REASON FOR UPDATE: Change of ownership

ASSOCIATED DOCUMENTS: F-Form Ref: F206

1. PURPOSE

1.1 To provide a procedure for the calibration of a speed output.

2. SCOPE

2.1 This document applies to all involved with the calibration of a speed output that is wired in to a computer via an amplifier or digital display.

3. RESPONSIBILITY

3.1 The Product Testing Team Leader is responsible for updating and communicating the details within this procedure.

4. PROCEDURE

A. **Transfer Standard:** Master Tacho: TT-177

B. **Display Accuracy:** The reading is accurate to 1.0rpm for each recorded value.

C. **Computer Accuracy:** The reading is accurate to 1.00rpm for each recorded value

D. **Speed Output Calibration Process:**

1) Make sure the computer program is in calibration mode.

2) Make sure there is no damage etc to any part of the system.

3) Attach the reflective strip to the speed output of the rig; place the tacho directly opposite the speed output (if the surface of the speed output is reflective this may need to be covered with none reflective tape before adding the reflective strip due the interference it may cause).

4) The tacho will then record the number of times the reflective strip passes a set point and from this gain a value of rpm.

5) Set the speed to a moderate value and start the motor running.

6) Leave the motor running for approximately 45 minutes to allow the bearing grease to heat up and the speed to stabilise.

7) Reduce the speed output to a minimum value, allow readings to stabilise.

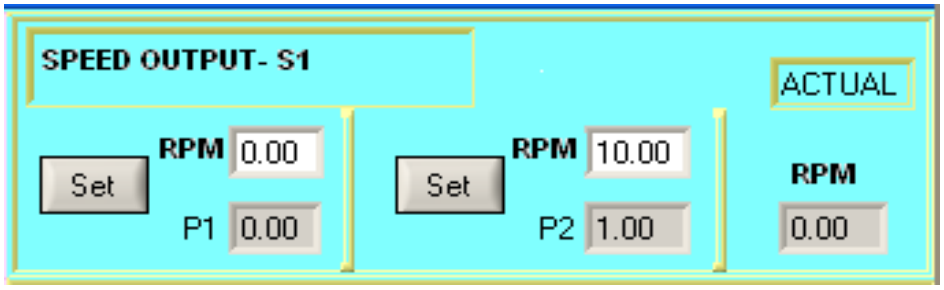
8) Record the actual speed output reading on the screen on the form.

9) Record and input the actual speed from the tacho in to the correct box on the screen (above P1).

10) Press the Set button to capture the current voltage value (P1).

11) Record the actual speed output reading on the screen on the form.

12) If there is a digital display reading then record on the form



13) Set the speed output now at a maximum value, allow readings to stabilise.

14) Record the actual speed output reading on the screen on the form.

15) Record and input the actual speed from the tacho in to the correct box on the screen (above P2).

16) Press the Set button to capture the current voltage value (P2).

17) Record the actual speed output reading on the screen on the form.

18) If there is a digital display reading then record on the form.

19) To ensure the calibration was successful, carry out two more readings at intervals between the maximum and minimum and record the same details for these as were recorded for the maximum and minimum values.

20) If either actual value is incorrect by more than 1% of the full scale reading then redo the above until in range values are obtained.

21) Document these items on calibration sheet number F206

- **i.** Test rig
- **ii.** Speed output number TTxxxxx
- **iii.** Display / Amplifier number
- **iv.** Computer Input number
- **v.** Tacho number / cal date
- **vi.** Above values
- **vii.** Calibration Interval
- **viii.** Next calibration due
- **ix.** Accept / Reject decision box
- **x.** Employee's name and signature

21. Place a new calibration sticker on the display / amplifier and speed output.

22. If there is a digital display add an offset label to the display if required.

23. Update the calibration record and store the written calibration sheet.