# **CALIBRATION CERTIFICATE**

No. 02-2025-FORC-0042

Date of Calibration : **February 24, 2025**Calibration Item : **Axle Weighing Scale** 

Capacity : 15 000 kgf

Measurement Range : 0 kgf to 15 000 kgf

Resolution : 50 kgf

Make / Model : Intercomp; Serial No. : 1122YL23001

Customer : SAVVICE CORPORATION

3rd Floor BMWC Bldg., Cagayan Valley Road

Sta. Rita, Guiginto, Bulacan

#### **MEASUREMENT RESULTS:**

| Applied<br>Force | Indicated<br>Force | Deviation<br>(Indicated Force -<br>Applied Force) | Relative<br>Expanded<br>Uncertainty | Relative<br>Accuracy<br>Error |
|------------------|--------------------|---|-------------------------------------|-------------------------------|
| kgf              | kgf                | kgf   | %                                   | %                             |
| 0.00             | 0.00               | 0   | 0.00                                | 0.00                          |
| 3 000            | 2 850              | -150  | 1.04                                | 5.26                          |
| 6 000            | 5 650              | -350  | 0.56                                | 6.19                          |
| 9 000            | 8 500              | -500  | 0.41                                | 5.88                          |
| 12 000           | 11 317             | -683  | 0.46                                | 6.04                          |
| 15 000           | 14 150             | -850  | 0.31                                | 6.01                          |

### **UNCERTAINTY OF MEASUREMENT:**

The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor k=2. It has been determined in accordance with the "JCGM 100:2008 Evaluation of measurement data- Guide to the expression of uncertainty in measurement". The value of the measurand lies within the assigned range of values with a probability of approximately 95%.

#### STANDARD USED:

| Name of Standard                           | Make/Model                | Calibration Certificate No. | Traceability                         |
|--|---------------------------|-----------------------------|--------------------------------------|
| Force Measuring Instrument SN 1251056K0094 | Shimadzu/ UH-<br>F1000kNX | 11-2020-FORC-0116           | Traceable to the SI through NMD-ITDI |

#### **CALIBRATION PROCEDURE:**

The axle weighing scale was subjected to specified force values in comparison with force standard values. Three (3) series of increasing force values were applied to the axle weighing scale.

The relevant references for this axle weighing scale calibration are the TP-S3-FORC-02: "Calibration of Axle Weighing Scales".

#### **ENVIRONMENTAL CONDITIONS:**

Ambient Temperature :  $(22 \pm 2)$ Relative Humidity :  $(39 \pm 5)$ 

#### **REMARKS:**

- The above results were those obtained at the time of calibration and refer only to the force measuring instrument (axle weighing scale) calibrated in static compression mode.
- No adjustment was performed on the axle weighing scale. The user should determine suitability of the axle weighing scale for its intended use.

## AHDRIAN CAMILO C. GERNALE

Science Research Specialist II

RADLEY F. MANALO Senior Science Research Specialist

For the Chief, National Metrology Laboratory

MARYNESS I. SALAZAR, PhD Head, Pressure and Force Standards Section Date issued:

-End of Report-