

DOWNWARD Single Layer Blown Film line with Water quenching of film bubble

Also available for
multi layers Co-Ex
blown film



The LWQF-400 is a water quenching film blowing attachment for downward extrusion of the film bubble. The melt coming out of the single die is blown up in same way as with conventional blown film system but it is here directed downward and is firstly lead through an air ring, after which it is blown up to required size and led through a water quenching ring where the film is in immediate contact with a

water curtain which will cool down the film instantaneously. After passing the water quenching unit, the film bubble is collapsed in an A-frame and entering the lower set of nip-rolls. The water on the flattened film is removed with squeegees and finally passed through a heating tunnel for efficient removal of all water.



Featuring

- Roll widths are 400 mm for max lay flat width of 350 mm.
- All parts in contact with the wet film are made of stainless steel, including the tank and water removal equipment.
- Single lip air ring is mounted on the die exit.
- Height adjustable water quenching ring with inserts made for each required bubble size.
- A-Frame angles are easily adjustable from outside the water tank with a turning wheel.
- Pneumatically operated rubber coated nip-rolls at end of A-frame, driven by a geared servo motor with high torque and RPM accuracy.
- Film drying tunnel is equipped with hot air nozzles for efficient removal of all water on the film.
- Can optionally be equipped with fully computerized controls of the entire line.
- For co-ex lines, the extruders can be supplied with a weighing hopper feeder system which enables a very accurate control of the layer thicknesses.
- Including heavy duty steel platform which hold all the extruders. Equipped with OSHA complying stare case and rails.
- Film Speed (Nip Roll Haul-off) 35 m/min (Other on request)
- Film Speed (Windup speed) 40 m/min (Other on request)
- Die diameter range 40-100 mm
- Die lip opening 1 mm (Other on request)
- Variable speed blower for air ring with power of 0.75 kW

25 mm, 30 L/D Single Screw Extruder type LE25-30/C

- New modern “One Pillar” design where the extruder barrel and drive is mounted on a single heavy duty pillar with threaded rod for height adjustment of +/- 50 mm
- Screw with Maddock mixing section at 22 D and with pineapple mixing at screw tip. Compression ratio 1 to 3. Other screw types on request.
- Screw speed infinitely variable from 0 to 300 RPM.
- 4 kW AC motor drive, coupled directly to an in line heavy-duty helical gear box, which in turn is connected to an individual housing containing the oversized thrust and position bearings for the screw drive.
- Programmable frequency inverter for infinite variable screw speed. Digital readout of the screw RPM and motor power in percent of full load from instruments mounted on the control panel.
- Optional vector motor drives for high torque even at very low RPM
- 4 heating zones on barrel, all with air-cooling. Each zone is equipped with high efficient air-cooling where copper sheets are mounted below the band heaters ending up in a multitude of fins. These fins catch the cold air and conduct it directly to the barrel. The sirocco type of cooling fans are all mounted below the barrel inside the barrel cover. The large wattage on the band heaters coupled with the efficient cooling system ensures very fast heating and cooling of each zone.
- Full steel cover over the entire extruder barrel with air venting grid on top.
- Modern designed extruder body where all components are fully enclosed.
- Stainless steel hopper, with a stainless steel 3-position turret safety valve where in one position the resin is fed directly into the screws feeding section, in the other the resin flow is shut off and in the third position the resin is discharged through a pipe on the front of the extruder barrel.



TECHNICAL DATA FOR 25 MM SINGLE SCREW EXTRUDERS

Description	LE 25-30
Screw diameter (mm)	25
Screw L/D ratio std. (others on request)	30
Motor Power (kW)	4
Motor Power for Vector drive (kW)	5
Screw Speed range (RPM)	0-300 / 0-200 for high torque version
Number of heating zones on barrel	4
Temperature controllers on panel	4+1 for die adaptor
Forced air cooling on all heating zones	YES
Total heating power (Watt)	4,500
Maximum output with LDPE Kg/Hr For Film Blowing	10