

FILM PLANT, TAP PLANT & SHEET PLANT SCREW BARREL



HI-TECH Screw Barrel works is specialized in manufacturing of screw barrel for Film Plant (Blown film or Multi-layer), Tap plant and sheet plant.

Characteristics :

- ☆ Screw with **meddock mixing ring**, **barrier type** and barrel with **groove feed**.

Machinery Applications :

- ➔ Air Bubble Sheet Plant
- ➔ Thermo Plastic Sheet Plant
- ➔ Lamination Film Plant
- ➔ Multilayer Film Plant
- ➔ PP Sheet Plant
- ➔ PVC Film & Sheet Plant

Product Application :

- ➔ Flexible Packaging
- ➔ Pharmaceuticals
- ➔ Chemical Industry
- ➔ Automotive Engineering
- ➔ Infrastructure
- ➔ General Purpose
- ➔ Food & Beverages
- ➔ Agriculture
- ➔ Logistics
- ➔ Electronics
- ➔ Stationary & Printing
- ➔ Liquid Packaging

Technical Details :

- ➔ Screw with **meddock mixing ring** is to achieve perfect melt by mixing (with a fluid-mixing of different polymers with similar viscosities & achieve to thermal melt quality & uniform viscosity at lowest possible melt temperature).
- ➔ **Barrier screws** have a number of advantages, but the most important is the ability of the designer to pinpoint the location where melting is to be completed. In conventional screws, the typical melting pattern occurs in the compression section. The channel depth is gradually reduced in this region, forcing unmelted polymer outward, where it is subjected to high shear forces that cause it to melt.
- ➔ The groove feed barrel is used for achieving high shear and better transportation of material. As the coefficient of friction between the granules and screw barrel should be higher to get proper melting of material, it is imperative to have groove feed in the barrel for processing of polymers.
- ➔ Groove Sleeve is made from **HSS material** for internal cooling system. Hardness of HSS sleeve is **60-62 HRC** through vacuum hardening process.

