



**KERN & Sohn GmbH**

Ziegelei 1  
D-72336 Balingen  
E-Mail: [info@kern-sohn.com](mailto:info@kern-sohn.com)

Phone: +49-[0]7433- 9933-0  
Fax: +49-[0]7433-9933-149  
Internet: [www.kern-sohn.com](http://www.kern-sohn.com)

# Operating instructions KERN App Tolerance - Tolerance weighing function

## KERN SET-031

Version 1.0  
2020-05  
GB



The current version of these instructions can also be found online under:  
<https://www.kern-sohn.com/shop/de/DOWNLOADS/>  
Under the section Operating manuals

SET-031-BA-e-2010\_tolerance



**KERN App Tolerance**  
Version 1.0 2020-05  
**Operating instructions**  
**SET-031**

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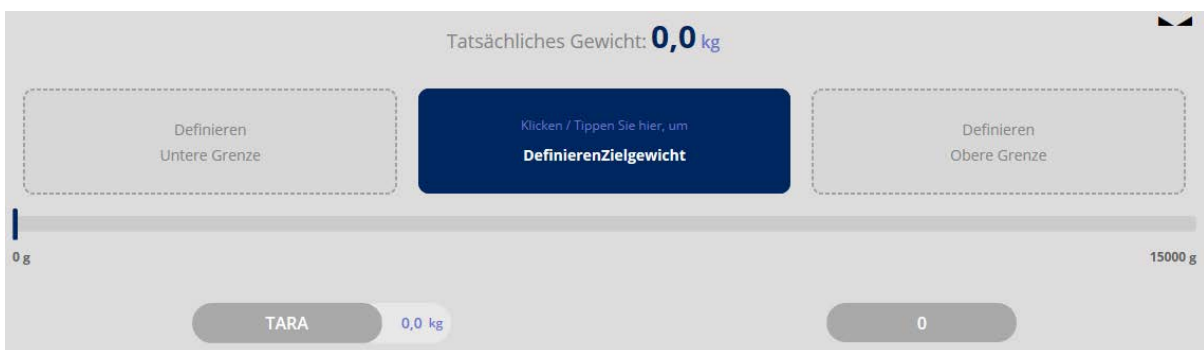
# 1 Weighing function Tolerance – Tolerance weighing function

**i** This function offers the possibility to determine a target weight which is situated inside a certain tolerance (upper/lower limit value). The values can be entered either numerically or in percent.

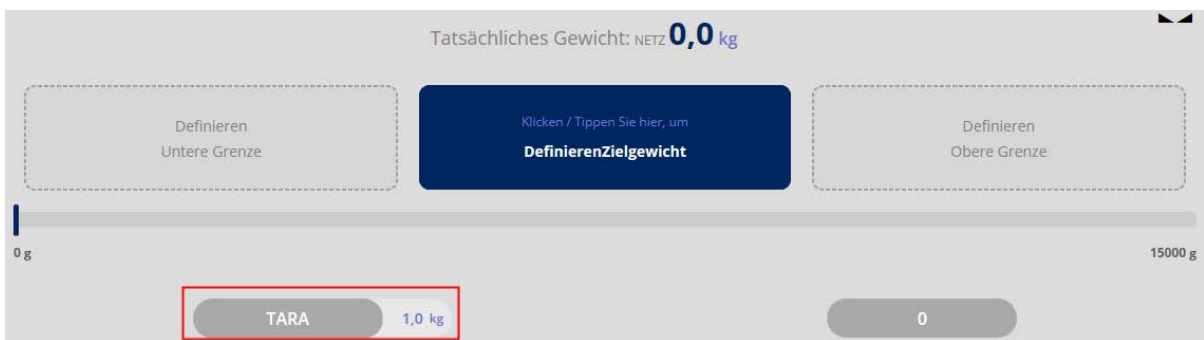
## 1.1 Weighing



In the menu FUNCTIONS click button „Tolerance“:  
The input screen appears:



If necessary, place a tare container on the weighing plate and tare with button TARE:



Next determine the target weight. For this click the blue field. The screen to enter the target weight appears:

DEFINIEREN ZIELGEWICHT

Gewicht von Waage verwenden

NET 0,0 kg

GEWICHT ANWENDEN

ODER

Geben Sie das Zielgewicht ein \*

Bitte geben Sie das Zielgewicht ein

Im (g)  Im (kg)

Enter the target weight and select the weighing unit:  
**Here is an example:**

DEFINIEREN ZIELGEWICHT

Gewicht von Waage verwenden

NET 0,0 kg

GEWICHT ANWENDEN

ODER

Geben Sie das Zielgewicht ein \*

2

Im (g)  Im (kg)

Then click the CONFIRM button. In the following screen determine the tolerance limits for the weighing good:



Click the fields „Upper and lower limit“ and enter the respective value. The value can be entered in grams or as percent value.

**Here is an example:**



Now enter the upper limit value accordingly.

Now the following screen shows the entered values:



Now you can start weighing. Here are the examples for:

### Weighing good below the lower limit value:



### Weighing good matches with target weight:



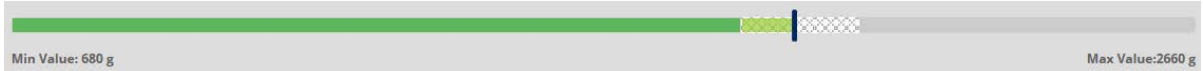
### Weighing good above the upper limit value:



The target weight can be reached by carefully adding or removing weighing good.



Clicking the scissors:



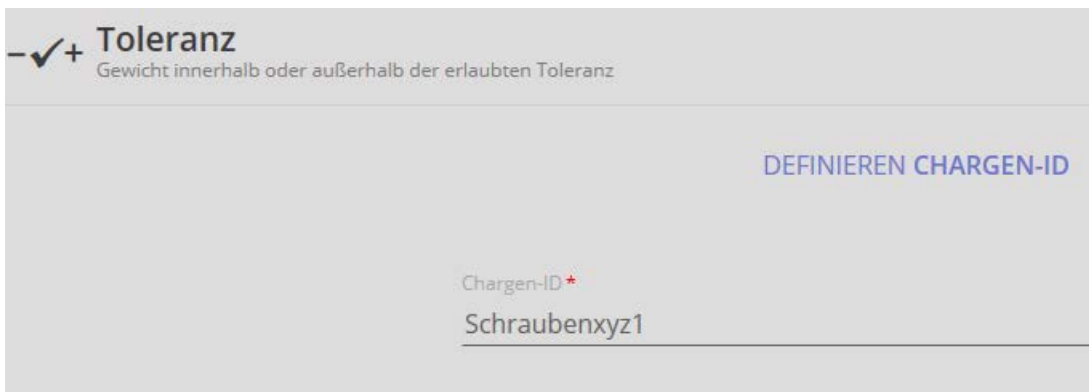
**i** The values to the left and to the right on the capacity display describe the relative range (the relevant section of the bar graph), which is actually used with this balance in this measurement.

## 1.2 Button NCF batch - Batch Charge – Batch management



By clicking the button “NCF batch“ a batch (lot) can be provided with an ID.

**Here is an example:**



Enter the batch ID and click button CONFIRM:

The screen for entering target weight and limit values appears. Also the previously determined batch is displayed:



As described above, enter target weight and limit values and then start weighing. When the target weight is reached, a short acoustic signal sounds, then the display changes automatically to the results overview. Enter here the object ID of the weighing, if you want, also fill out the residual fields.



Here is an example:

**-✓+ Toleranz - ergebnis**  
Ergebnisdaten speichern

Objekt-Identifikation  
Schraubenxyz1-1

Objektname  
Bitte geben Sie den Objektnamen ein

Dynamische Objekt-ID  
Bitte geben Sie die dynamische Objekt-ID ein

Name des dynamischen Objekts  
Bitte geben Sie den dynamischen Objektnamen ein

Chargen-ID  
Schraubenxyz1

Zielgewicht  
2.0 kg

Nettoergebnis  
2.0 kg

Untere Tol  
- 5.0 g

Obere Tol  
+ 5.0 g

Ergebnis  
OK

Leergewicht  
0.0 kg

Bruttogewicht  
2.0 kg

Verwendetes Gerät  
PCB 100-3

Ergebnis generiert  
durch Max Maier  
auf 2020-06-02 | 11:49:20

Seriennummer  
WF2054687

Fa. Kern und Sohn GmbH  
Ziegelei 1, 72236, null, null

Interner Code  
ID36455

Telefon: -

Letzte Justierung  
2020-03-10

E-Mail: -

Temperatur  
21 C

Webseite: -

Now these values can be stored, either



semi-automatically (green mode) by pressing the button) or fully automatic



(red mode) always after the balance having been unloaded and then reloaded.

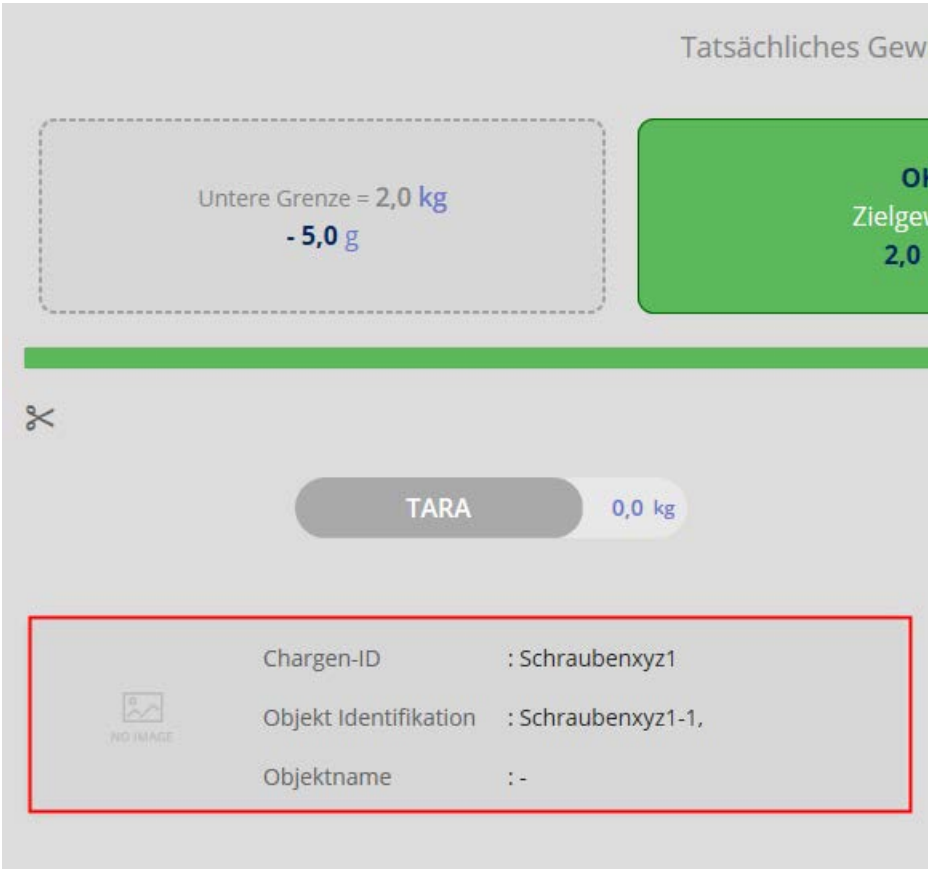
That means that the user in mass storing activities doesn't need to press any button and can work efficiently.

The allocation of a batch ID grants that all results which have been achieved under this batch ID, are stored in the dynamic data memory under this ID.

Here is an example:

TOLERANCE-W02062020115808	SCHRAUBENXYZ1-1,	2020-06-02	11:49:20
TOLERANCE-W02062020120213	SCHRAUBENXYZ1-1,	2020-06-02	12:01:38

After storing the balance changes automatically into weighing mode. Batch and object ID are displayed:

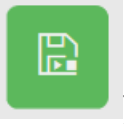




Now the next weighing can take place.

### 1.3 Start/Stop button

#### **ID-backup:**

It offers the possibility to store every weighed and saved weighing result with a unique ID number (Dynamic Object ID) and a ID name (Dynamic Object name).

The storage can always be initiated either semi-automatically (green mode )

or fully automatically (red mode  via button result ) every time after the balance having been unloaded and reloaded.

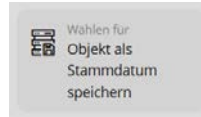
That means that the user in mass storing activities doesn't need to press any button and can work efficiently.

## 1.4 Saving with object ID and object name:



By clicking “Result“ you can attribute object IDs and names to the weighing process, under which it is stored in the database.

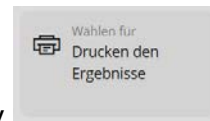
Enter the IDs and store them in the database using



This overview can also be printed out:



Either with the button in the submenu on the right or by below.



**-✓+ Toleranz - ergebnis**  
Ergebnisdaten speichern

Objekt-Identifikation*	Objektname
WtZR345	Mehl
Dynamische Objekt-ID	Name des dynamischen Objekts
WtZR345-1	Mehl-1

Zielgewicht	Nettoergebnis
-	2,0 kg
Ergebnis	Leergewicht
-	0,0 kg
Bruttogewicht	
2,0 kg	

Verwendetes Gerät  
PCB 100-3

Seriennummer  
WF2054687

Interner Code  
ID36455

Letzte Justierung  
2020-03-10

Temperatur  
21 C

Ergebnis generiert durch Max Maier auf 2020-05-25 | 13:19:34

Fa. Kern und Sohn GmbH  
Ziegelei 1, 72336, null, null

Telefon: -

E-mail: -

Webseite: -

Wählen für Objekt als Stammdatum speichern

Wählen für Drucken den Ergebnisse

## 1.5 Function Tolerance counting

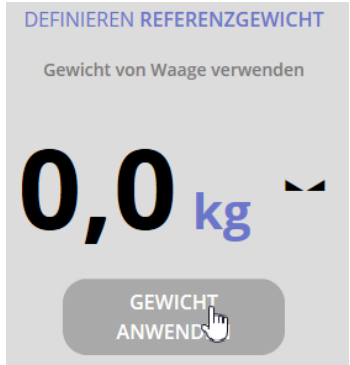
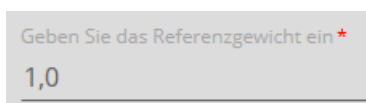


Button :

<b>i</b>	This function offers the possibility to weigh-in and to count parts via a previously determined reference weight.
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For that you must determine in this screen the reference weight and the corresponding piece quantity:

You can determine the reference weight either by weighing or by manual input:

<p><b>By weighing:</b> Place weight on weighing plate, wait for the stability display and click APPLY WEIGHT:</p> 	<p><b>By manual input:</b> In the respective fields</p> <ul style="list-style-type: none"> <li>• Reference weight</li> <li>• Measuring unit</li> <li>• Enter the piece quantity which corresponds to the reference weight</li> </ul> <p>(see below)</p>
<p>The value is taken over:</p> 	

Select weighing unit and enter the piece quantity which has to match with the reference weight:

Geben Sie das Referenzgewicht ein *	Einheit
1,0	(kg) <span style="float: right;">▼</span>
Menge der Referenzobjekte *	
1	

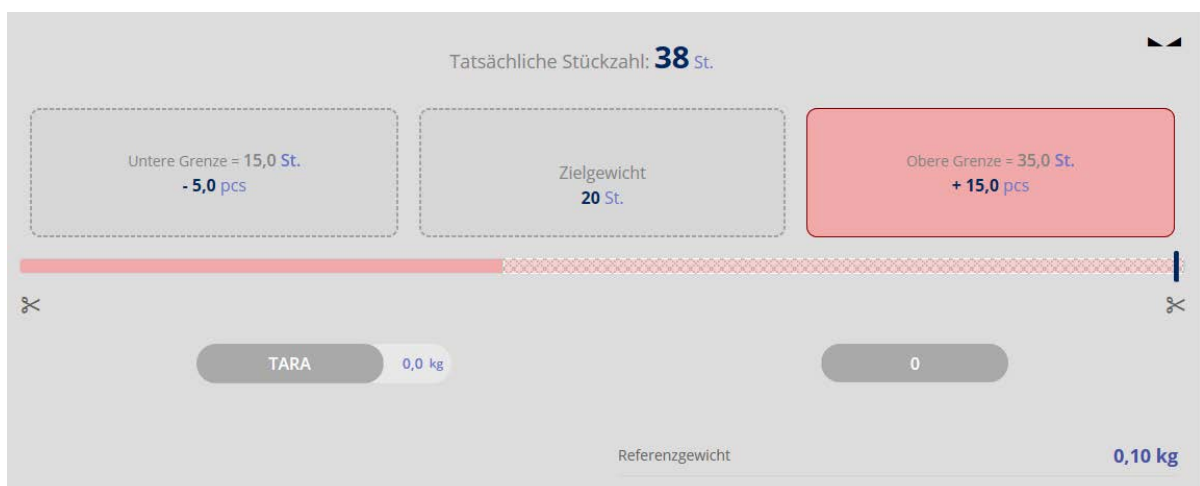
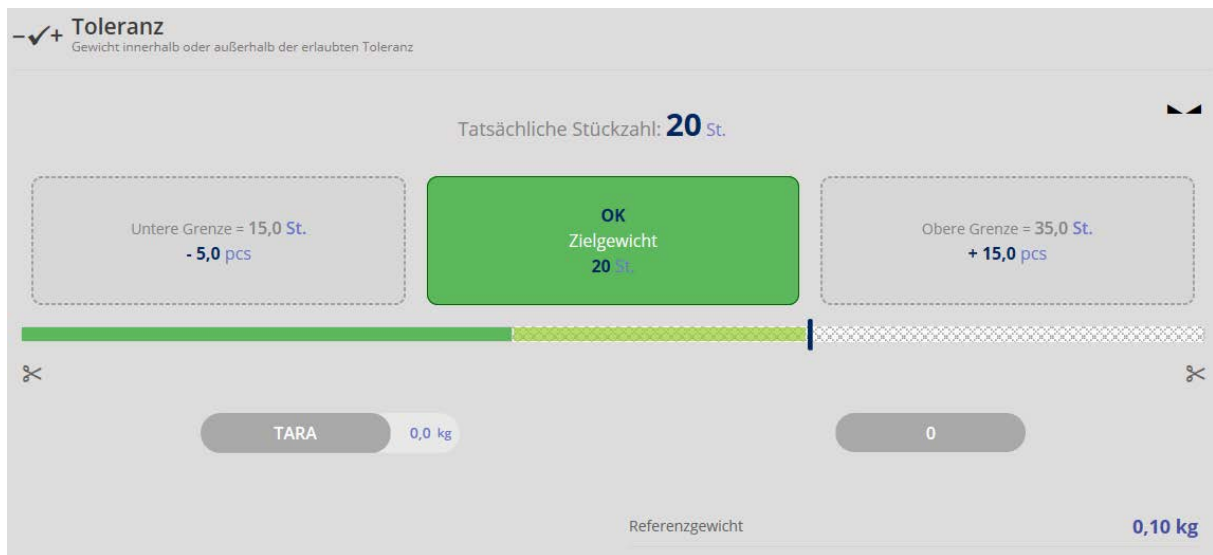
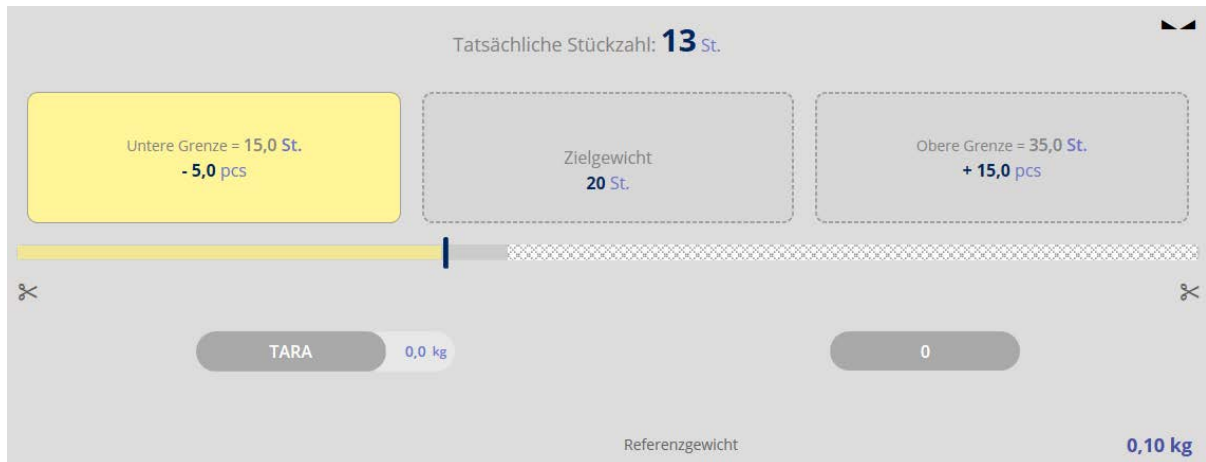
Click CONFIRM.

The screen to enter the target piece quantity and the upper and the lower limit value appears:

The screenshot shows a mobile application interface for setting piece quantity and limits. At the top, it displays "Tatsächliche Stückzahl: 0 St." and a navigation arrow "> 0 <". Below this, there are three buttons: "Definieren Untere Grenze" (left), "Klicken / Tippen Sie hier, um Ziel-Stückzahl festlegen" (center, dark blue), and "Definieren Obere Grenze" (right). A horizontal scale is visible below the buttons, ranging from "0 g" to "15000 g". Below the scale, there are two input fields: "TARA" with a value of "0,0 kg" and a field with the value "0". At the bottom, it shows "Referenzgewicht" and a value of "1,00 kg".

Click every field and enter value: Piece number under limit value, target piece quantity and piece quantity upper limit value.

Then start weighing:



In the display the currently placed number of pieces appears, corresponding to the reference. Remove or add pieces in order to obtain the desired target piece quantity (green field appears).