Pendulum Impact Testing Machine (SATEC)

Asset No: 9800003939
Categorized: General
In-Charge: Thomas Lew
Remarks: Booking System
PI: Nil
RA Register: P020

**Standard Operating Procedures**

- Safety Precaution for this equipment must be handled with extra SAFETY, as the Hammer Force when released from the latch is very powerful.
- The Heavy Hammer (Charpy-SI-K3) Torque: Low position latch 125 ft-lbs (169.5 Joules) or High position latch 300 ft-lbs (406.7 Joules)
Indicating dial is graduated in increments of 1.0 ft-lb for the 125 and 300 ft-lbs capacities and in increments of 2.0 Joules for capacities of 169.5 and 406.7 Joules.

OPERATION OF MACHINE

1. Checking Zero – Latch pendulum, set pointer to full scale of scale, release latch and let pendulum fall freely till stop. Adjust pointer to zero (no energy generated) allow tolerance of 0.75%.
2. A single lever located on top of the frame operates 3 positions: latched (right), release (center) and brake (left).
3. Latch the lever to the right, raise the pendulum carefully with both hands till the latch automatically engaged and hold the pendulum in place. A safety catch prevented low latch position while pendulum is swinging.
4. Then put in the safety pin to prevent accidental release of pendulum while loading specimen.
5. Load the Charpy specimen in the charpy anvil with the tong provided.

6. Stay clear of the swing of the pendulum at all time !!!
7. Ensure that the pusher arm and pointer is at the maximum value.
8. Shift the lever to release (center) position, the hammer will swing and break the specimen.
9. Remove the safety pin, shift the lever to brake (left) position.
10. Gradually, the hammer will come to a stop.
11. Repeat Step 3 till all specimens completed.
12. Lift hammer slightly away from the charpy anvil and place a wooden block provided in between and let the hammer rest on the wood on the charpy anvil.

13. Clear all tested materials from the work area and latch the safety door of the cage.

14. Report any damage to Technician before you leave.