Australian Government
National Measurement Institute
Bradfield Road, West Lindfield NSW 2070

Supplementary Certificate of Approval

No S579

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the instruments herein described.

Sims Group Model Truck Scale C1 Point of Sale (POS) System

submitted by Sims Group Australia Holdings Limited
43 Ashford Avenue
Milperra NSW 2144

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

This approval becomes subject to review on 1/11/17, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variant 1 approved – interim certificate issued	5/10/12
1	Pattern & variant 1 amended (validity date) – interim	13/12/12
2	Pattern & variant 1 approved – certificate issued	10/04/13

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI S579' and only by persons authorised by the submittor.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with document NMI P 106.

Special Conditions of Approval: (weighbridges)

The pattern has not been assessed for compliance with requirements which are outside the scope of document NMI M7, including those features which control the automation of weighbridge operation or ticket formats for public weighbridges.

This Certificate does not constitute or imply approval for these functions. Details of these requirements can be found on the NMI website.

Signed by a person authorised by the Chief Metrologist to exercise their powers under Regulation 60 of the *National Measurement Regulations 1999*.

Dr A Rawlinson

TECHNICAL SCHEDULE No S579

1. Description of Pattern approved on 5/10/12

A Sims Group model Truck Scale C1 system to provide certain additional facilities for transactions when interfaced to compatible (#) NMI-approved point of sale systems granted with reference to document NMI M7.

1.1 Key Features

- The system provides point of sale arrangements when connected to NMI-approved measuring instruments fitted with a Ranger model 5000 digital indicator (approval NMI S363) or other compatible (#) NMI-approved measuring instruments.
- The system receives measurement data from the output interface of the approved measuring instrument and computes prices using a product look up (PLU) facility.
- The system computes total price for multiple items including non-measured items and is approved for use for transactions direct to the public.
- Manually entered measurement data shall be indicated as such on a printed transaction record.
- The system is able to apply a tare value up to the maximum capacity of the approved measuring instrument.
- The POS controllers may be connected in a network to share common PLU data, to accumulate and retrieve management information including information pertaining to pricing, material codes, vendor details, etc.

(#) 'Compatible' is defined to mean that no additions/changes to the hardware/software specified in this approval are required for satisfactory operation of the system.

1.2 System Description

The Sims Group model Truck Scale C1 system (Figure 1) comprises:

(i) POS Controller

The Sims Group model Truck Scale C1 POS controller is a server-based application where a PC-based device that operates a Microsoft Windows operating system connects to a server running SAI Truck version C1.x software.

The SAI Scale Monitor version 1.xx is a PC based software module that provides measurement functionality to the SAI model Truck/Rail Scale application software module for a PC that is physically connected to an NMI approved weighing instrument.

The application software must not cause the system to incorrectly indicate measured quantity or price.

The Scale Monitor software version number is displayed by selecting 'about' from the 'help menu' of the application software.

(ii) Electronic Indications

Indications shall satisfy the requirements of document NMI M7, *Pattern Approval Specifications for Point of Sale Systems*.

An HP computer monitor or equivalent (*) is connected to the POS controller to provide an indication for the operator and the customer. Typical Truck Scale screens are shown in Figures 2 and 3.

(*) 'Equivalent' is defined to mean other proprietary equipment of the same or better specifications requiring no changes to the software specified in this approval for satisfactory operation of the system.

(iii) Printing Devices

Transaction records shall satisfy the requirements of document NMI M7, *Pattern Approval Specifications for Point of Sale Systems*.

A Star model TSP847C thermal printer or equivalent (*) is connected to the controller to provide transaction record printing facility. A typical record is shown in Figure 4.

Note: Tickets have NOT been assessed for compliance with the requirements for Weighbridge Measurement Tickets as given in relevant Licensing Directives of the trade measurement section of NMI as published on the NMI website.

(*) 'Equivalent' is defined to mean other proprietary equipment of the same or better specifications requiring no changes to the software specified in this approval for satisfactory operation of the system.

(iv) Multiple Instruments Facility

The model Truck Scale C1 POS system may be connected to up to four approved measuring instruments. The POS system is configured to display which measuring instrument is connected.

The measuring instrument to be used is preselected by the operator when they log into the Truck Scale C1 application.

Note: In the case of this feature, each instrument/combination shall be clearly identified to correspond to the appropriate measuring instrument display shown on the POS system display. Trade measurement authorities may require additional markings or signs to ensure that these relationships are clear.

The measuring instrument to be used by the operator when they login into the Truck Scale application is defined by the following parameters

- Inbridge 1 (where there may be 4 weighing instruments used)
- Inbridge 2 (where there may be 4 weighing instruments used)
- Outbridge 3 (where there may be 4 weighing instruments used)
- Outbridge 4 (where there may be 4 weighing instruments used)
- Inbridge (where there may be 2 weighing instruments used)
- Outbridge (where there may be 2 weighing instruments used)
- Truckscale (where there is only 1 weighing instrument used)

Upon the operator choosing the appropriate selection, the Truck Scale application will lock in the selected weighing instrument, and not allow an operator to change to another weighing instrument from within the Truck Scale application

The operator will have an indication from within the Truck Scale application as to which weighing instrument they are connected to, i.e. 1, 2, 3 or 4 depending on the number of weighing instruments interfaced

The selection of weighing instrument is also reflected in the ticket produced from the application where the Gross and Tare measurements show which measurement instrument was used to capture the weight

This method prevents the operator from inadvertently choosing the incorrect weighing instrument within the Truck Scale application where there is more than 1 weighing instrument available to be used.

(v) Truck Weighing Functions

Providing functions intended specifically for truck weighing applications, including provision for 'truck and product' identification data to be stored in memory.

The truck weighing functions provide for:

- simple vehicle weighing, where the gross weight of a vehicle is determined by a single weighing;
- first/second weighing, where a vehicle is weighed before and after a loading or unloading operation;
- function keys programmed to perform various functions (such as accessing and searching stored vehicle, item, product or client information).

(vi) Additional System Facilities

In addition, the system may include barcode readers or scanning devices to input relevant information. It may also include other plant/site-specific control systems. The facilities shall not interact with the system in a way that would cause an incorrect indication of the measured quantity or price.

1.4 Verification Provision

Provision is made for the application of a verification mark.

1.5 Descriptive Markings

The POS controller is marked in a clear and permanent manner, in one location, with the following information:

Submittor's name or mark	……..
Serial number or other unique identifier	……..
Pattern approval number	NMI S579

2. Description of Variant 1 **approved on 5/10/12**

With the SAI model Retail Scale C1 software module which is similar to the model Truck/Rail Scale application software module except that it is intended to be used for weighing operations using small platform weighing instruments used to weigh small amounts of scrap material. Figure 5 shows a typical Retail Scale main data entry screen.

The platform scales can be interfaced with Retail scale up to a maximum of 4 weighing instruments.

If the platform scales are interfaced with Retail Scale C1, the operator can choose the weighing instrument to weigh from within the Retail Scale application and will have a selection of up to 4 weighing instruments to choose from.

The operator chooses which weighing platform to use in the Retail Scale Application by choosing either of scale options 1, 2, 3 or 4 depending on the number of platform scales interfaced with the PC.

If the scale platform(s) are not interfaced with the Retail Scale application, all weights are manually entered and there will be no scale options available.

2.1 Retail Scale Weighing Functions

- Single pass weighing where the net weight is determined from the Gross Weighing operation where the Gross weight is either automatically captured or manually entered.
- A Gross & Tare weighing operation where the net weight is determined by the Gross & Tare weighing operation and is either automatically captured or manually entered to produce a net weight.

TEST PROCEDURE No S579

The POS system shall be tested in addition to any tests specified in the approval documentation for the instruments to which the POS system is connected, as appropriate

The POS system shall be tested in the normal operational mode of the instrument and device, not in ‘training mode’ or any other management mode.

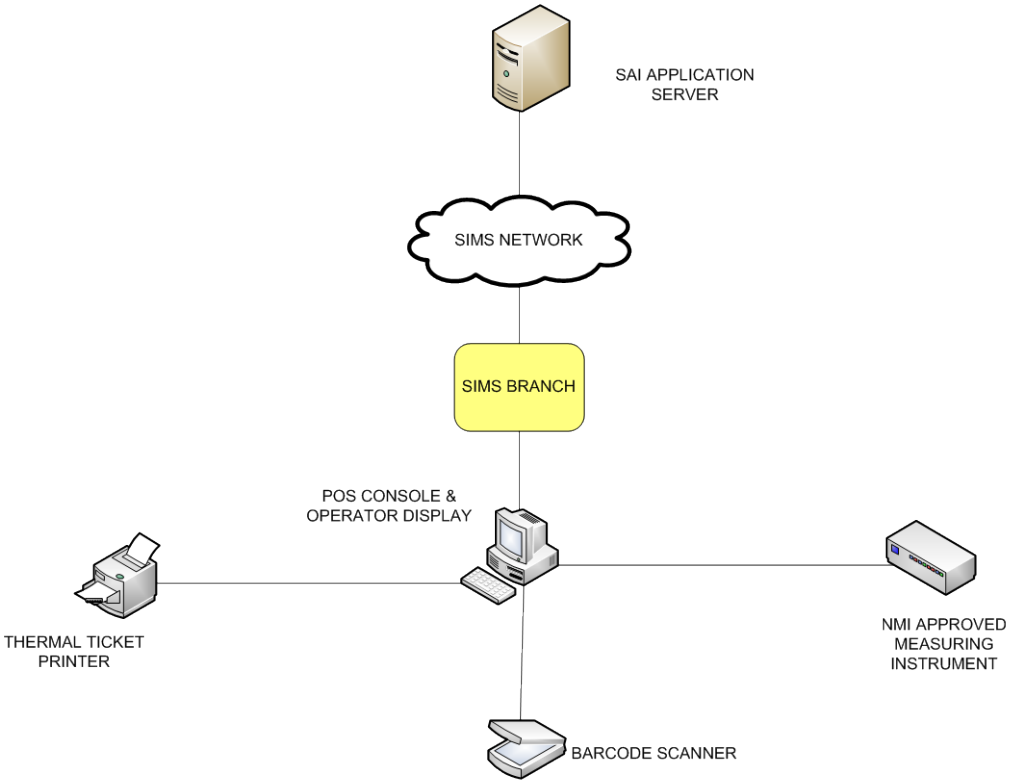
Maximum Permissible Error

The maximum permissible error for price computation is ±0.5 cent.

TESTS

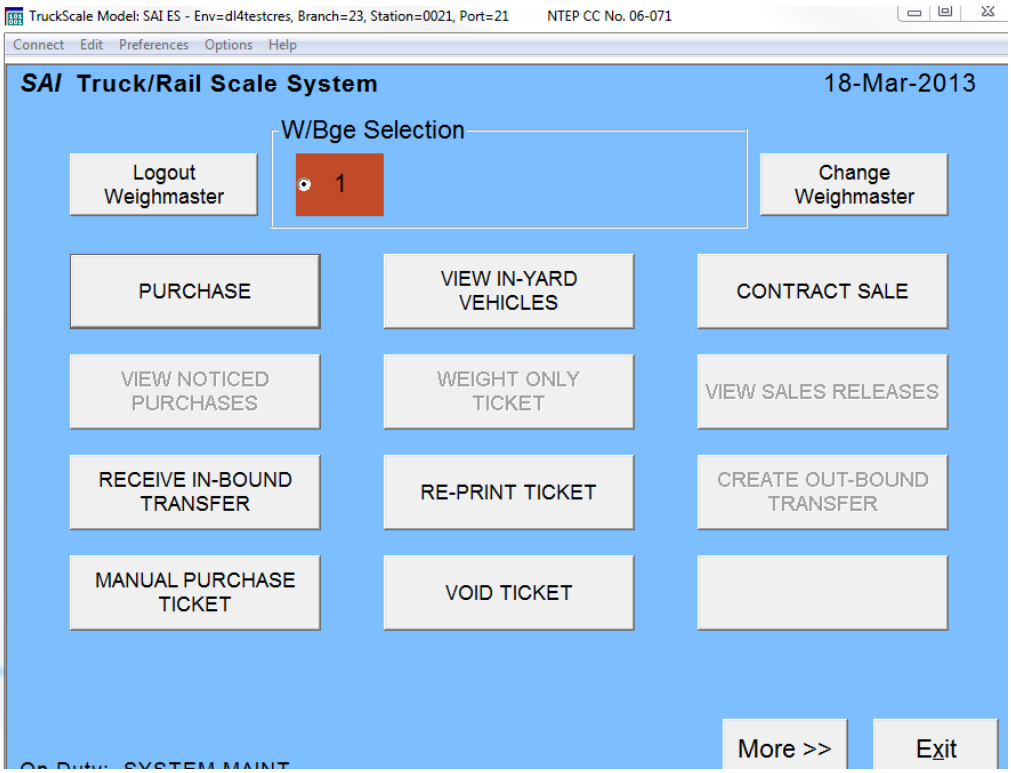
1. Check the software version number/s.
2. Check that the POS system faithfully reproduces the measurement data in the same units and scale interval as the connected approved measuring instrument, e.g. test by using a PLU without a stored tare.
3. Check that the system performs correct price computation, and computes and indicates a correct unrounded subtotal. For cash payment methods, check that any rounding calculation is correct.
4. Manually enter some pre-determined measurement data and ensure that the printed transaction record clearly indicates the transaction as such.
5. For network systems check to ensure that the measurement data printed on the transaction record is correctly reproduced.
6. Ensure that electronic indications and printed information are in accordance with document NMI M7.

FIGURE S579 – 1



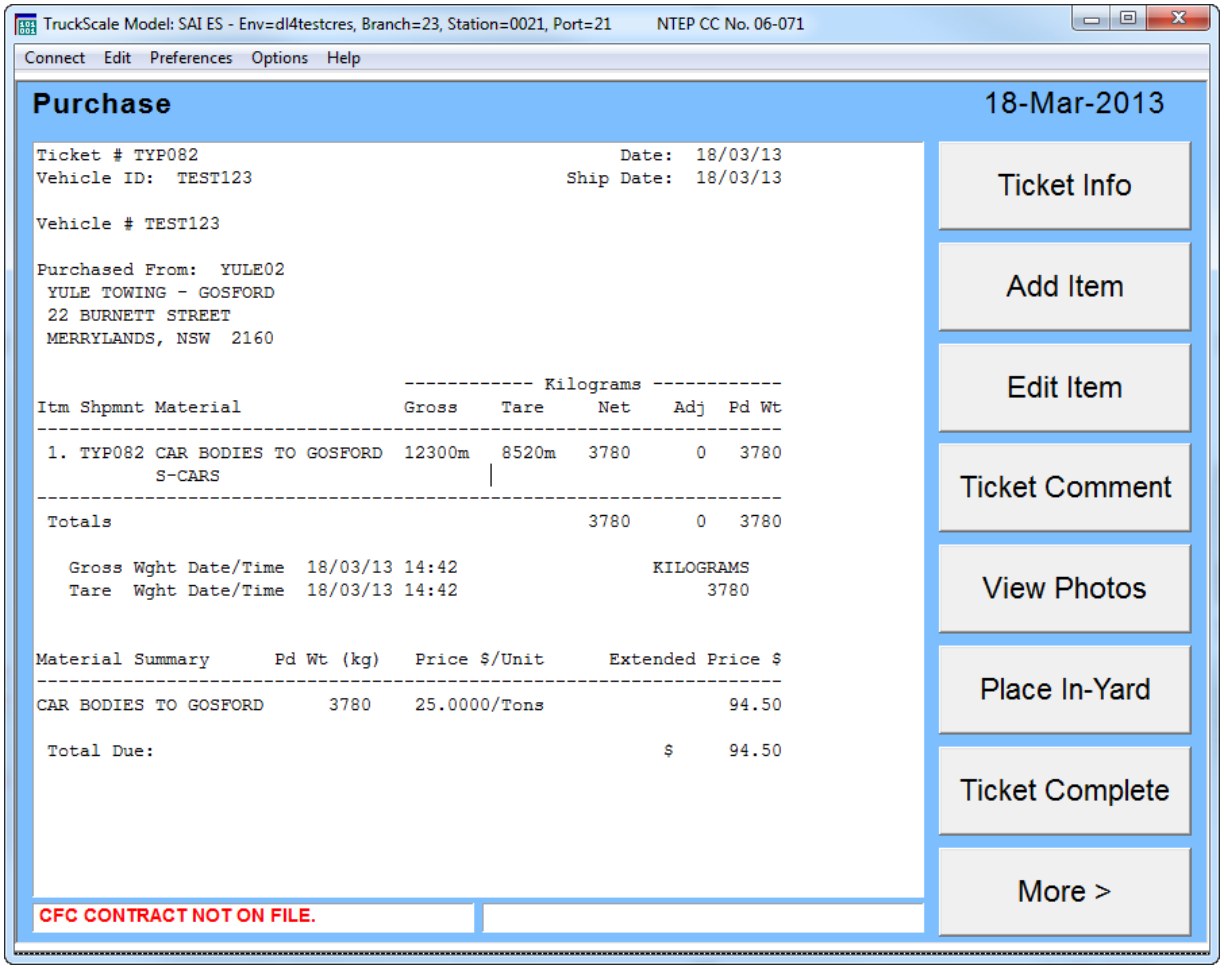
Sims Group Model Truck Scale C1 Point of Sale (POS) System

FIGURE S588 – 2



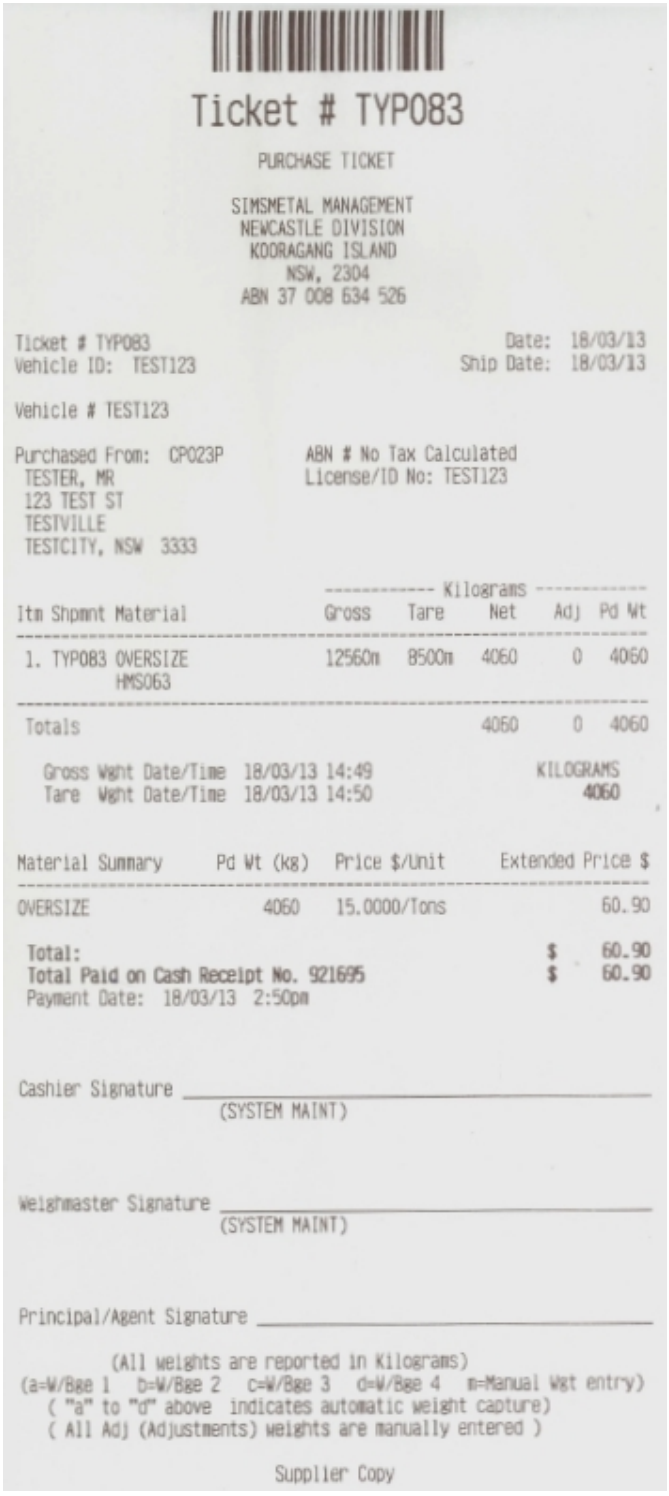
Typical Truck Scale Main Screen

FIGURE S588 – 3



Typical Truck Scale Main Data Entry Screen

FIGURE S579 – 4



Ticket # TYP083

PURCHASE TICKET

SIMSMETAL MANAGEMENT
NEWCASTLE DIVISION
KOORAGANG ISLAND
NSW, 2304
ABN 37 008 634 526

Ticket # TYP083 Date: 18/03/13
Vehicle ID: TEST123 Ship Date: 18/03/13

Vehicle # TEST123

Purchased From: CP023P ABN # No Tax Calculated
TESTER, MR License/ID No: TEST123
123 TEST ST
TESTVILLE
TESTCITY, NSW 3333

Itm	Shpmnt	Material	Kilograms Gross	Tare	Net	Adj	Pd Wt
1.	TYP083	OVERSIZE HMS063	12560m	8500m	4060	0	4060
Totals					4060	0	4060

Gross Wght Date/Time 18/03/13 14:49
Tare Wght Date/Time 18/03/13 14:50

KILOGRAMS
4060

Material Summary	Pd Wt (kg)	Price $/Unit	Extended Price $
OVERSIZE	4060	15.0000/Tons	60.90

Total: $ 60.90
Total Paid on Cash Receipt No. 921695 $ 60.90
Payment Date: 18/03/13 2:50pm

Cashier Signature _____
(SYSTEM MAINT)

Weighmaster Signature _____
(SYSTEM MAINT)

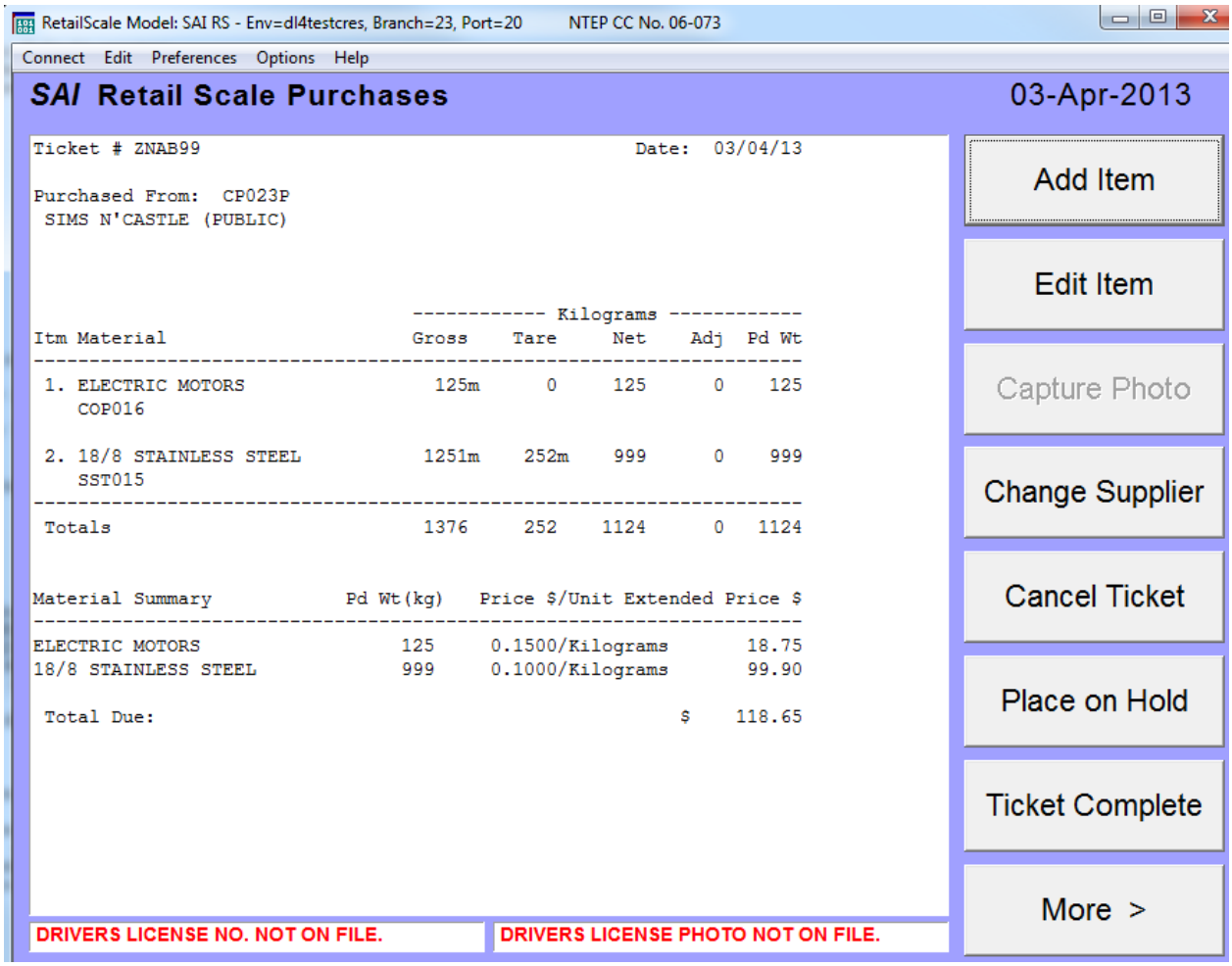
Principal/Agent Signature _____

(All weights are reported in Kilograms)
(a=W/Bge 1 b=W/Bge 2 c=W/Bge 3 d=W/Bge 4 m=Manual Wgt entry)
("a" to "d" above indicates automatic weight capture)
(All Adj (Adjustments) weights are manually entered)

Supplier Copy

Typical Truck Scale Ticket & Payment Receipt

FIGURE S588 – 5



Typical Retail Scale Main Data Entry Screen

~ End of Document ~