

Black Hood Enclosure for MPI Machine

General Description:

The **Black Hood Enclosure** is a specially designed **light-shielding structure** used in **Magnetic Particle Inspection (MPI) machines** to enhance **fluorescent magnetic particle testing**. By minimizing ambient light interference, the black hood enclosure ensures **optimal visibility** of indications under **UV (blacklight) illumination**, improving **detection accuracy** in **non-destructive testing (NDT) applications**.



Constructed from **durable, non-reflective materials**, the enclosure effectively **blocks external light sources**, providing a **controlled inspection environment**. Its **ergonomic design** allows for easy operator access while maintaining **consistent inspection conditions**.

Key Features:

- ✓ **Enhanced Fluorescent Inspection** – Reduces external light interference for clearer **UV-visible indications**.
- ✓ **Durable Construction** – Made from **high-quality, non-reflective materials** for long-lasting performance.
- ✓ **Optimized for MPI Machines** – Designed to fit standard **Magnetic Particle Inspection (MPI) units**.
- ✓ **Ergonomic & Operator-Friendly** – Provides **easy access** while maintaining **light shielding**.

✓ **Customizable Sizes** – Available in various dimensions to fit different MPI machine models.

Black Hood Enclosure – Data Sheet:

Parameter	Specification
Material	Non-reflective, durable fabric or coated metal
Colour	Black (light-absorbing)
Compatibility	Designed for MPI machines with fluorescent testing
Purpose	Reduces ambient light interference for enhanced UV visibility
Access Design	Adjustable openings for operator convenience
Installation	Easy to attach/detach from the MPI machine
Customization	Available in multiple sizes based on machine requirements

Applications:

- ✓ **Fluorescent Magnetic Particle Inspection (FMPI)** – Enhances defect visibility under **UV blacklight**.
- ✓ **Quality Control & NDT Labs** – Used in **industrial and aerospace testing facilities**.
- ✓ **Automotive & Manufacturing** – Improves **defect detection in high-precision components**.

The **Black Hood Enclosure** is an **essential accessory** for any **MPI machine using fluorescent magnetic particle testing**, ensuring **accurate and efficient inspections in low-light conditions**.