

CALIBRATION REPORT

COMPANY: Transmex SERIAL No.: 0720996
 INSTRUMENT: Transmex TAG: TT-14001
 FUNCTION: Tank Temperature AREA: Utilm
 CALIBRATION FREQUENCY: 12 months

TECHNICAL INFORMATION

MODEL: TY-2096
 INPUT: RTD-Pt-100
 OUTPUT: Voltage
 ACCURACY: ± 0.50% of Span

CALIBRATION AND ADJUST

Point	Reference	MEASURED	SELETT
Pts	(°C)	(°C)	(°C)
1	0.00	0.000	0.000
2	10.00	10.000	10.000
3	20.00	20.000	20.000
4	30.00	30.000	30.000
5	40.00	40.000	40.000
6	50.00	50.000	50.000
7	60.00	60.000	60.000
8	70.00	70.000	70.000
9	80.00	80.000	80.000
10	90.00	90.000	90.000
11	100.00	100.000	100.000

Calibration Conditions

LOCATION: Laboratory (V) MOUNTAIN
 MAX DEV: 0.010 (V) MOUNTAIN

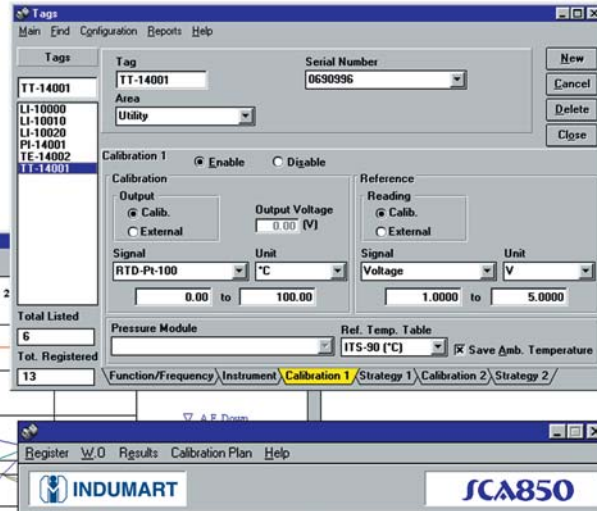
Model: UC-504 Ser. Num.: P-0001 Cert.
 Target Uncertainty of Standard: 0.0000 V

COMMENTS:
 AS FOUND - Only one calibration point is on AS LEFT - All calibrations points within tol:

Percentage: MAIN:
 000-Instrument on normal conditions
 23/09/96 Date

Error Graph
 Tag: TT-14001 S.N.: 0720996 2

Y-axis: %
 X-axis: (% Calibration)



Tags

Tag: TT-14001
 Serial Number: 0690996
 Area: Utility

Calibration 1 Enable Disable

Output: Calib. External
 Output Voltage: 0.00 [V]

Reference: Calib. External
 Signal: Voltage
 Unit: V
 Range: 1.0000 to 5.0000

Signal: RTD-Pt-100
 Unit: °C
 Range: 0.00 to 100.00

Pressure Module: Ref. Temp. Table: ITS-90 (°C) Save Amb. Temperature

Total Listed: 6
 Tot. Registered: 13

Function/Frequency/Instrument/Calibration 1/Strategy 1/Calibration 2/Strategy 2

INDUMART SCA850

calibration software SCA-850

Calibration Software

SCA-850

SCA-850 Calibration Software was developed to automatize and manage instrument calibration processes together with INDUMART calibrators:

- Allows the registration of instruments and sensors, calibration standards and factory areas, and also the choice of engineering units and signal types to be used in calibrations.
- Brings more efficiency to the organization of calibrations through work order concepts.
- Prints calibration reports and certificates, as well as error graphics and calibration history.
- Sends and receives calibrator information by means of serial communication.
- Runs in Windows™ and it is easily operated.

SCA-850 makes possible the Documenting Calibration System accomplishment by means of information shared with INDUMART calibrators, allowing data handling through report and certificate issues, automatic management of tasks, registration of process instruments and sensors, organization and storage of data for an overall coverage of quality procedure requirements, specially those related to ISO 9000. SCA-850 allows the specification of work orders with calibration strategies of several instruments to be calibrated. Through its instructions, the calibrators perform the correct sequence for calibration of all points and, when it is necessary, organize the data input to be provided by the operator. In the field, the calibrators have sufficient autonomy to inform the operator of the measures already carried out and the deviations found during the calibration process.

SCA-850 allows the registration of several instruments and sensors, engineering units, signal types, calibration standards and factory areas, making it easier to configure new calibration strategies by using registers already specified.

It helps to verify calibration standards compliance, due to the registration of their calibration certificate number and validity.

All information concerning the registration of instruments or the results of calibrations are stored in SCA-850 database which can also be easily accessed with Access™.

Each instrument is associated to a tag, configured with one or two calibration strategies (for the instrument input and output, for example), including an option for reading ambient temperature with a probe Pt-100 connected to the calibrator. The calibration points must also be defined, either chosen by the user or calculated by the software, and the direction of sequence to be followed (up and/or down).

The automatic calibrations can be performed without interference of the operator when the calibrator generates a sequence of signals which are associated to the values measured simultaneously in its input. When the calibrator does not measure or when it does not generate a certain type of signal, as in a calibration of an indicator or manual station, for example, the calibrator asks the operator to enter through the keypad the value corresponding to each measure carried out during the calibration.

Calibration strategies of up to 10 tags are organized in work orders and transmitted to a calibrator by means of serial communication.

The calibrators perform two types of calibration: *as found* and *as left*. The *as found* calibration is carried out to verify the instrument present conditions, while the *as left* allows the calibration points to be checked over more than one up/down sequence, usually after the instrument adjustment.

After returning calibration data to the computer, it is possible to visualize through tables the results of the *as found* and *as left* calibrations, and to print error graphics for the calibration points.

SCA-850 offers three kinds of calibration reports, distinguished from one another by the layout of the measured values presentation, which also show the instrument description, calibration conditions, used standards, failures and comments. All the information mentioned is stored in the database.

The software also allows the printing of reports with information about previous calibrations registered in the database, as calibration history per instrument or tag, and annual statistics of the number of calibrations for each factory area.

System and Hardware Requirements

- Computer compatible with IBM-PC 486DX or higher. Windows™ 3.x or higher.
- Minimum of 8MB of RAM (16MB is recommended) and 10MB of free hard disk area.
- 3 ½" disk / CD-ROM drive and mouse.
- VGA monitor.
- Serial port available for communication.