SCOPE & PURPOSE:
The purpose of this SOP is to proficient users and staffs how to operate the Alicona GT5 safely to obtain 3D topographical data.

TRAINING REQUIREMENTS:
User will have completed Level 1 online and Level 2 materials labs inductions, and need to be trained by technical staff in a level 3 induction. Before using this equipment, required safety documentations must be completed and signed off by the technical staff and the user’s supervisor.

POTENTIAL HAZARDS/HEALTH EFFECTS:
Mechanical entanglement in the stage.
Crushing by being trapped between the plant and materials or fixed structures.
Ergonomic due to other factors – long periods of sitting.

MANDATORY CONTROLS:
✓ Safety glasses  ✓ Safety stop button  ✓ Received training  ✓ Use supports to position workpieces
✓ Project Safety Assessment

Precaution Requirements:
DO NOT USE AFTERHOURS (OUTSIDE OF MON – FRI 8AM – 6PM) WITHOUT TECHNICIAN AUTHORISATION.
• Be mindful - there are no collision sensors/detectors installed on the equipment.
• DO NOT change the location or names of any files/projects/folders once created.
• DO NOT change the objective with the sample underneath unless all the lenses are well clear of the top of sample.
• DO NOT tilt the stage with the sample underneath unless all the lenses are well clear of the top of sample.
• DO NOT run a 3D scan at zero tilt angle unless your sample is longer than 30 mm and there is sufficient clearance between the lens and tilted stage.
• Remove the secondary stage (unscrew it first) in case the tilt/rotation stage is aimed to be engaged for any measurement.
• Keep clear of the moving part of the equipment during operation.

INSTRUCTIONS:
Booking Procedure: must have a booking in the Outlook Calendar *G SEBE ENG Lab Eqpmt KE2.101 Alicona GT5(even if free and available).

Pre-Start check:
• Ensure the head is in its uppermost position.
• Ensure the stage is in neutral position. The tilt/rotation stage must stay at 90 degree tilt angle.
• Ensure there is no items on the stage including the secondary stage.

Operation:
• Open IF-MeasureSuite 5.3 software.
Follow the messages carefully before any action.
If the stages need self-lubrication, inform the technical staff to do so.
Select your database.
Select the required objective by carefully rotating the lens head without touching the lenses.
Position the sample. Mount the secondary stage if you are looking at flat samples and ensure it is fully secured to the main stage.
If using the Real 3D scan option, remove the secondary stage before mounting the sample on the self-centering chuck.
Using the joystick controller focus on the image in the imagefield - pull up/push down for z (focusing) movement.
Use numbers 1-4 on the joystick for different movement speed options with 4 being the fastest.
Using the joystick controller set up the imagefield;
  o right/left for x movement,
  o up/down for y movement,
Adjust the brightness and contrast of the image.
Adjust vertical and lateral resolution to your requirements.
Set up your image dimensions.
Save object as after scan finishes.

GENERAL CARE & MAINTENANCE:
- Move the head to its uppermost position.
- Move the stage to its neutral position.
- Remove all sample holders and return to cupboard.
- Make sure you collect all your samples and belongings and the working area is clean and tidy before you leave.

REPAIRS & CERTIFICATION/VALIDATION SCHEDULE:
Reporting faults/concerns of equipment procedure: Technical staff.
Supplier calibration is conducted annually.

SPILLS/ ACCIDENT REPORTING PROCEDURE:
Report incidents to: Technical staff.
In case of Emergency:
- Use safety stop button.
- Contact Technical Staff
- If a serious injury has occurred call 000.
- Alert others if nearby.
- Evacuate to closest assembly area.