

**Typical system for processing of loose material**

**1. Holding belt:**

For loading of the film waste

**2. Metal detector:**

For protection of the downstream granulator.

**3. Granulator:**

For size reduction of the film waste, down to the required particle size. On request the granulator may be equipped with a sound insulation cabinet.



**4. Material transport system :**

For discharge of the film flakes from the granulator and transporting to the downstream equipment.

**5. Pre-Soaking screw :**

For moistening of the material with water and separation of foreign material such as stones, metal pieces etc.



**6. Intensive washer:**

For surface cleaning of material from water soluble foreign contamination. A continuous cleaning device cleans the outer screen surface as well as the inner housing without additional water injection.



**7. Suction device**

To discharge the film particles from the intensive washer and transport to the downstream equipment

**8. Separation tank:**

For separation of the floating polyolefines from other plastics like PS, PET, PVC. Since the material feed takes place below the water surface and due to a special tank construction, the material remains in the separation tank for a considerable period of time which leads to a good separation result.



**9. Mechanical dryer:**

For mechanical surface drying of the film flakes after discharge from the separation tank. A continuous cleaning device cleans the outer screen surface as well as the inner housing without additional water injection.



**10. Suction unit:**

To discharge the film flakes from the mechanical dryer and transport to the downstream equipment

**11. Thermal dryer:**

For further reduction of the residual moisture. The film flakes are mixed with hot air for final drying. The heating may be done by electrical heating elements, gas heating or steam – heat exchanger.



**12. Suction unit:**

To mix the dried film flakes with fresh air and further transport to the silos or into big bags.

