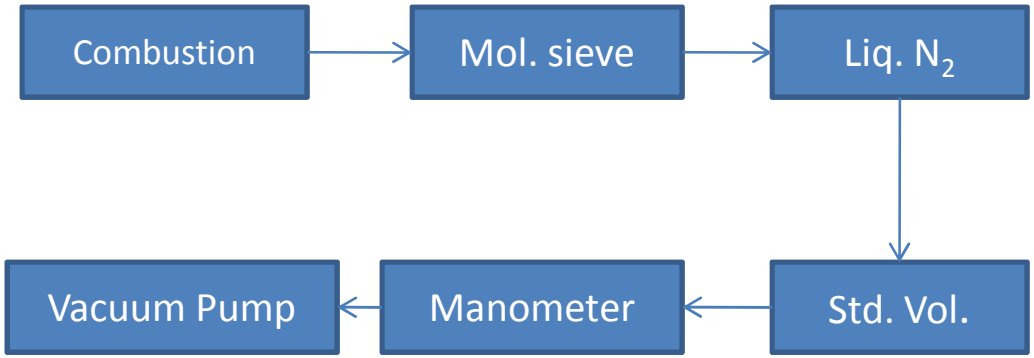
Determination of Carbon in Uranium metal by Low Pressure Method

Need for the Analysis

Carbon in uranium has considerable effect on its physical properties, a simple and precise method for C determination is often required.

Principle of Detection

- Uranium turning burn at 650°C
- CO_2 and moisture get trap in molecular sieve
- By heating molecular sieve CO_2 and moisture get trap in liquid nitrogen
- CO_2 and moisture get separated in liquid nitrogen and acetone slurry
- CO_2 is expanded in standard volume



Salient Features

- In house fabricated system
- Range: 50 µg/g to 1200 µg/g Carbon
- Precision: ± 5 %