

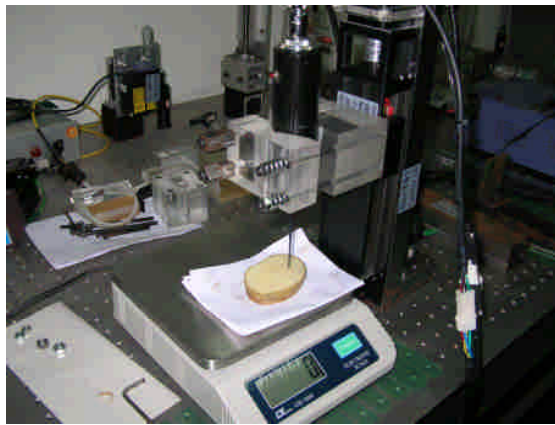
Ultrasonic Horn/Linear Motor/LabVIEW Procedure

1. Equipments:

- Linear motor.
- Ultrasonic generator.
- Digital Scale.
- Ultrasonic horn.
- Software:
 - 🚦 LabVIEW version 8.5. (Laptop D:\User\tam\rs232_scale.vi)
 - 🚦 Lightening (Laptop linear motor software)

2. Experimental procedure.

1. Set up:



- Connected Digital Scale to computer by RS232 cable in com12 gate.
 - Using LabVIEW software program (Laptop D:\User\tam\rs232_scale.vi) monitored the force applied to potato piece.
 - The horn is connected to Ultrasonic Generator.
 - Voltage from Ultrasonic Generator: V_{RMS} : 45V.
 - Set frequency of Ultrasonic Generator in 28kHz.
 - Put Potato specimen on Digital Scale
- #### 2. Ultrasonic procedure.
- Turn on Ultrasonic Generator.
 - The Horn vibrated in resonance frequency (28kHz)
 - Using Lightening software control motion of linear motor.
Set speed cutting: 2mm/s.