(c) specific requirements for assist equipment (if any); and

(d) specific requirements for testing conditions, i.e., device temperature, ambient temperature, ambient pressure, etc.

Test parameters shall be listed, i.e., time between openings, number of tests, etc.

**NB-7600  NONRECSRLOSING PRESSURE RELIEF DEVICES**

**NB-7610  RUPTURE DISK DEVICES**

Rupture disk devices certified in accordance with NB-7720 are subject to the following:

(a) rupture disk devices shall not be used as the sole pressure relief devices;

(b) rupture disk devices used in conjunction with pressure relief valves shall be located only on the outlet side of the valve (NB-7623).

**NB-7611  Burst Pressure Tolerance**

The burst pressure tolerance at the specified disk temperature shall not exceed ±2 psi (±15 kPa) for stamped burst pressure up to and including 40 psi (300 kPa) and ±5% for stamped burst pressure above 40 psi (300 kPa) as established by the rules of NB-7613, unless other values have been established in the Design Specification and are covered in the Overpressure Protection Report.

**NB-7612  Tests to Establish Stamped Burst Pressure**

(a) Every rupture disk shall have a stamped burst pressure established by rules of NB-7611 within a manufacturing design range at a specified disk temperature, and shall be stamped with a lot number.

(b) Each lot of rupture disks shall be tested in accordance with one of the following methods. All tests of disks for a given lot shall be made in a holder of the same form and pressure area dimensions as that being used in service.

(1) At least two sample rupture disks from each lot of rupture disks shall be burst at the specified disk temperature. The stamped burst pressure shall be determined so that the sample rupture disk burst pressures are within the tolerance specified by NB-7611.

(2) At least four sample rupture disks, but not less than 5%, from each lot of rupture disks shall be burst at four different temperatures distributed over the applicable temperature range for which the disks will be used. This data shall be used to establish a smooth curve of burst pressure versus temperature for the lot of disks. The burst pressure for each data point shall not deviate from the curve more than the burst pressure tolerance specified in NB-7611.

The value for the stamped burst pressure shall be established from the curve for a specified disk temperature.

(3) For prebulged solid metal disks or graphite disks only, at least four sample rupture disks using one size of disk from each lot of material shall be burst at four different temperatures, distributed over the applicable temperature range for which this material will be used. This data shall be used to establish a smooth curve of burst pressure versus temperature for the lot of material. The burst pressure for each data point shall not deviate from the curve more than the burst pressure tolerance specified in NB-7611.

At least two disks from each lot of disks, made from this lot of material and of the same size as those to be used, shall be burst at the ambient temperature to establish the room rating of the lot of disks. The curve shall be used to establish the stamped rating at the specified disk temperature for the lot of disks.

**NB-7620  INSTALLATION**

**NB-7621  Provisions for Venting or Draining**

When a rupture disk is used in conjunction with a pressure relief valve, the space between the rupture disk and the pressure relief valve shall be vented and/or drained to controlled thermal dissipation or discharge storage systems.

**NB-7622  System Obstructions**

Piping and other components downstream of the rupture disk shall be constructed so that bursting of the rupture disk will not impair the function of the pressure relief valve by the release of rupture disk material.

**NB-7623  Rupture Disk Devices at the Outlet Side of Pressure Relief Valves**

A rupture disk device may be installed at the outlet side of pressure relief valves if the following provisions are met:

(a) the set pressure of the valve is independent of back pressure, or the set pressure of the valve plus the stamped burst pressure of the rupture disk plus any pressure in the outlet piping does not exceed the limits of NB-7400;

(b) the relieving capacity meets the requirements of NB-7300;

(c) the stamped burst pressure of the rupture disk at the specified disk temperature plus any pressure in the outlet piping from the rupture disk device shall not exceed the secondary Design Pressure of the pressure relief valve and the Design Pressure of any pipe or fittings between the valve and the rupture disk device. However, in no case shall the stamped burst pressure of the rupture disk at the operating temperature plus any pressure in the outlet piping from the rupture disk device exceed the limits of NB-7400;