



# KERN KTU

Version 1.0 02/2005

## User manual

### Pallet Scale

---

---

<b>1</b>	<b>General .....</b>	<b>12</b>
1.1	<i>Overview .....</i>	<i>14</i>
1.2	<i>Documentation.....</i>	<i>14</i>
<b>2</b>	<b>Setting up the pallet scale.....</b>	<b>15</b>
2.1	<i>Selecting installation location.....</i>	<i>15</i>
2.2	<i>Unpacking the pallet scale.....</i>	<i>15</i>
2.3	<i>Installing the pallet scale .....</i>	<i>16</i>
<b>3</b>	<b>Operation .....</b>	<b>17</b>
3.1	<i>Operational limits .....</i>	<i>17</i>
3.2	<i>Loading/unloading the pallet scale.....</i>	<i>17</i>
<b>4</b>	<b>Maintenance and cleaning .....</b>	<b>18</b>
4.1	<i>Maintenance.....</i>	<i>18</i>
4.2	<i>Daily checks.....</i>	<i>18</i>
4.3	<i>Cleaning.....</i>	<i>18</i>
<b>5</b>	<b>Technical data, approvals and accessories .....</b>	<b>19</b>
5.1	<i>Technical data.....</i>	<i>19</i>
5.2	<i>Accessories.....</i>	<i>20</i>

# 1 General

## Declaration of conformity for apparatus with CE mark

Konformitätserklärung für Geräte mit CE-Zeichen




Déclaration de conformité pour appareils portant la marque CE

Declaración de conformidad para aparatos con marca CE

Dichiarazione di conformità per apparecchi contrassegnati con la marcatura CE

- English** We hereby declare that the product to which this declaration refers conforms with the following standards.
- Deutsch** Wir erklären hiermit, dass das Produkt, auf das sich diese Erklärung bezieht, mit den nachstehenden Normen übereinstimmt.
- Français** Nous déclarons avec cela responsabilité que le produit, auquel se rapporte la présente déclaration, est conforme aux normes citées ci-après.
- Español** Manifestamos en la presente que el producto al que se refiere esta declaración está de acuerdo con las normas siguientes
- Italiano** Dichiariamo con ciò che il prodotto al quale la presente dichiarazione si riferisce è conforme alle norme di seguito citate.

**Series: KTB, STB, UTB, UTS, STB-TIPM, KTB-TM, KTU**

Mark applied	EU Directive	Standards	Approval/Test-certificate N°
	73/23/EEC Low Voltage	EN61010-1 :2002	
	89/336/EEC EMC	EN61326-1:1997+ A1 : 98+A2 : 2001 (Class B); EN61000-3-2 :2000; EN61000-3-3 :1995+A1 :2001;	
	90/384/EEC Non automatic weighing Instruments	EN45501	<u>KTB, STB, UTB, UTS 1) :</u> T6679  <u>STB-TIPM 2) :</u> TC6678  <u>KTB-TM 2) :</u> TC6677  <u>KTU1.5TV20IPM 3) :</u> Load Cells TC6045  <u>KTU1.5TV20IPM 3) :</u> Load Cells TC5999

- 1) applies only to certified balances  
gilt nur für geeichte Waagen  
valable uniquement pour les balances vérifiées  
sólo aplicable a balanzas verificadas  
la dichiarazione vale solo per le bilance omologate
- 2) valid only for STB-TIPM/KTB-TM terminals in connection with approved load cells  
nur gültig für STB-TIPM/KTB-TM Terminals in Verbindung mit zugelassenen Lastzellen  
valable uniquement pour les terminaux STB-TIPM/KTB-TM en liaison avec des cellules de charge homologuées  
sólo válido para terminales STB-TIPM/KTB-TM en combinación con células de carga aprobadas  
valido solo per terminali STB-TIPM/KTB-TM in collegamento con celle di carico approvate
- 3) valid only for KTU weighing platforms in connection with an approved weighing indicator  
nur gültig für KTU Wägebrücken in Verbindung mit einem zugelassenen Waagenterminal  
valable uniquement pour les plates-formes KTU en liaison avec un terminal de pesée homologué  
sólo válido para plataformas de pesaje KTU en combinación con un terminal de balanza aprobado  
valido solo per basamenti KTU in collegamento con un terminale di pesata approvato

**Date: 01.03.2005**

**Signature:**



**Gottl. KERN & Sohn GmbH**

Gottl. KERN & Sohn GmbH, Ziegelei 1, D-72336 Balingen, Tel. +49-[0]7433/9933-0, Fax +49-[0]7433/9933-149

### Notice

Certified balances and balances used for legal applications have the EU type approval. The year of the initial verification is shown next to the CE mark. Such balances are verified in the factory and carry the „M“ mark on the actual balance and the packaging. The year of initial verification is shown next to the CE mark. The GEO value of verified balances explains for which location of use the balance has been verified. This GEO value is shown on the balance itself and on the packing. Further details see GEO value table.

### Hinweise

Für geeichte/eichpflichtige Waagen liegt eine EU Bauartzulassung vor. Das Jahr der ersten Eichung ist neben dem CE Zeichen aufgeführt. Solche Waagen sind ab Werk geeicht und tragen die Kennzeichnung „M“ auf dem Gerät selbst und auf der Verpackung. Der GEO-Wert gibt bei vom Hersteller geeichten Waagen an, für welchen Aufstellungsort die Waage geeicht ist. Dieser GEO-Wert befindet sich auf der Waage sowie der Verpackung. Genaueres ist der GEO-Wert-Tabelle zu entnehmen.

### Remarques

Les balances vérifiées/admissibles à la vérification font l'objet d'une approbation de modèle UE. L'année de la vérification primitive est indiqués à côté de la marque CE. Ces balances sont vérifiées d'origine et portent la marque „M“ sur l'appareil lui-même et sur l'emballage. Le valeur GEO indique le lieu d'utilisation pour lequel la balance été vérifiée. Ce valeur GEO se trouve sur la balance ainsi que sur l'emballage. Veuillez trouver plus de détails dans le tableau GEO.

### Notas

Las balanzas verificadas/verificables cuentan con una aprobación de modelo UE. El año de la primera verificación está indicado al lado del distintivo CE. Estas balanzas están verificadas en fábrica y llevan la designación „M“ sobre el propio aparato y sobre el embalaje. El valor GEO indica el lugar de ubicación por lo cual la balanza está verificado. El valor se encuentra sobre la balanza así como sobre el embalaje. Por favor toman demás detalles de la tabla GEO.

### Avvertenza

Per le bilance approvate esiste un'approvazione CE del tipo. L'anno della prima verifica è indicato a fianco della marcatura CE. I tipi marcati con un contrassegno „M“ su sfondo verde peino possono essere impiegati da subito. Il coefficiente GEO di bilance omologate indca per quale luogo la bilancia è stata omologata. Questo coefficiente GEO si trova sulla bilancia e sull'imballo. Ulteriori informazioni vedi tabella coefficiente GEO.

### GEO-WERT-Tabelle / GEO-value table

geographische Breite /geo- graphical latitude				Höhe über Meer in Metern / altitude					
				0-650	650-1300	1300-1950	1950-2600	2600-3250	
0°	0'	-	9°	52'	4 / 5	3 / 4	2 / 3	1 / 2	0 / 1
9°	52'	-	15°	6'	5 / 6	4 / 5	3 / 4	2 / 3	1 / 2
15°	6'	-	19°	2'	6 / 7	5 / 6	4 / 5	3 / 4	2 / 3
19°	2'	-	22°	22'	7 / 8	6 / 7	5 / 6	4 / 5	3 / 4
22°	22'	-	25°	21'	8 / 9	7 / 8	6 / 7	5 / 6	4 / 5
25°	21'	-	28°	6'	9 / 10	8 / 9	7 / 8	6 / 7	5 / 6
28°	6'	-	30°	41'	10 / 11	9 / 10	8 / 9	7 / 8	6 / 7
30°	41'	-	33°	9'	11 / 12	10 / 11	9 / 10	8 / 9	7 / 8
33°	9'	-	35°	31'	12 / 13	11 / 12	10 / 11	9 / 10	8 / 9
35°	31'	-	37°	50'	13 / 14	12 / 13	11 / 12	10 / 11	9 / 10
37°	50'	-	40°	5'	14 / 15	13 / 14	12 / 13	11 / 12	10 / 11
40°	5'	-	42°	19'	15 / 16	14 / 15	13 / 14	12 / 13	11 / 12
42°	19'	-	44°	32'	16 / 17	15 / 16	14 / 15	13 / 14	12 / 13
44°	32'	-	46°	45'	17 / 18	16 / 17	15 / 16	14 / 15	13 / 14
46°	45'	-	48°	58'	18 / 19	17 / 18	16 / 17	15 / 16	14 / 15
48°	58'	-	51°	13'	19 / 20	18 / 19	17 / 18	16 / 17	15 / 16
51°	13'	-	53°	31'	20 / 21	19 / 20	18 / 19	17 / 18	16 / 17
53°	31'	-	55°	52'	21 / 22	20 / 21	19 / 20	18 / 19	17 / 18
55°	52'	-	58°	17'	22 / 23	21 / 22	20 / 21	19 / 20	18 / 19
58°	17'	-	60°	49'	23 / 24	22 / 23	21 / 22	20 / 21	19 / 20
60°	49'	-	63°	30'	24 / 25	23 / 24	22 / 23	21 / 22	20 / 21
63°	30'	-	66°	24'	25 / 26	24 / 25	23 / 24	22 / 23	21 / 22
66°	24'	-	69°	35'	26 / 27	25 / 26	24 / 25	23 / 24	22 / 23
69°	35'	-	73°	16'	27 / 28	26 / 27	25 / 26	24 / 25	23 / 24
73°	16'	-	77°	52'	28 / 29	27 / 28	26 / 27	25 / 26	24 / 25
77°	52'	-	85°	45'	29 / 30	28 / 29	27 / 28	26 / 27	25 / 26

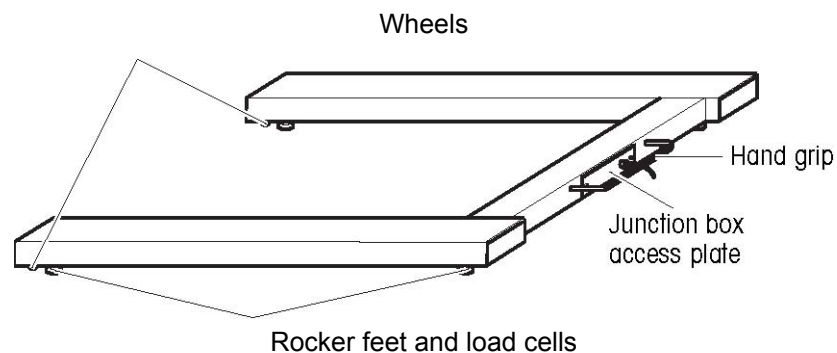
# Safety instructions

- ▲ Never operate the pallet scale in hazardous areas.
- ▲ Read this manual before operating the pallet scale. Save this manual for future reference.
- ▲ Only qualified personnel may install the pallet scale.
- ▲ Observe the safety notes throughout this manual.
- ▲ Do not lean the scale against the wall.
- ▲ Allow the pallet scale to stabilize to room temperature before connecting the power supply.
- ▲ Do not move the scale when it is loaded.

## 1.1 Overview

Thank you for purchasing a KERN product.

- ⇒ The KTU.... pallet scale is a fully electronic scale for top-of-the-floor installation. It is designed to weigh Euro pallets and bulk containers having the same profile as a Euro pallet.
- ⇒ There are two versions of the KTU.. pallet scale: KTU 1.5T0.5V20 IPM (painted) KTU 1.5T0.5 V30 IPM (stainless steel).
- ⇒ The KTU.. pallet scale and the STB indicator form a complete scale.



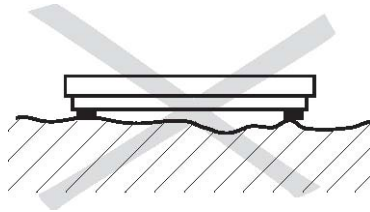
## 1.2 Documentation

This user manual provides information on installing and maintaining the KTU... pallet scale. How to operate the indicator is described in the user manual of the STB indicator

Please read these manuals carefully.

## 2 Setting up the pallet scale

### 2.1 Selecting installation location



- ▲ The foundation at the installation site must be capable to safely support the weight of the weighing platform at its support points when it carries the maximum load.
- ▲ The location must be completely flat and allow horizontal installation.

### 2.2 Unpacking the pallet scale

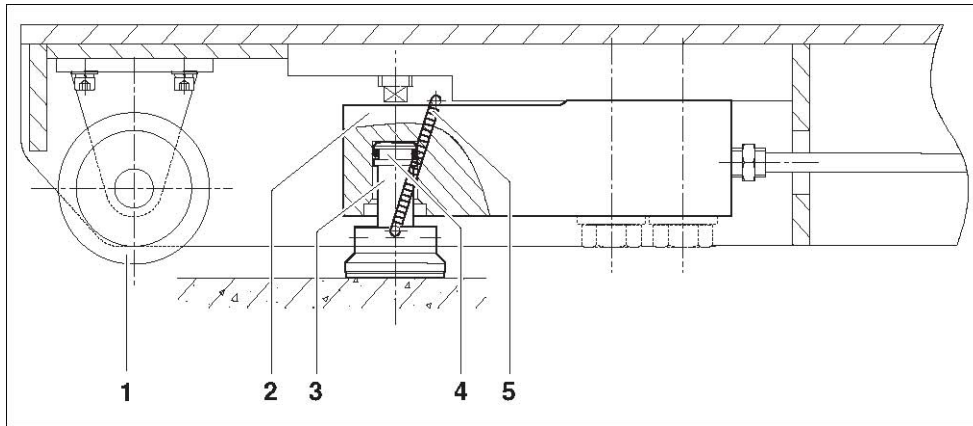
**Attention!!**  
**Risk of straining your back!**  
**The pallet scale is relatively heavy.**

Lift the pallet scale only with assistance of another person or use a power-lifting device such as a crane or forklift.

1. Remove the scale and the indicator from the transportation pallet and protective carton.
2. Ensure that the scale, cable and indicator were not damaged during shipping.
3. Ensure that the package contents is complete:
  - Pallet scale with 5 m premounted cable
  - User Manual

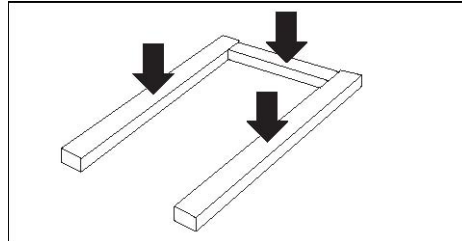
## 2.3 Installing the pallet scale

1. Place the pallet scale at the installation location. To move the pallet scale you can lift it with the handle and roll it on the transportation wheels (1).
2. Check if a loading pin (4) is installed in each of the 4 rocker feet receivers (3) and load cells (2). Do not apply torque to the load cells.
3. Check if all the springs (5) are hung on both sides of the foot.
4. Route the cable to the indicator in such a way that it is protected against damage.
5. For further steps refer to the STB indicator documentation.

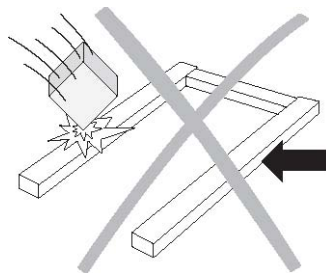


## 3 Operation

### 3.1 Operational limits



The KTU... pallet scale is designed for an evenly distributed load of 1500 kg.



- ▲ Avoid falling loads, shocks and lateral impacts.
- ▲ The forks of the forklift must not touch the pallet or the scale during weighing.
- ▲ Never move the scale when loaded.

### 3.2 Loading/unloading the pallet scale

- ⇒ Place the load on the scale with a hand pallet truck, crane or forklift. Make sure that the load is not swinging when it is placed on the scale.
- ⇒ Remove the load by raising it by at least 10 cm above the scale before moving or repositioning.

## 4 Maintenance and cleaning

### 4.1 Maintenance

Ensure that the pallet scale is routinely calibrated, call KERN servicepartner.

### 4.2 Daily checks

- ⇒ Check if the rocker feet are properly seated in the blind hole of each load cell.
- ⇒ Check if the 4 feet are in contact with the floor.
- ⇒ Check if the pallet scale is free from debris, especially under the scale.
- ⇒ Check if there is no damage on the indicator connecting cable.
- ⇒ Check if the indicator power cable is not damaged.
- ⇒ Check if the power plug is plugged into the socket.

### 4.3 Cleaning

**CAUTION !!**

**Risk of electrical shock!**

**Disconnect the power supply before cleaning the pallet scale.**

#### **Pallet scale, blue painted mild steel**

- ⇒ Clean the pallet scale with a soft cloth that has been dampened with a mild soap.

#### **Pallet scale, stainless steel**

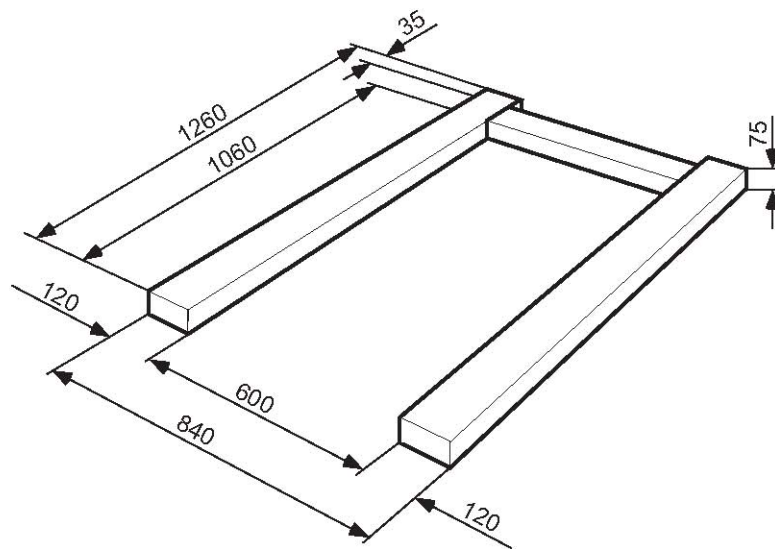
- ⇒ Clean the pallet scale with a soft cloth that has been dampened with an appropriate cleaning solution for stainless steel.
- ⇒ Do not use a steel or Ferris metal brush as this would lead to surface corrosion.

## 5 Technical data, approvals and accessories

### 5.1 Technical data

Capacity	• 1500 kg
Increment	• 0.5 kg (3,000 divisions)
Accuracy class	• III
Safe overload	• 150 % of rated capacity (2250 kg)
Ultimate overload	• 250 % of rated capacity (3750 kg)
Enclosure	• Blue painted mild steel or stainless steel

**Dimensions (in mm)**



## 5.2 Accessories

### Description

Terminal stand, stainless steel

Terminal stand

