Distributed by: ABQ Industrial LP USA
Tel: +1 (281) 516-9292 / (888) 275-5772 **eFax:** +1 (866) 234-0451
Web: https://www.abqindustrial.net **E-mail:** info@abqindustrial.net

Operating Instructions
STM-50

Distributed by: ABQ Industrial LP USA
Tel: +1 (281) 516-9292 / (888) 275-5772 **eFax:** +1 (866) 234-0451
Web: https://www.abqindustrial.net **E-mail:** info@abqindustrial.net

Contents

1 Warranty and Liability 3
1.1 Notices within the Operating Instructions 3
1.2 Responsibilities of the Operating Company 3
1.3 Responsibilities of the Personnel 3
1.4 Informal Safety Measures 4
1.5 Training of the Personnel 4
1.6 Intended Use 4
1.7 Dangers in Handling the Device 4
1.8 Copyright 4
1.9 Declaration of Conformity 4

2 Available Models 5
2.1 Specifications 5
2.2 Delivery Includes 5
2.3 Unpacking 5

3 Measuring 6
3.1 Notices Before Starting Measurement 6
3.2 Measuring with the Screen Printing Tension Meter 6
3.3 Marking a tension range 7

4 Testing the screen printing tension meter 8

5 Service and Maintenance 8

6 Cleaning 8

7 Verification of Calibration and Determination of Repair Costs 9

8 Correspondence 10

9 Repairs 10

1 Warranty and Liability

In principle, the supply of the device is subject to our “General Conditions of Sale and Delivery.” These have been provided to the operating company on conclusion of the contract, at the latest.

Warranty:

- SCHMIDT Mechanical Screen Printing Tension Meter are warranted for 12 months.

Parts subject to wear, electronic components and measuring springs are not covered by the warranty. No warranty or liability will be accepted for bodily injury or property damage resulting from one or several of the following causes:

- Misuse or abuse of the device.
- Improper mounting, commissioning, operation and maintenance of the device (e.g. verification interval).
- Operation of the device if any safeguards are defective or if any safety and protection precautions are not properly installed or not operative.
- Failure to comply with the notices in the Operating Instructions regarding transport, storage, mounting, commissioning, operation, maintenance and setup of the device.
- Any unauthorized structural alteration of the device.
- Insufficient inspection of device components that are subject to wear.
- Opening the device or improper repair work.
- Disasters caused by the effects of foreign objects or by force majeure.

1.1 Notices within the Operating Instructions

The fundamental prerequisite for the safe handling of this device and its troublefree operation is the knowledge of the basic safety notices and safety instructions.

These Operating Instructions contain the most important notices for the safe operation of the device.

These Operating Instructions, in particular the safety notices, must be observed by any person who works with the device. In addition, the local valid rules and regulations for the prevention of accidents must be complied with.

The representations within the Operating Instructions are not true to scale.

The dimensions given are not binding.

General indications of direction, such as FRONT, REAR, RIGHT, LEFT apply when viewing the front of the device.

1.2 Responsibilities of the Operating Company

In compliance with the EC Directive 89/655/EEC, the operating company agrees to only permit persons to work with the device who:

- are familiar with the basic regulations on industrial safety and accident prevention and who have been trained in handling the device.
- have read and understood the chapter on safety and the warning notices in these Operating Instructions and have confirmed this with their signatures.
- are examined regularly on their safe and conscientious working method.

1.3 Responsibilities of the Personnel

All persons who work with the device agree to perform the following duties before starting work:

- to observe the basic regulations on industrial safety and accident prevention.
- to read the chapter on safety and the warning notices in these Operating Instructions and to confirm with their signatures that they have understood them.

1.4 Informal Safety Measures

The Operating Instructions must always be kept on hand where the device is operated. Apart from the Operating Instructions, the general and local valid regulations on accident prevention and environmental protection must be provided and complied with.

1.5 Training of the Personnel

Only trained and instructed personnel is permitted to work with the device. The responsibilities of the personnel must be clearly defined for mounting, commissioning, operation, setup, maintenance and repair. Trainees may only work with the device under the supervision of an experienced personnel

1.6 Intended Use

The device is intended exclusively to be used as a tension of print screens.
Any other use or any use exceeding this intention will be regarded as misuse.
Under no circumstances shall HANS SCHMIDT & Co GmbH be held liable for damage resulting from misuse.
The intended use also includes:

- Complying with all notices included in the Operating Instructions and observing all inspection and maintenance works.

1.7 Dangers in Handling the Device

The device was designed according to the state of the art and the approved safety standards. Nevertheless, its use may cause serious or fatal injury to the user or third persons, and/or an impairment of the device or of other material assets.

The device must not be operated in potential explosive areas and must not come into contact with aggressive substances.

The device may only be applied:

- For its intended use in a faultless condition with regard to the safety requirements.
- Malfunctions that could impair safety must be remedied immediately.
- Personal protective equipment must be used according to the EC Directive 89/686/EEC.

1.8 Copyright

The copyright on these Operating Instructions remains with the company
HANS SCHMIDT & Co GmbH.
These Operating Instructions are intended for the operating company and its personnel only. They contain instructions and notices that may only be reproduced on the prior written permission of
HANS SCHMIDT & Co GmbH
and under indication of the complete reference data.
Violations will be prosecuted.

1.9 Declaration of Conformity

Our mechanical screen printing tension meters do not belong to the EC machinery directive 2006/42/EG and do not have a CE mark.

2 Available Models

Model	Measuring Range	Measuring Force
FT / STM-50	6 - 50 N/cm	2.1 - 3.0 N

2.1 Specifications

Tension range:	6 - 50 N/cm
Depth of indentation:	max. 1 mm
Measuring force:	2.1 - 3.0 N
Scale diameter:	54 mm
Dimensions:	75 mm x 46 mm x 115 mm (L x W x H)
Weight, net (gross):	approx. 480 g (740 g)

2.2 Delivery Includes

1 Instrument
1 Operating Instructions
1 Carrying case

2.3 Unpacking

Unpack the tension meter and inspect it for any shipping damage. Notices of defect must be filed immediately, at the latest within 10 days on receipt of the goods.

3 Measuring

3.1 Notices Before Starting Measurement

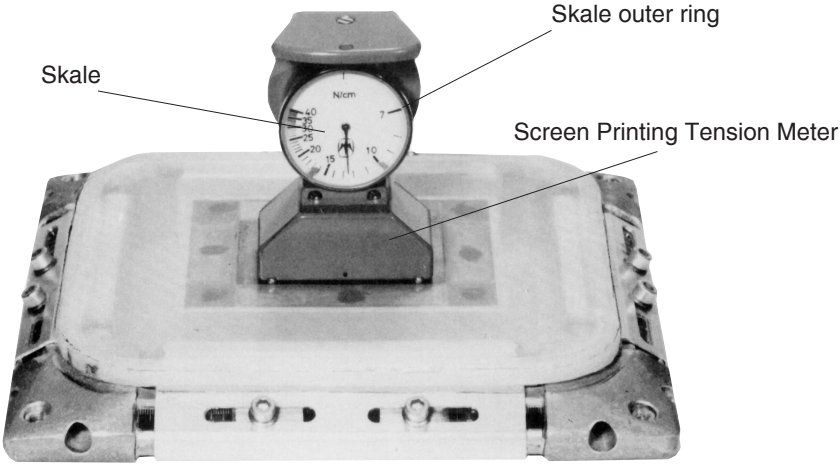
Have you read and understood the Operating Instructions, in particular Chapter 1 “Basic Safety Notices” ?
You are not permitted to operate the device before doing so.

Before working with the device you must put on your personal protective clothing, if necessary. For example, eye protectors, gloves, etc.
To avoid damage, do not move the center measuring feeler by hand.

Tensions that exceed the tension range of the instrument by more than 100 % may cause permanent damage to the movement and must be avoided under any circumstances.

The ID plate with the serial number as well as the calibration label (optional) are provided on the rear side of the instrument, the SCHMIDT Quality Seal are provided on the front side.

3.2 Measuring with the Screen Printing Tension Meter



Measuring:
- Ensure that the instrument shows zero in unloaded conditions. If the pointer does not match the zero position turn the outer ring carefully till the pointer matches the zero position.
- Place the instrument on the mesh and hit the screen web a few times with your hands to compensate any mechanical friction caused by the instrument and thus ensure the repeatability.
-The scale pointer will show now the screen tension directly in N/cm

3.3 Marking a tension range

The instrument is equipped with two adjustable marks to mark a tension range which is mostly used.

4 Testing the screen printing tension meter

- In unloaded conditions the indicator must point at zero, at which the index line of the scale has to point optical upright to the top (The outer ring of the scale can be turned)
- Place the device on a flat surface (e. g. glass plate). After removing the tension meter from the surface, the indicator must point at zero again

5 Service and Maintenance

The tension meter is easy to maintain.
Depending on operating time and load, the tension meter should be checked according to the locally valid regulations and conditions (as described in Chapter 4)
Other testing methods as described in chapter 4 can cause different measuring readings.

6 Cleaning

For cleaning the unit, do not use any

AGGRESSIVE SOLVENTS

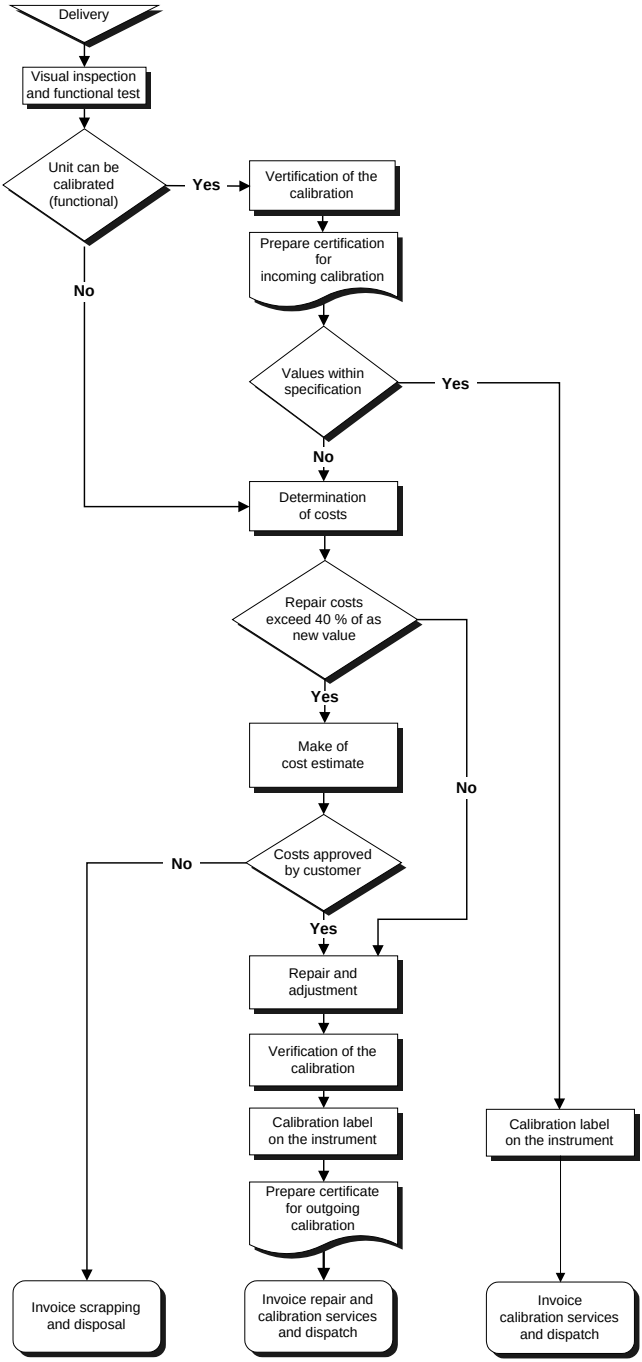
such as trichloroethylene or similar chemicals.

NO WARRANTY OR LIABILITY

shall be accepted for damage resulting from improper cleaning.

7 Verification of Calibration and Determination of Repair Costs

Flow chart for verifying the calibration of used tension meters, incoming and outgoing verification with Inspection Certificate 3.1 according to DIN EN 10204



8 Correspondence

Should you have any questions regarding the instrument or Operating Instructions, or their use, please indicate above all the following details which are given on the ID plate:

1) Model
2) Serial number

9 Repairs

Shipping instructions:

We kindly ask for return free of charge for us, if possible by airmail parcel. All occurring charges, if any (such as freight, customs clearance, duty etc.), will be billed to customer. For return from foreign countries, we ask you to include a proforma invoice with a low value for customs clearance only, e.g. 50 Euro, each and to advise the shipment in advance by fax or eMail.

To avoid unnecessary follow-up questions, and the resulting loss of time or possible misunderstandings, please return the instrument with a detailed fault description to our service department. Please indicate in your order whether you require an Inspection Certificate 3.1 according to DIN EN 10204.

ABQINDUSTRIAL
PRECISION. RELIABILITY. QUALITY.
Distributed by: ABQ Industrial LP USA
Tel: +1 (281) 516-9292 / (888) 275-5772 **eFax:** +1 (866) 234-0451
Web: https://www.abqindustrial.net **E-mail:** info@abqindustrial.net