality inspection processes, ensuring they are fully restored to meet HP certified standards. The rigorous building and testing processes verify that all HP Renew products meet equivalent to new standards. It is only then that they qualify for full same-as-new HP warranty - your guarantee of HP quality and reliability! In addition, service and support options are equivalent to that offered with new HP products and the most current software revisions are installed.



Please find step by step how HP Renew Program refurbishment process truly ensures that all remanufactured products are 'as good as new'!

# HP Renew Technical Refurbishment Check List

#### Incoming Product Inspection

- Products must pass a cosmetic inspection based on strict HP Factory Standards. If the parts do not meet the following requirements they are replaced with original HP new parts:
  - •On visible front-facing surfaces (Class 1), light scratches must measure less than 6cm, deep scratches must measure less than 2mm
  - •Any areas of blemishes, abrasions or water spots must measure less than 1.5cm
  - •Any dents on panels
  - •Any rusts spots
- 2 System Power up and configuration checks performed
- 3 Validation of parts against Bill of Materials
- Components inspections, such as memory and hard disks must bear manufacturer's seals of authenticity. Otherwise they are 4 rejected and scrapped for recycling
- 5 All cables and accessories are scrapped for recycling and replaced by new ones
- 6 Perform Engineering Change Notification checks to latest new product factory specifications

## Reconditioning

- Perform disassembly down to sub-assembly level parts such as fans, power supplies, major cages and I/O panels are 7 cleaned
- 8 Intensive cleaning of all sub-assembly parts and racks
- 9 Removal of labels and regeneration of new product labels
- 10 Polishing of internal/external metal surfaces
- 11 Paint (re-spray) external coated surfaces if required

### Assembly & Software Installations

- 12 Product component assembly and system integration
- 13 Restore Factory Default settings and reset all password settings
- 14 Restore licensed version of Operating System Software and install latest Firmware updates

## HP Renew Technical Refurbishment Check List continued

Coverage	Static Testing	Dynamic Testing
Configuration and System Settings	<ul> <li>Product Configuration Checks</li> <li>Hardware checks via system LED/LCD displays</li> <li>Unit Serial number Update</li> <li>System and I/O firmware verification and updates</li> </ul>	
Fans	• Fan Status checks	
CMOS		<ul> <li>Random Data Pattern Tests</li> </ul>
PCI Bus /Serial Port/USB Devices		• Detect and Read tests
Temperature Status		<ul> <li>Temperature Caution Tests</li> </ul>
Peripheral Interconnect Tests		<ul> <li>All Hot-plug Hard disk slots Interconnectivity tests</li> <li>DVD/CD-ROM boot and O/S installation checks</li> <li>LAN connectivity</li> </ul>
Processor	<ul> <li>CPU clock speed</li> </ul>	<ul><li> Real-time clock test cycles</li><li> Up to 24hr run-in tests</li></ul>
Memory	<ul> <li>Memory Size and Slot Test</li> </ul>	<ul> <li>Random Address Tests</li> <li>Read/Write Test</li> <li>March/Noise/Walk/ECC Tests</li> <li>Up to 24hr run-in tests</li> </ul>
Hard disk	<ul> <li>RAID setup and configuration</li> </ul>	<ul> <li>Read/Write Tests</li> <li>Sequential and Random Read Tests</li> <li>Short and Extended Offline Tests</li> <li>SCSI SMART status checks</li> <li>Glist tests &lt; 100</li> </ul>
		<ul> <li>Complete Disk Wiping (Compliance to DoD 522 22.M US defense standards)</li> </ul>

16 SCSI Adaptors, Fibre Channel Host Bus adapters, SAN switches, LAN etc, are tested where options apply

17 Mandatory electrical safety Hipot/Ground bond tests

Final Product Inspection and Deliverables

18 Archive Test logs and Product Manifest Outputs for Test status Verifications

- 19 Include newest versions of product documentations and/or CD kits
- 20 Optional provision of racking services for Storage and Server products, inclusive of Power Distribution Unit cabling works
- 21 Re-packaging in new HP boxes or wood crates as per HP Factory standard packaging procedures
- 22 The Warranty period is reset in HP's worldwide service database upon shipment date
- 23 Product is ready for delivery and installation

To learn more about HP Renew, please visit www.hp.com/products/hprenew

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