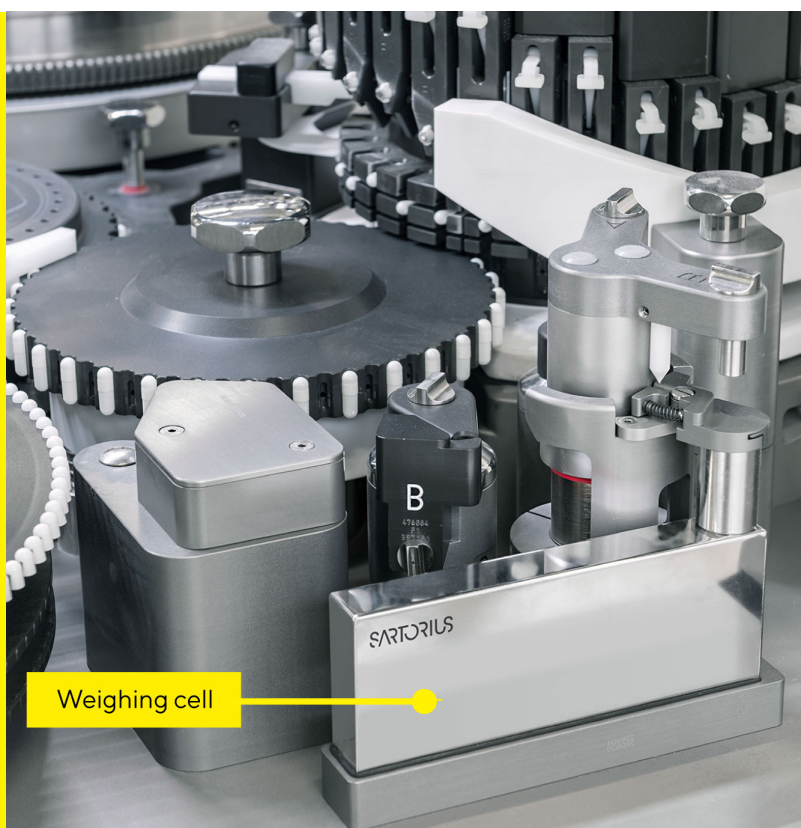


# Decision Criteria for Weighing Cell Integrators

Precision measurement demands selecting the right weighing cells (also called load cells) to ensure accuracy, reliability, and efficiency. This infographic explores the key decision criteria guiding the selection process, including required certifications, easy integration, environmental considerations, and technical support. Understanding these factors helps businesses make informed choices that align with their operational needs and regulatory requirements. Explore the essential aspects that define the optimal weighing cell solution for your applications.



## Easy Integration

Load cell installation process is straightforward, with simple mechanical setup and communication connection. With technical drawings and 3D graphics files, you can implement the load cell into your design even before you start building your device. The separation of mechanics and electronics aids in efficient space utilization, especially when load cells are integrated into customer devices, where space requirements are critical.

When standard models don't fit, the load cell can be customized through specialized construction to fit your specific spatial constraints.

## Connectivity

The customer's electronics communicate with and control the load cell via the RS232 connection. Two different protocol options (SBI and xBPI) are available for communication.

## Protection

The installation location of the load cell determines the needed level of protection.

- Moisture and dust protection are offered with ratings or like IP43 or IP68
- Explosion protection to be considered in areas where needed
- Overload protection is recommended especially in automated process where high forces may occur and potentially damage load cell



## Environmental Conditions

Right load cell model is selected based on weighing capacity and accuracy needed utilizing the provided technical specifications for each load cell model.

Ambient conditions have an impact on the load cell's measuring accuracy and should be thoroughly discussed with the customer. Additionally, it's important to address how these conditions can be mitigated to ensure optimal performance.

## Compliance

Key to ensure compliance for usage is obtaining necessary approvals including:

- RoHS directive (2011/65/EU, incl. del. Directive (EU) 2015/863)
- REACH regulation (EC 1907/2006)
- SVHC candidate list of 14-06-2023
- CE Mark (Conformité Européenne)
- FCC Certification (Federal Communications Commission),
- UKCA (United Kingdom Conformity Assessed)
- Ex Certification (Explosion Protection)

## Technical Support

Sartorius offers technical support and provides a sample device before purchasing decisions, ensuring compatibility with the customer's product development. With our global service organization, weighing cells can be repaired in all parts of the world, offering comprehensive after-sales support. However, it's important to remember that the customer's device can only be operated with the original equipment manufacturer's assistance.

## Individualization

The specifications of each load cell must be tailored and adjusted to meet the specific requirements of the customer. These settings are highly individualized and are done with Sartorius configuration software.

**The configuration software "CAS Suite" supports all our load cells and is available free of charge.**

