



IS 7080 (Part 3): 2024 MTP Suction Apparatus Specification Part 3 Electrically Operated (Third Revision)

The MTP (Medical Termination of Pregnancy) suction apparatus is a medical device used for early abortion or miscarriage management. It consists of a suction pump, a flexible cannula (tube), and a collection chamber to remove pregnancy tissue from the uterus. The pump generates a vacuum to gently aspirate the tissue, while the cannula is inserted through the cervix. This procedure is typically performed during the first trimester of pregnancy and requires proper sterilization and medical expertise to minimize the risk of uterine injury or infection.

The IS 7080 (Part 3): 2024 standard specifies the requirements for electrically operated MTP suction apparatus, covering critical aspects of design, materials, safety, and functionality. The apparatus comes in two types: Type A (Light Duty) for general use and Type B (Heavy Duty), which features explosion-proof properties, making it suitable for environments with flammable gases, such as operating theaters. An MTP suction apparatus must provide reliable and safe operation in clinical settings. Constructed from high-quality, corrosion-resistant materials like stainless steel and borosilicate glass, key components—such as the tubing, cannula, and rubber parts—must withstand sterilization and frequent use without damage. The apparatus must be designed for stability, with Type B models mounted on antistatic castors for mobility in hospitals.

This Indian standard defines the dimensions, materials, and design specifications for essential parts, including the cannula, vacuum unit, and collection bottles, to ensure they meet performance and safety expectations. For safety, the standard stipulates that the apparatus must have no sharp edges and meet stringent electrical and operational safety measures. An explosion-proof design, bacterial filters, and overflow valves are required for safe operation. Furthermore, all electrical components must be spark-proof, and the wiring and switches must be capable of handling continuous load without failure. To ensure quality, the standard mandates multiple tests such as adhesion, vacuum seal, and noise level tests to verify structural integrity, safety, and quiet operation. It also outlines clear marking and labelling requirements, including vacuum control indicators and warnings, along with a detailed user manual to guide safe and effective use. By adhering to these standards,

the MTP suction apparatus ensures high levels of safety, durability, and performance, safeguarding both patient and operator in clinical environments.