

# Preparing for the Future with Sustainable Lab Balances

Minimize the Environmental Impacts of Analytical Balances

Lab balances are an essential piece of laboratory infrastructure, required for a myriad of analytics. From highly regulated pharmaceutical labs to R&D institutions, balances must be adaptable to suit the wide range of environments they are needed for.

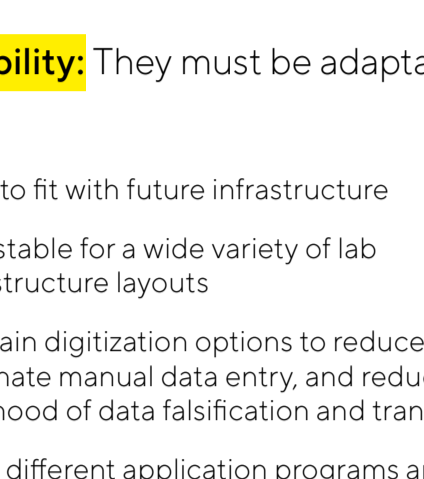
However, with an increased focus on sustainable, environmentally conscious manufacture and design, balances must be up to the task of meeting all of the needs and goals of today's evolving laboratory environment. From initial sourcing of materials to acquisition of new equipment in the lab, the environmental costs of equipment production add up throughout the life cycle.



## Lab Balances Must Satisfy Several Needs

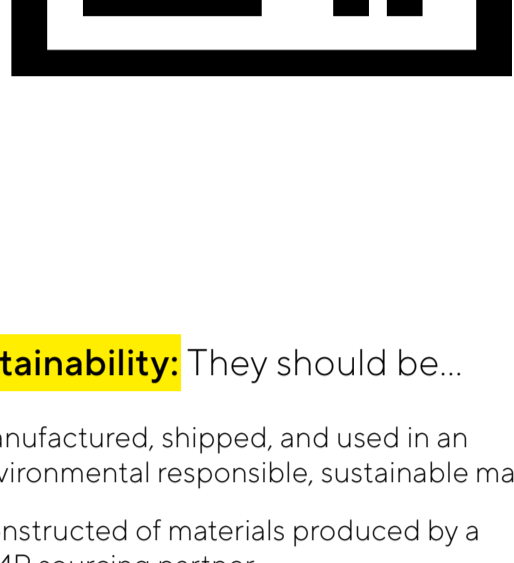
**Usability:** They should be easy to use, with...

- High resolution, easy-to-read displays
- Easy and intuitive instrument operation capabilities
- Automated stability and a high level of weighing accuracy for routine use without daily manual recalibration, adjustment, or leveling



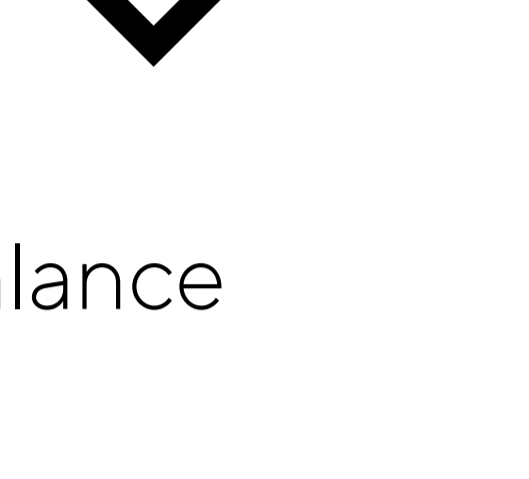
**Flexibility:** They must be adaptable and...

- Able to fit with future infrastructure
- Adjustable for a wide variety of lab infrastructure layouts
- Contain digitization options to reduce paper, eliminate manual data entry, and reduce the likelihood of data falsification and transfer errors
- Have different application programs and language options
- Eliminate a typical barrier to global implementation of universal equipment

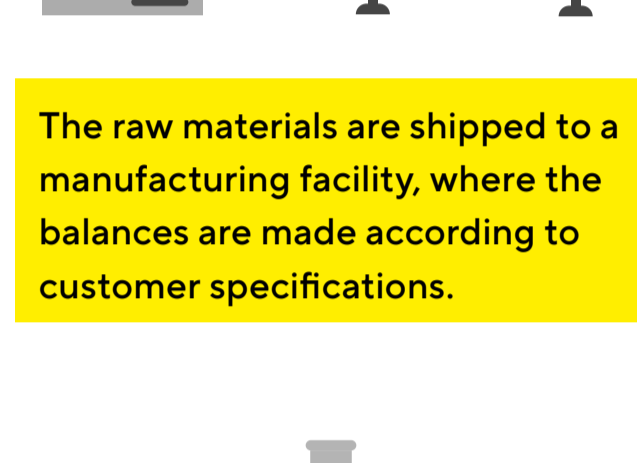
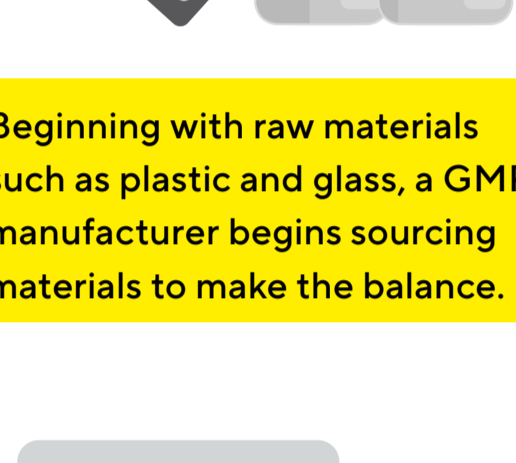


**Sustainability:** They should be...

- Manufactured, shipped, and used in an environmental responsible, sustainable manner
- Constructed of materials produced by a GMP sourcing partner
- Produced in an environmentally conscious way in every step of the production pipeline

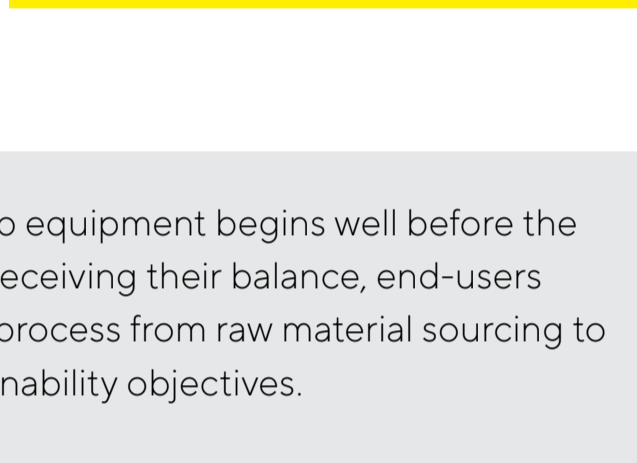
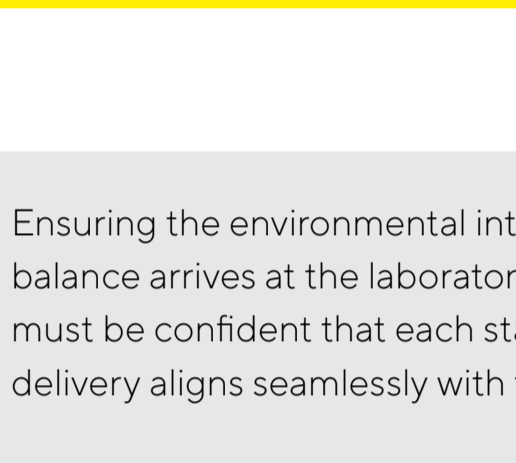


## The Life of a Lab Balance



Beginning with raw materials such as plastic and glass, a GMP manufacturer begins sourcing materials to make the balance.

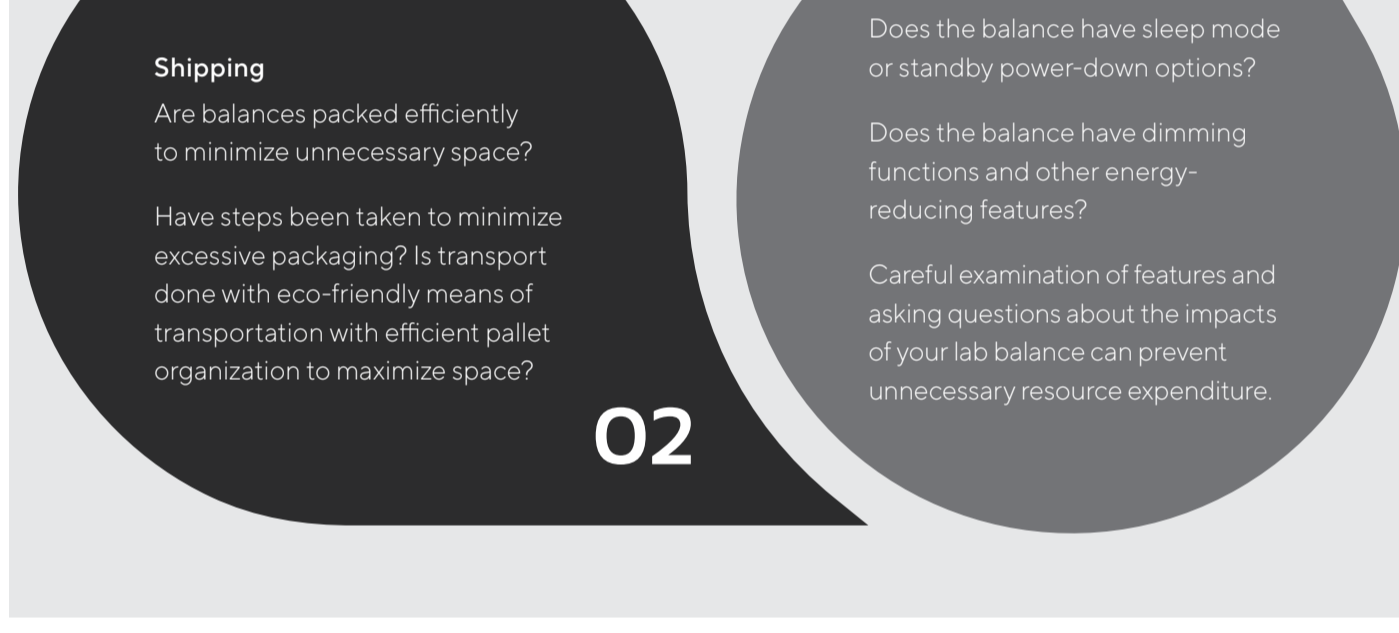
The raw materials are shipped to a manufacturing facility, where the balances are made according to customer specifications.



The finished balances are then packaged and shipped on pallets.

Balances are purchased and used for the duration of their lifetime.

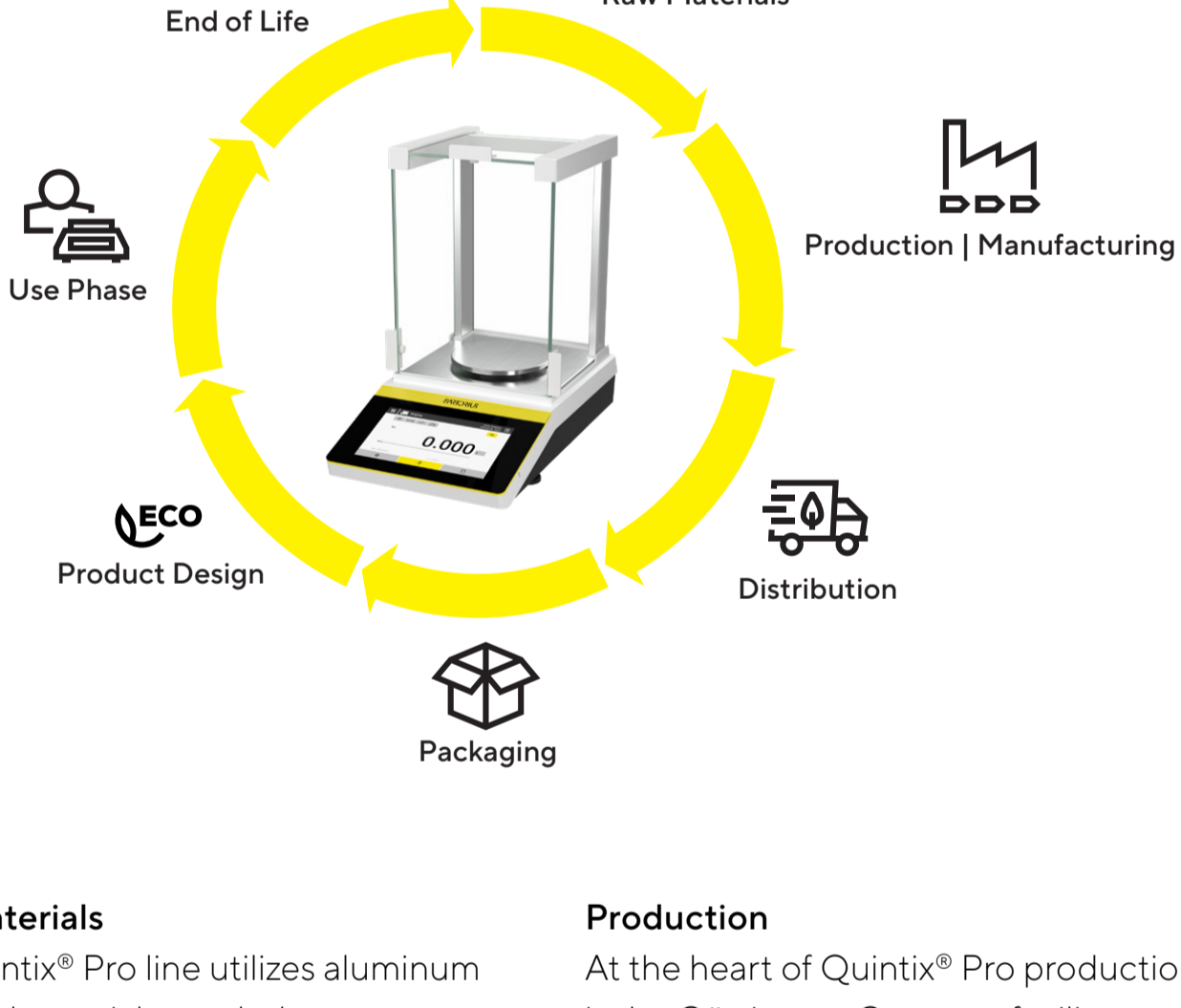
Ensuring the environmental integrity of lab equipment begins well before the balance arrives at the laboratory. Prior to receiving their balance, end-users must be confident that each stage of the process from raw material sourcing to delivery aligns seamlessly with their sustainability objectives.



## Quintix® Pro

Redefining the Standard

Quintix® Pro Laboratory Balances deliver the performance you need, with added premium features that raise the bar in usability, flexibility, and eco-consciousness design.



**Raw Materials**  
The Quintix® Pro line utilizes aluminum with a substantial recycled content sourced within Europe, reducing its carbon footprint. Prioritizing sourced recycled materials further diminishes the environmental impact. With 20% recycled content in high-volume parts like the carrier plate, the Quintix® Pro conserves resources and supports the circular economy.

**Production**  
At the heart of Quintix® Pro production is the Göttingen, Germany facility, where a significant portion of the Quintix® Pro family is manufactured using 100% renewable electricity. This design also boasts a 91% recycling rate and is on track for zerowaste production by 2030. Every piece of aluminum scrap is recycled, ensuring full material utilization.

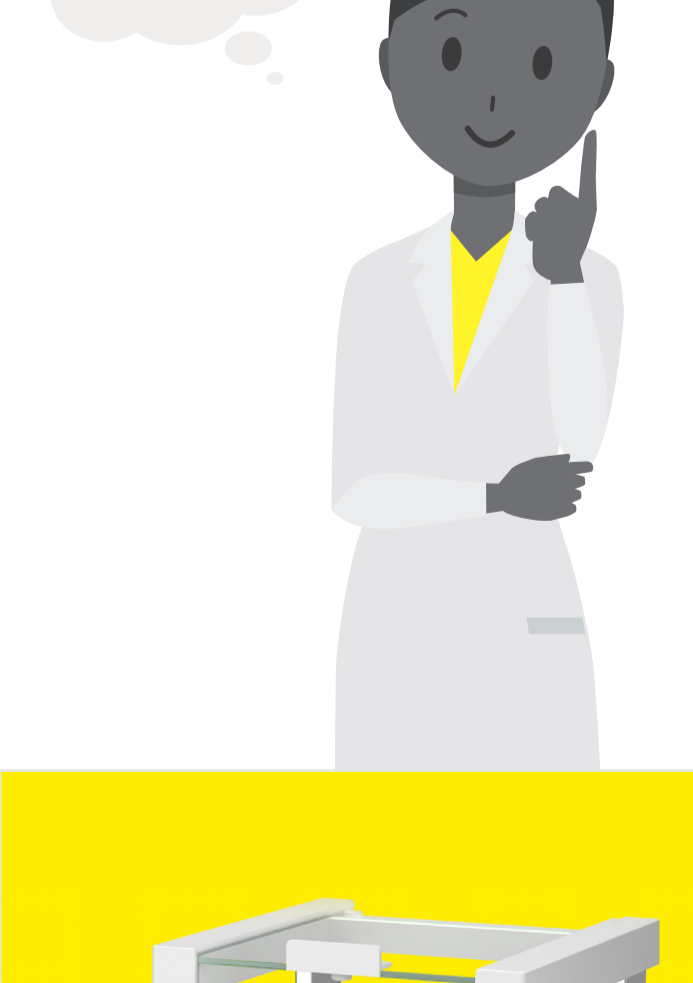
**Distribution**  
Quintix® Pro balances reach their destinations through optimized distribution channels, favoring sea transport over air to enhance environmental efficiency. Strategic distribution hubs and consolidated shipments further reduce the carbon footprint. This logistical approach ensures timely delivery and demonstrates a commitment to sustainable transportation practices.

**Packaging**  
Protective bags for Quintix® Pro balances are made from 80% post-consumer recycled material, the cardboard boxes contain 60% to 100% recycled material, and for the Quintix® Pro with draft shield, the recycled content in packaging has been increased to over 70%. Most packaging materials are also labeled with recycling codes to streamline the recycling process.

**Product Design**  
Energy efficiency is a key design principle of the Quintix® Pro, featuring low power electronics and intelligent backlighting that dims to save energy and extend product life. The deepstandby mode cuts energy use by more than half for an average 8-hour, 5-day-a-week operation. It also features a digitized and integrated manual, and operation instructions into the Quintix® Pro user interface, reducing the printed version by 30% to lessen the environmental impact.

**Use Phase**  
The balance is designed with replaceable and repairable parts, promoting longevity and reducing the need for frequent replacements. The Sartorius service model includes a network of local service hubs close to customers, reducing the need for extensive logistics and further cutting the overall carbon footprint.

**End of Life**  
As a Quintix® Pro balance nears the end of its usable life, its design facilitates easy disassembly for recycling. Lack of restrictive technologies, like adhesives, simplifies the recycling process. This design philosophy is consistent with the goal of creating products with their end-of-life disposal in mind.



Discover the Quintix® Pro

Speak With a Lab Weighing Expert

