The instrument is manufactured as per IEC 811, IS: 10810 (Pt.16) and IS: 10810 (Pt.56), for heat Ageing test under oxygen \ air pressure for insulation & sheath of electric cables. This apparatus is also used for estimating the relative resistance of vulcanized rubber to age determination by assessment of change in tensile strength & elongation of material by subjecting them to accelerated ageing in oxygen\air pressure.

**Temperature Range**: Ambient to 200°C  
**Pressure Range**: 0-22 Kg/cm² (0-2.2 Mpa)

**The instrument consist of the following**:  
- Inner chamber of seamless steel pipe of at least 8 mm thickness.  
- SS lid and provision for placing the rubber test pieces,  
- Pressure Control by Digital Pressure Controller  
- Jacket Heaters outside the Inner Chamber  
- PID Digital Temperature Indicating Controller, least count 0.1°C  
- Pressure Gauge Digital (least count 0.1 kg/cm²)  
- Inlet, outlet, Safety valve (preset / sealed)  
- Manifold with pressure switch, solenoid valve for compensating drop in pressure of gas from cylinders  
- Power cord, extra seal, rubber pipe to connect instrument with cylinder

(Activity instrument may differ from the photograph due to regular improvements)
Salient Features

- Pressure Chamber is made of 8 mm Thick Stainless steel seamless pipe.
- The Lid and screws are made of very thick SS plate.
- The Pressure is monitored by imported pressure transmitter.
- Pressure Control within 0.5 Kg/cm².
- Temperature is controlled using PID temperature controller.
- Temperature Control within ±2 Deg C.

Safety Features

The instrument contains pressure up to 22 Kg/cm² (300 psi) which is about 10 times the pressure in a car tyre.

The safety of instrument and operator is paramount while using this instrument. SSIPL has introduced various safety features in the instrument. Some of the are

- The Chamber is designed with three safety devices for over shoot of pressure.
  a) The input is regulated by digital pressure control which switch off the solenoid value once the desired pressure is reached.
  b) A separate pressure switch with solenoid value is provided in series with the first solenoid value. The value of this pressure switch is set slightly higher than the set value, and will cut off the pressure if the digital pressure control fails.
  c) A release value is provided on the top, set at ~25 kg/cm² and will release the pressure if both the solenoid fails.