The BM machine performs in automatic way the inspection of particles and the leak test of plastic bags; as option it is possible to add a labeler and other cosmetic controls.

**Advanced Features**
- **Leak test**
  - Pulses trains at high voltage up to 35KV with frequency around 1000 Hz. Fast, proven and efficient system without degradation nor contamination of the product.
  - **Leak test area**
  - Area surrounding the inlet gates and bottom welding.
- **Foreign matter inspection**
  - Each station is equipped with up to 5 cameras (colour and BW).
- **Detectable particles**
  - Fibers, dark particles, clear plastic particles.
- **Special features**
  - Set of in-built connectors for automatic check of electronics for leak test.
  - Aspirator for ozone evacuation.
  - Illumination system based on long lasting LED with different colours.
- **CFR21/Part11 compliance**
  - User friendly HMI based on 17” touchscreen PC running on Windows with full audit trail functions and several levels of passwords.
- **Additional controls**
  - Inspection of flip off, label presence, OCR-OCV, bar code inspection and other on request.

**Technical Specifications**
- **Dimensions (LxWxH)**: 200 x 250 x 200 cm.
- **Weight**: 3500 Kg.
- **Electrical consumption**: 6 KW.
- **Machine speed**: Up to 1500 bags/hr independent from the size.
- **Containers type**: Soft or semirigid bags.
- **Material of bags**: PE or PP.
- **Container sizes**: from 50 ml up to 2000 ml.
- **Minimum conductivity of liquid**: 30 microSiemens/cm.
**+ Station for infeed and outfeed**

A robotic arm takes the container from the belt and positions them between the pinces of the turret. Same arm performs also the unloading. At the infeed there are sensors for control of flip-off colour and presence of alufoil. Correct orientation of the bag is also checked.

**+ Station for particles inspection**

Inspection of foreign matter is performed by 4/5 cameras for each station, checking the containers from different directions. Containers are illuminated from LED of different colors each one enhancing different types of defects. Rotation of bags can be precisely adjusted by stepmotors that position the containers with the correct preset angle in front of cameras. The rotation of bags in horizontal position reduces the effect of undesired bubbles and allows the detection of foreign matter even if floating on the meniscus. Both dark and clear particles can be detected.

**+ Station for leak test**

The leak test is performed with well known system of high voltage that is applied in two times to the inlet part of the bags and to the welded area in the bottom. The bag is rotated before the test to have all internal sidewalls wet.

**+ Description**

The operator positions the bags over an infeed belt between some slots. A pneumatic arm collects automatically the containers one by one and positions them between the pinces of a turret. The turret moves in intermittent way through four stations each one dedicated to a different test. Two stations are dedicated to inspection of foreign matter after rotation of bags along their horizontal axis, one to the leak test with high voltage method and one to the labelling. Rejects bags are automatically expelled by falling, while accepted proceed towards outfeed belt.