Summary

on

<u>IS 3768 : 1996 – Ventilation Ducting — Vinyl Coated, Flexible and Semi - Rigid Specification</u>

Ducting made from coated fabrics are used in mines for auxiliary ventilation. Flexible ventilation ducting is suitable for forcing systems only, whereas semi-rigid ventilation ducting's may be used for both exhausting as well as forcing systems.

The Indian Standard IS 3768: 1996 specifies the requirements, methods of sampling and tests for vinyl coated flexible and semi-rigid ventilation ducting used for auxiliary ventilation in mines. It merges and revises previous Indian Standards IS 3768: 1966 - Ventilation ducting - Vinyl coated, flexible – Specification and IS 12814: 1989 Ventilation ducting - Vinyl coated, semi-rigid - Specification into a single Indian Standard 'IS 3768: 1996 - Ventilation Ducting — Vinyl Coated, Flexible and Semi - Rigid Specification'.

The current Indian Standard outlines specifications for the materials, including non-cellulosic yarns and polyvinyl coatings, and defines tests for tensile and tear strength, flex resistance, coating adhesion, electrical resistance, and fire resistance, ensuring durability and safety in hazardous mining environments. It also addresses safety aspects, such as ensuring anti-static properties and upgrading durability against tear and abrasion. Additionally, the standard includes testing of assembled duct such as pressure test, leakage test, suction test (for semi-rigid ducting only) and joint rings.

Sampling protocols, tolerance limits for dimensions, and quality control measures are also outlined in the standard.