

ESIT HIPPO MODULAR STEEL WEIGHBRIDGE



A. Steel Deck

ESIT Hippo is a modular steel weighbridge with pit-mount and surface-mount options. Designed to meet European standards in its respective industry, Hippo offers a strong static build which is suitable for use in every sector where legal loading and weight measurement is required.

ESIT Hippo weighbridges feature a modular structure with a width of 3 m and are produced in various lengths from 4 m to 24 m with 2m intervals. Thanks to its modular structure, Hippo can be easily assembled and is suitable for international container shipping. Hippo steel weighbridge is designed not only to provide robustness and long-term durability, but also to offer easy assembly, easy handling, easy cleaning and ideal height. ESIT Hippo vehicle scales are equipped with CAD Digital load cells and EL rubber mounting kits as well as ECI microprocessor-based Digital electronic weighing terminals.

Key Features

- ✓ Rubber pads
- ✓ Multiple load cells
- ✓ Low profile
- ✓ Dust covers
- ✓ Steel cable housings
- ✓ Lightning protection
- ✓ Assigning incremental sequence numbers to every weighing ticket
- ✓ Memory capacity to store 100,000 weighing operations
- ✓ Capability to recognize vehicles of fixed tare values
- ✓ 10 user-definable ticket data fields
- ✓ Detailed reporting between given dates
- ✓ Ability to edit ticket and report formats
- ✓ Access to any data based on given criteria
- ✓ Printer connection
- ✓ Label and report printing
- ✓ Legal metrology approval
- ✓ CE certificate
- ✓ Unique orthotropic V beam anti deflection design.



ESIT CAD



ESIT SCD

Advanced Digital Load Cells

CAD and SCD load cells have double sockets, allowing direct cable connection from one load cell to another without the need for a junction box. This makes installation simpler and replacement easy in case of a fault.

They operate on the shear force principle for compression measurement and are designed for high-capacity industrial weighing applications. Their rugged stainless steel construction provides excellent resistance to corrosion, overload, and side forces, making them suitable for harsh and chemical environments.

A key advantage over other digital load cells is the built-in electronic angle meter, which uses colored LEDs to guide correct installation. With patented angle compensation technology, CAD and SCD load cells detect vertical deflection and ensure accurate measurements despite side forces or platform deformation.

Key Features

- ✓ Certified to OIML R60 standards
- ✓ Welded hermetic sealed body
- ✓ %100 resistant to side forces
- ✓ %300 resistant to overload
- ✓ IP68 industrial protection
- ✓ Lightning Protection
- ✓ Installation angle compensation
- ✓ Modbus communication
- ✓ Automatic corner calibration from indicator
- ✓ Measurement error detection
- ✓ 24 bit A/D converter

ECI Digital indicator



ECI Digital Weighing Indicator is designed for weighing with digital load cells and to be used in vehicle scales. There are two different models of ECI Digital: designed for Modbus or Canbus output digital load cells. Although ECI is designed for panel use, there are optional casings for colon or desktop use as well. ECI indicates the weighing process clearly, via its various warnings and graphics on IP65 enclosure-rated front panel touch screen and new bright graphic screen. With a standard mounted USB port; ECI offers free firmware update, backup and reporting functions.

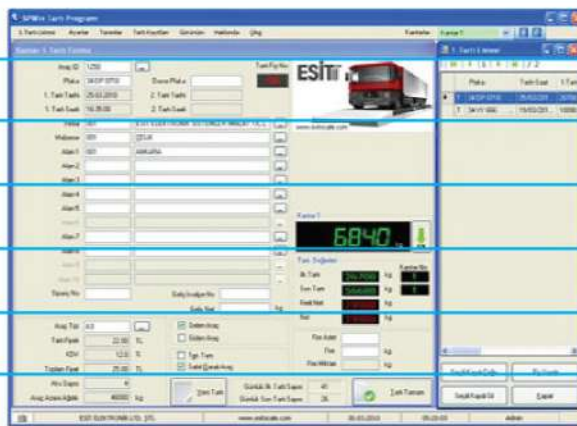
Key Features

- ✓ Weighing program with digital load cells
- ✓ Angle correction function when used with CAD series digital load cells
- ✓ Faulty load cell warning
- ✓ Weighing program with digital load cells
- ✓ Communication with load cells via Modbus or Can Bus protocols Indicator, platform scale or vehicle scale modes
- ✓ Adaptive, indexed menu system
- ✓ Easy connection with connectors (Solder-free)
- ✓ 1600 Hz measurement / 800 Hz data output rate
- ✓ USB reporting / update / backup / calibration backup
- ✓ Possibility of moving calibration data to other devices
- ✓ Multi-language option resolver multi-frequency vibration filtering technology
- ✓ Easy calibration (mV, factory, coefficient, digital)
- ✓ Intelligent plug and play type option cards and modular expansion
- ✓ Galvanic isolated communication docks
- ✓ Internal thermometer
- ✓ Service menu (self-diagnostic)
- ✓ Printer support
- ✓ USB, RS232 serial communication and external display output

SP-WIN management software (VGM COMPLIANT)

SPWin Vehicle Weighing Application was prepared with our previous experience and the demands of our customers. Not only providing standard expectations SPWin meets special demands such as flexible reporting and easy adjustable report formats. During weighing, storing photos of the vehicle with a camera and displaying within the record history is among the many outstanding features of the application.

| | SP WIN | SP WIN PRO |
|---|--------|------------|
| Remote Display | + | + |
| Message Panel | - | + |
| Traffic Lights | - | + |
| Mechanical Barrier | - | + |
| Optical Security Ring | - | + |
| Network | - | + |
| Photo | - | + |
| Button Case (kiosk) | - | + |
| Printer(kiosk) | + | + |
| Language (TR, EN, BG, RU, GE, AZ, FR, DA, SR) | | |
| Vehicle Define | - | + |
| Plate Define | - | + |
| RFID | - | + |
| Card Reader | - | + |
| Barcode | - | + |
| Integration and Data Connection | | |
| Web Service(XML) | - | + |
| E-mail | - | + |
| SMS | - | + |
| VGM report | + | + |



*** Features indicated with "+" are priced separately. (Excluding language option and web service)

ESIT AUTHORIZATION CERTIFICATE




KENAS- AND ISO-CERTIFIED



WEIGHTS AND MEASURES

REPUBLIC OF KENYA



WEIGHTS AND MEASURES DEPARTMENT

APPROVAL OF REPAIRER'S WORKSHOP

Ref: WM/MECH/2/3/VOL. 3 (161)

IN PURSUANCE of Rule 245(2) of the Weights and Measures Rules, the Workshop whose particulars are given hereunder has been duly approved for the purpose of repair and/or overhauling of **WEIGHING INSTRUMENTS INCORPORATING ELECTRONIC DEVICES (TYPE III)**.


The name and address of proprietor: **SCALES TECHNOLOGY SOLUTIONS LIMITED**

Location of Workshop: **PLOT NO. 37/134, BUNYALA ROAD, NAIROBI.**

P.O. BOX 62743 - 00200 NAIROBI.

TELEPHONE: 0743233223

Dated this: **21ST DAY OF MARCH 2023.**



J. NARAMBA
For: **DIRECTOR WEIGHTS AND MEASURES**

OIML CERTIFICATES

 **OIML Certificate N°**
R60/2000-DK3-17.01

OIML CERTIFICATE OF CONFORMITY

Member State
Denmark

Issuing authority
Name: DELTA
Address: Vesterhedevej 4
2970 Hørsholm
Denmark

Person responsible: J. Hovgaard Jensen

Applicant
Name: Est Elektronik Sistemler İmalat ve Ticaret Limited Şirketi
Address: Nisantepi Mah. Gelişim Sok. No 36,
Çekmeköy,
34794 İstanbul
TURKEY

Manufacturer
Manufacturer
of the certified pattern: **Est Elektronik Sistemler İmalat ve Ticaret Limited Şirketi**

Identification
of the certified pattern: **Digital compression, strain gauge load cell**
Type: **CAD**
Further characteristics are set out on page 2.


This certificate attests the conformity of the above-mentioned pattern (represented by the samples identified in the associated test report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML).

R60
edition 2000 (E)
for accuracy class C

This certificate relates only to the metrological and technical characteristics of the pattern of the instrument concerned, as covered by the relevant OIML International Recommendation.


This certificate does not bestow any form of legal international approval.

Page 1. This certificate includes 2 pages.

 **OIML Certificate N°**
R60/2000-DK3-17.01

The conformity was established by tests described in the associated test report N° DANAK-1918090 issued by DELTA, 57 pages, issued 18 Dec. 2017.

The issuing authority: **DELTA, OIML Issuing Authority DK3**
19 December 2017


J. Hovgaard Jensen
Certification Officer

Characteristics

| Type designation | | C3 | C4 | C5 | C6 |
|---------------------------------------|-------------------------------------|---------------------------------|--------------------------|--------------------------|--------------------------|
| Accuracy class | | 3000 | 4000 | 5000 | 6000 |
| Maximum number of intervals | g/g | 3000 | 4000 | 5000 | 6000 |
| Maximum capacity | E _{max} | 100, 200, 250, 300, 500 | | | |
| Approximate factor | g/g | 0.1 | | | |
| Maximum verification interval | g/g | E _{max} /10000 | E _{max} /20000 | E _{max} /20000 | E _{max} /40000 |
| Ratio of max LC verification interval | Y | 10000 | 20000 | 20000 | 40000 |
| Maximum dead load output return | DR | 0.0166 %E _{max} | 0.0125 %E _{max} | 0.0100 %E _{max} | 0.0080 %E _{max} |
| Relative DR | Z | 3000 | 4000 | 5000 | 6000 |
| Excitation voltage | U _{exc} | 12-24 VDC | | | |
| Excitation current | I _{exc} | 100 mA | | | |
| Maximum dead load, relative | E _{max} / E _{max} | 0 % | | | |
| Scale certified limit | Limit | 100 %E _{max} | | | |
| Temperature range | Int. Temp. | -10 °C / +40 °C | | | |
| Boundary condition | | CH (No marking) | | | |
| Data interface | | RS485 CAN BUS | | | |
| Communication speed | | 115 200 baud | | | |
| Digital resolution | | 200 000 counts for nominal load | | | |
| Load cell material | | Stainless steel | | | |

Important note:

Apart from the mention of the certificate's reference number and the name of the OIML Member State in which the certificate was issued, partial quotation of the certificate or of the associated test report is not permitted, though they may be reproduced in full.

Page 2. This certificate includes 2 pages.

WEIGHBRIDGE PROJECT PORTFOLIO

Delivering precision-engineered weighbridge solutions across Kenya, built for accuracy, durability, and long-term reliability.

CASE STUDY 01

80-Ton ESIT Weighbridge Installation



Location: Mai Mahiu, Kenya



Foundation Preparation



Calibration of the weighbridge

Project Scope:

- ✓ Civil works & foundation construction
- ✓ Supply of ESIT weighbridge system
- ✓ Mechanical Installation
- ✓ Calibration using certified test weights
- ✓ Testing and Commissioning

CASE STUDY 02

100-Tons ESIT Weighbridge Installation

**Location:** Nairobi, Kenya**Client:** Mr Green Africa

Installation of decks and loadcells



Calibration of the weighbridge

Project Scope:

- ✓ Supply of ESIT weighbridge system
- ✓ Calibration using certified test weights
- ✓ Mechanical Installation
- ✓ Testing and Commissioning

CASE STUDY 03

80-Ton ESIT Weighbridge Installation

**Location:** Eldoret**Client:** Rift Grain Logistics LTD



Foundation Preparation



Completed Weighbridge

Project Scope:

- ✓ Civil works & foundation construction
- ✓ Supply of ESIT weighbridge system
- ✓ Mechanical Installation
- ✓ Calibration using certified test weights
- ✓ Testing and Commissioning

CASE STUDY 04

ESIT Weighbridge Installation



Location: Nairobi, Kenya

Client: Origen Fresh



Foundation Preparation



Completed weighbridge

Project Scope:

- ✓ Civil works & foundation construction
- ✓ Supply of ESIT weighbridge system
- ✓ Mechanical Installation
- ✓ Calibration using certified test weights
- ✓ Testing and Commissioning

CASE STUDY 05

ESIT Weighbridge Installation



Location: Naivasha

Client: Uwezo Maize Millers



Foundation Preparation



Completed weighbridge

Project Scope:

- ✓ Civil works & foundation construction
- ✓ Supply of ESIT weighbridge system
- ✓ Mechanical Installation
- ✓ Calibration using certified test weights
- ✓ Testing and Commissioning

CASE STUDY 06

ESIT Weighbridge Installation



Location: Murang'a

Client: Planfresh



Foundation Preparation



Completed weighbridge

Project Scope:

- ✓ Civil works & foundation construction
- ✓ Supply of ESIT weighbridge system
- ✓ Mechanical Installation
- ✓ Calibration using certified test weights
- ✓ Testing and Commissioning