

Quantity Unit Conversion

In this page we explain how the quantity unit conversion works in BW.


- [Standard conversion \(Based on material master data\)](#)
 - [Conversion between 2 units from the same dimension.](#)
 - [Conversion between 2 units from different dimensions.](#)
 - [Standard conversion summary](#)

Standard conversion (Based on material master data)

For the standard conversion, usually there will be a prompt with a variable selection that will allow you to select the Unit you want. BW will then try to convert the base quantity to this unit. In most cases the report will display a column with the base unit and another with the converted unit.

The conversion will be done material by material but **if the conversion cannot be done BW will display a warning message "No quantity conversion possible" and the "converted quantity" column will show the quantity in base unit instead of target unit.**

We can distinguish 2 cases based on if the base and target unit are in the same dimension or different dimension.

 A Dimension is a grouping of units of measure for which the conversion rate is fixed internationally.

Length = centimeter (cm), inch (in), foot (ft), meter (m), kilometer (km)
Mass = gram (g), kilogram (kg), Ton (TO), Us Ton (TON)

Conversion between 2 units from the same dimension.

If the conversion is between 2 units from the same dimension BW will convert using the international rate without issue. Example :

1000 KG = 1 TO

Conversion between 2 units from different dimensions.

If the conversion is between 2 units from a different dimension then there is no international rate, so BW will try to look for the conversion information in the material master data in RCS. Example :

KG to L
PC to KG

The conversion will work only if the target unit was set as an alternative unit of measure in the RCS material master data. Example :

Material Base Unit = KG
Alternative Unit h1.L with 1 L 1.2 KG
Conversion from KG to L will work.

Important Note : The conversion with an alternative unit of measurement will only work if converting directly between the base unit and alternative unit. It will not work if you try to convert to another unit from the same dimension. Example :

Material Base Unit = L
Alternative Unit h1.KG with 1 KG 0.8 L
Conversion from L to TO will NOT work.

Standard conversion summary

Context	Source Unit	Target Unit	Result	Explanation
Base Unit = KG	KG	TO	OK	Both units in same dimension
Base Unit = KG	KG	PC	NO !	Units not in the same dimension
Base Unit = PC Alternative Unit KG = 2 PC	PC	KG	OK	Material master data provides conversion rate
Base Unit = PC Alternative Unit KG = 2 PC	PC	TO	NO !	Only direct from base to alternative unit works