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Speciality Valve is a renowned name among leading <u>Safety Valve Manufacturers in India</u>, providing sturdy and precision made safety solutions for diversified industrial applications. Safety valves are an integral component in ensuring equipment integrity as well as safeguarding human life by releasing pressure from the system automatically prior to it becoming hazardous.

Parts

- 1. Valve Body: The primary mounting that accommodates internal components and attaches to the system.
- 2. Spring: Regulates the set pressure by controlling the pressure required to open the valve.
- 3. Disc: The movable element that closes against the valve seat and rises when pressure passes the threshold.
- 4. Bonnet: Contains the spring and shields internal mechanisms.
- 5. Seat: The sealing surface that engages with the disc in order to regulate flow.

Working Mechanism

The valve is closed for normal pressure. When pressure builds, it pushes the disc. After it overcomes the spring pressure (set pressure), the disc rises, allowing excess pressure to escape through the outlet. The spring seats the disc when pressure has receded to a safe level, thus halting the release and restoring system integrity.

Advantages

- Preserves Equipment and People: Stalls disastrous failures brought about by overpressure.
- Automatic Operation: Reacts immediately to out-of-limit pressure variations.
- Reliable and Durable: Designed to operate under severe operating conditions.
- Low Maintenance: Minimalistic design supports long term operation with low maintenance.
- Regulatory Compliance: Needed for compliance with safety codes and regulations.

Functions of Safety Valve

- Overpressure protection
- Pressure regulation in emergency situations
- Safety assurance for boilers, tanks, and pipelines

Types of Safety Valve

- 1. Steam safety valve
- 2. Thermal safety valve
- 3. Conventional Safety Valve

