VIBRATORY Dengensha Nut Feeder set-up / checking method statement for commissioning

1. Check supply voltage is correct 110VAC/230VAC 50Hz (+/- 10%)

2. Check machine frame is correctly installed with supplied jacking bolts.

3. Check bowl feet correctly located in metal rings and no contact at bowl / chute track joint. SN of bowl and machine agree.

4. Check set up of feed unit. Gap between nose pin and guide pin approximately 2mm with spindle extended so nut cannot escape. Optimum feed angle is 45º from horizontal. 60º maximum.

5. Check tube run. No sharp bends (not less than 500mm radius) minimise the amount nut has to climb from lowest to highest point. No deformation of tube and no tie clips.

6. Check stock of nuts in the bowl. Maximum 80% covering bottom of bowl. Bowl switch (start / stop bulk hopper vibration) operating correctly to maintain 50% to 80% coverage. Nuts are dry and free of debris.

7. Check nut stock in chute track B. One or two nuts above proximity switch is OK but no nuts over joint between track and bowl. If necessary adjust vibration delay time or vibration speed.

8. Check nut stock in chute track B. Square nuts max until visually seen in tube or to sensor; other nut types number is indicated on track usually one or two. DO NOT EXCEED!

9. Check vibration speed and set to minimum to deliver nuts to chute track A i.e. approx 1 nut per 3 seconds. Use lowest possible setting.

10. Check delay time. This is the time between separator operation and start of air blow which allows nut to drop into tube. Blow should start when nut drops approx. 150mm to 200mm down tube.

11. Check blow time. Not usually longer than half the time it takes the nut to go down the tube. NUT SHOULD DROP SLOWLY THE LAST 500mm BY GRAVITY.

12. Check air pressure. Normally max is 4 bar. Some nuts need more but do not set too high a damage to chute tracks can occur. USE MINIMUM POSSIBLE.

13. Record settings and check weekly.

Manual machine operation note
Start buttons must be depressed until weld has started (if buttons are released before nut is delivered to guide pin, a mis-feed will result).

Refer to manual for detailed installation and maintenance procedures