

Xerox North America
Manufacturing Brochure
Xerox® WorkCentre®, ColorQube™
and Phaser® products



The environmental merits of Xerox manufacturing



Before you choose your next printing products, be sure to learn the facts.

Xerox's manufacturing approach focuses on sustainable strategies to extend the lifespan of equipment and components. It also prevents the unnecessary use of additional natural resources. And most important, every Newly Manufactured or Factory Produced New Model product is backed by Xerox's Total Satisfaction Guarantee, with no quality, appearance or performance differences. Read on to learn more about our manufacturing practices.

"Why the focus on Xerox's manufacturing strategies and our component recycling practices?"

Back in the early 1990s, we began taking back copiers and printers that would have wound up in landfills. We either recycled or reused parts for use in new products, or sometimes remanufactured entire machines, to offer value to our customers.

But it was much earlier—in the 1960s—when our company and our manufacturing teams became involved in the sustainability movement, because we thought it was the

right thing to do for the environment. Through our continuing journey to meet our goals for waste-free manufacturing and design, we've discovered innovations that not only deliver the highest quality in our products, but also lessen their impact on the environment. We've even created new markets from our investments in engineering innovations—a recent example is the solid ink technology in our Xerox® ColorQube™ multifunction printers. We want our customers to know that Xerox® products are designed from the ground up with sustainability in mind. It's the way we do business. So we want you to have the facts you need to make fully informed product decisions.

"So is it true that all Xerox products contain some reprocessed components or parts?"

No, not all. Many do, as this is part of our focus on sustainable business practices and our goals toward waste-free manufacturing. But you can also be assured that all our products meet new-product specifications for quality and performance, whether products are Newly Manufactured or Factory Produced New Equipment. And we have such high confidence in the quality and reliability of these reprocessed parts that all the Xerox® equipment we sell, regardless of reprocessed part content, is backed by Xerox's 3-Year Total Satisfaction Guarantee.

"What does the take-back manufacturing process involve?"

It's a rigorous, step-by-step process that ensures all our equipment meets the highest quality standards, not just those set by Xerox, but also by independent authorities that set worldwide standards, including the ISO/IEC FDIS 24700: "Quality and Performance of Office Equipment that Contains Reused Components." Our processing of these components includes:

- Disassembly to predetermined standards established by Xerox for each product model to prevent the unnecessary disposal of reusable components in landfills
- Cleaning these components through a process that not only eliminates hazardous waste but also saves time and costs as part of our clean-manufacturing process
- Refinishing all reusable components so that they match the appearance and performance of new parts
- Inspection and testing to new-machine test standards

"GPA (Green Products Association) is seeing an increase in the recycling of components and content in products and equipment in the market. We've also spoken with major corporations that dominate the market, all of whom are moving toward widespread recycling and reuse programs, and sustainable 'cradle-to-cradle' manufacturing practices...and soon, there will be no other competitive option."

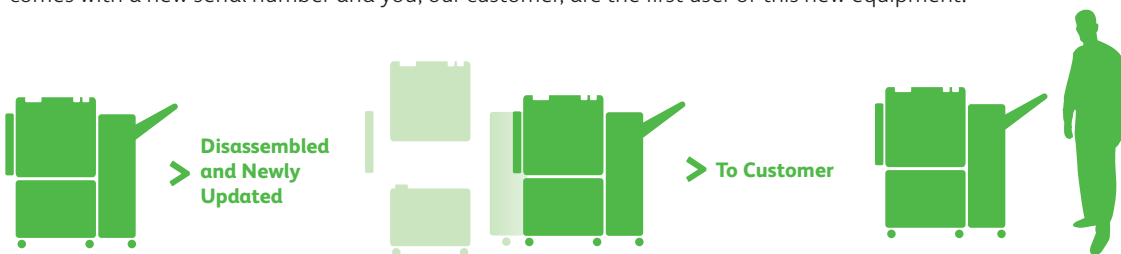
– Barbra Batshalom
Founder and CEO
The Green Roundtable, Inc.

“What do the ‘Newly Manufactured’ and ‘Factory Produced New Model’ manufacturing definitions mean?”

Currently most Xerox® products are classified as Newly Manufactured, while a few products are classified as Factory Produced New Model. Here is what these manufacturing definitions mean:



- **Newly Manufactured Equipment**—these machines are newly assembled on the manufacturing line. This category includes products that contain all-new parts as well as those that may contain a limited number of reprocessed components, which prevents valuable and reusable materials from becoming landfill waste. Examples include non-moving, low-wear parts, such as internal frames, covers or glass used inside the imaging unit of a device. Xerox has made significant investments in environmentally sound manufacturing practices to help us meet our goals for a waste-free “cradle-to-cradle” manufacturing approach wherever possible. Our quality manufacturing process ensures that every Xerox® machine fully complies with all product performance and reliability specifications. Each of these machines comes with a new serial number and you, our customer, are the first user of this new equipment.



- **Factory Produced New Model Equipment**—this is our classification for equipment that is disassembled, then sent for manufacture as a significantly updated, new generation of the model, per our predetermined standards. These units may contain new, reprocessed and/or recovered parts that meet all our new-product specifications. Many of these products also contain new software and/or firmware to increase their functionality.

Reprocessed parts used in just one of our multifunction devices can save enough energy to power one North American household for a full year.

“I’d also like to point out that in response to ever-growing environmental concerns, several other vendors offer products that are classified as ‘Newly Manufactured’ and virtually all now offer products that contain some degree of recycled/reprocessed materials and parts.”

– Anthony F. Polifrone
Managing Director
Buyers Lab Inc.

Xerox manufacturing processes produce industry-leading office products that also reduce resource consumption.

“How does Xerox know these components are good to use again?”

Xerox has unique processes and technologies to ensure that all of our products, no matter how many components are reused or recycled, meet the same stringent specifications for performance, appearance, quality and reliability. One of these technologies is called signature analysis, which tests new parts to determine a “signature”—an acceptable range for the noise, heat or vibration that parts produce while they’re in use. We use this test as one way to evaluate these characteristics in parts from returned components. Only those parts whose signatures are consistent with those of newly built parts are approved for reuse.

“Don’t parts break down?”

Only parts that can meet all functional, reliability and appearance parameters for the life of the product are reprocessed. When parts come back that are identified for reprocessing, we disassemble and clean them, then check them for any potential failure. We replace any worn components and reassemble the parts to new-build specifications.

“Do products with reprocessed components really work as well as brand-new ones?”

Yes, and we’re not the only organization that determines our standards for equipment and its components. The quality and performance of office equipment that contains reused components must be equivalent to new products, according to the International Standardization Organization (ISO) and the International Electrotechnical Commission (IEC), which is outlined in ISO/IEC FDIS 24700. The report states that office equipment, when comprised of reused parts, should have the same cosmetic, functional and performance characteristics as equipment comprised of

all-new parts. This same standard also requires that products meet international equipment safety and environmental standards, whether or not they contain reused components.

“What about certifications for products that contain reprocessed components—are they evaluated the same way as other products?”

Yes, all of our products, including products that contain any reused or recycled components, are thoroughly tested under our rigorous certification regime, and many have been awarded the ENERGY STAR and/or Environmental Choice certification. All Xerox® equipment is also certified by appropriate product safety agencies, such as Underwriters Laboratories (UL). In some cases, we also ask Buyers Lab Inc. to provide particular certifications for specific products, including tests that measure productivity and performance. These go beyond our standard certifications.

“Which areas of the environment do Xerox’s manufacturing and recycling practices affect?”

We’re focused on four areas where we can have the most impact: climate protection; preserving biodiversity and the world’s forests; preserving clean air and water; and preventing and managing waste. Our commitment to sustainability began in the 1960s and continues to be a great learning experience that has delivered benefits to all our stakeholders. We like to think of ourselves as leaders in sustainable business practices, so we’re still pushing the boundaries together with a wide variety of partners focused on sustainable practices—including our customers. Our ultimate goal? To nurture a greener world through sustainable innovation and development.

Last year alone, Xerox diverted nearly 106 million pounds of waste from landfills, bringing the total to over 2.2 billion pounds since 1991. That’s just one way we’re demonstrating our commitment to sustainability. For more on environmental sustainability at Xerox, see: <http://www.xerox.com/sustainabilitystory>

“Okay, I understand Xerox’s manufacturing approach, but what if I still want equipment containing only all-new parts?”

If you absolutely require products that contain only new parts, Xerox can still meet your needs and provide these types of products. Please ask your Xerox representative for details.

All our Newly Manufactured and Factory Produced New Model equipment is backed by the Xerox Total Satisfaction Guarantee!

The Xerox Total Satisfaction Guarantee applies only to equipment that has been continuously and exclusively maintained by Xerox or its authorized representatives under a Xerox express warranty or Xerox Maintenance Agreement. Certain other restrictions apply.

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