

## **Total Leucocyte Count (TLC) Chamber and Sprayer**

### **Principle:**

Total leucocyte count is based on the dilution of blood and the counting of white blood cells under a microscope using a counting chamber. The blood is diluted with a diluting fluid that lyses red blood cells and stains leucocytes, making them visible for counting.

### **Components:**

- Improved Neubauer counting chamber
- Cover glass
- Leucocyte diluting fluid (e.g., Turk's fluid)
- Sprayer (used to rinse and evenly spread fluid on the chamber)

### **Uses:**

- Determination of total white blood cell (WBC) count
- Diagnosis and monitoring of infections and blood disorders
- Routine hematological analysis

### **Advantages:**

- Simple and economical method
- Requires minimal equipment
- Suitable for teaching and clinical laboratories