
Measuring hole centres

- 1) When using the gauge for hole centre measurement set up the gauge as described in “preliminary checks” and insert the two transit setting pins. The tooling can now be set up ensuring there is free play at either side of the hole centres. Remove the setting pins and place the setting piece onto the tooling and zero the indicator. Your component can now be measured. It is good practice to periodically substitute the setting master to confirm the zero position.

Care and Maintenance

- 1) When using the gauge it is advisable to rest the component on a bed rather than the moving table, this gives a more consistent reading and reduces wear.
- 2) When the gauge or tooling is not in use keep the fixed and sliding tables lightly oiled to prevent corrosion.
- 3) When the gauge is to be moved replace the transit pins first and it is advisable to lift the gauge by the handles provided.
- 4) NOTE : The weight of the gauge without tooling is approximately 19kg



BOWERS METROLOGY

CHECKMATIC Operating Instructions

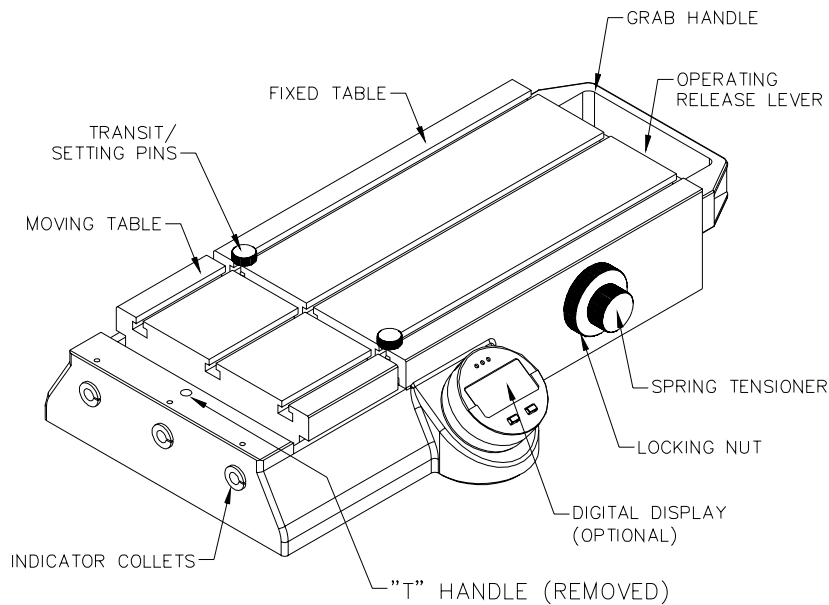


sylvac

CONTENTS

INCLUDE :- 3 split indicator collets
2 transit / setting pins
1 2mm Allen key
1 probe anvil spanner
Sylvac indicator instructions (when digital display is fitted)

Packing: - carefully remove gauge from box and pull off protective end cappings. After removing the Zerust film, wipe the ground faces and place on a work surface and remove transit / setting pins.



WORKING WITH THE GAUGE

Basic functions

1) When using the gauge for external measurement hold the spring tensioner and loosen the locking nut one full turn, rotate the spring tensioner anti-clockwise, until the table reaches its natural stop, then tighten the locking nut. Push the release lever at the end of the gauge to move the table.

When using the gauge for internal measurement, hold the spring tensioner and loosen the locking nut one full turn, rotate the spring tensioner clockwise until the table reaches its natural stop and tighten the locking nut. Pull the release lever to move the table. The gauge can also be used for center hole measurement, to do this set the moving table approximately mid travel and lock in place with the locking nut. The table will now have approximately 1mm of free movement with no spring tension. These are the 3 basic functions of the gauge and the gauge is now ready for use.

2) When using an external indicator check that the indicator probe tip and moving table maintain contact throughout its travel, adjustment can be made if necessary. **IMPORTANT:** - care must be taken when using an external indicator to ensure the indicator still has travel when the table is in its fully back position to prevent damage to the indicator.

3) If more than one external indicator is to be used, or a stronger spring force is required, adjustment can be made by loosening the locking nut and rotating the spring tensioner fully then re-tighten the locking nut.

Measuring internal features

When using the gauge for internal measurement set up the gauge as described in "basic functions." Push the release lever forward and insert the 2 transit / setting pins. The tooling can now be set up to a test piece. Adjust the position of the setting master to give the maximum reading on the indicator and set the reading to zero, remove the pins prior to replacing the test piece and recheck the zero / datum. Your component can now be measured. It is good practice to periodically substitute the setting master to confirm the zero position.

Measuring external features

When using the gauge for external measurement set up the gauge as described in "basic functions." Pull the release lever back and insert the two transit / setting pins. The tooling can now be set up to a test piece, adjust the position of the setting master to give a maximum reading on the indicator and set the indicator reading to zero, remove the pins prior to replacing the test piece and recheck zero / datum. Your component can now be measured. It is good practice to periodically substitute the setting master to confirm the zero position.
