

at the peak of performance



- TWIN SCREW EXTRUSION PLANTS FOR PVC PIPES, PROFILES & DOOR/CEILING PARTITIONS
- SINGLE SCREW EXTRUSION PLANTS FOR
PVC / HDPE / PP PIPES & PROFILES
BRAIDED & SUCTION HOSE, GARDEN HOSE
PEN / REFILL, SLEEVE & STRAW
PVC NON-TOXIC MEDICAL TUBES
BOX STRAPPING & TWINE (Sutli)
WIRE & CABLE COATING.
- SHEET PLANTS & RAFFIA TAPE PLANT
- STRETCH CLING PVC FILM PLANTS
- BLOWN FILM PLANTS FOR
R-PVC / S-PVC FILM
LDPE / HDPE / HM-HDPE FILM
MULTI LAYER CO-EXTRUSION FILM
HEAT SHRINK FILM
PP-TQ FILM
- SEGMENTED TWIN SCREW CO ROTATING EXTRUSION PLANTS
- HIGH SPEED MIXERS & COOLER MIXERS

MANUFACTURERS & SUPPLIERS OF THERMOPLASTIC
EXTRUSION PLANTS & MIXER - COOLERS



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TWIN SCREW EXTRUSION PLANTS

FOR PVC PIPES AND PROFILES,
DOOR PANELS,
DOOR FRAMES ETC.



- Counter rotating parallel screws with internal cooling / fluid filled and barrel made from alloy steel (EN-41B) and Nitride hardened by gas nitride process and/or hard chrome plating after Nitride.
- Stainless steel hopper for smooth material flow with motorized Crammer feeder.
- Compact and reliable energy efficient helical gear box.
- Reputed brand AC motors and AC variable speed drives.
- Temperature control panel with Electronics digital PID temperature controllers with Ampere Meters, rotary switches. Contactors, MCBS and thermo couples for each heating zone. **PLC based touch screen control also available.**
- Controls for other motors also provided.
- Cost efficient, quality plant with reasonable price and lowest running cost per kg output of finished Products.

SPECIFICATIONS

	MODELS	TTS - 52 /100	TTS - 52 /140	TTS - 52 /200	TTS - 65 /170	TTS - 65 /250
Screw diameter	mm	52	52	52	65	65
L/D Ratio	-	18:1	22:1	25:1	18:1	22:1
Screw speed	RPM	5-50	6-55	6-60	5-45	5-53
Main Motor	KW	11.5	15.0	22.5	15.0	30.0
*Max. Output	Kg. / hr.	110	140	200	170	250
Pipe O.D. Min.	Mm	20	20	25	20	75
Pipe O.D. Max.	mm	110	125	200	200	250



TWIN SCREW GEAR BOX

Helical type gear box specially designed for Twin screw Extruder with thrust pack. Made under design from **HENSCHEL ANTIRIEBSTECHNIK GMBH, Germany.** Gearbox having oil pump for circulating oil in all bearings.



VACUUM CHAMBER (Calibrator) and WATER COOLING BATH UNIT



Fabricated from heavy sheet with anti corrosive coating. Vacuum pump connections and pressure gauge. **Water shower nozzles** provided throughout the unit. Height adjustment and traverse movement facility. Axial adjustment of unit on slide rails with locking arrangement. Water level control and drain. Accurate vacuum control.



CATER PILLAR (Haul off unit / traction unit)

Specially designed rubber pulling belts- Twin and multi track system. Driven by AC motor coupled with reduction gearbox.

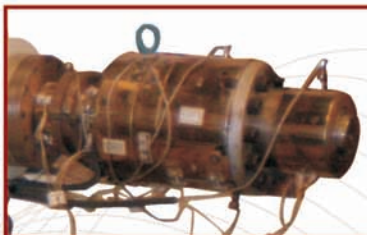


Cater pillar with Individual drive for each belt also available. Line speed range of 0.375 to 7.5 m/min. and up to 16 to 20 m/min. Opening range 10 mm to 250 mm and 30 mm to 350 between the belt is adjusted manually. AC variable speed drive in control panel. Synchronism schem with extruder motor.



Heavy duty cater pillar for Twin Screw Pipe Plants

DIE HEAD FOR TWIN SCREW PIPE PLANT



MULTI PIPE DIE



Made from alloy steel and hard chrome plated. Suitable for wide range of thickness. Thickness can be changed by changing pin of the die. Designed for smooth melt flow and low melt pressure. With Die trolley stand for dies above 200mm diameter pipe.

MODELS	PD-65	PD-110	PD-200	PD-315
Pipe range Diameter	20-65	20-110	63-200	110-315
Multi die Head	2x20	2x25	4x20	4x25

BACK VIEW OF TWIN SCREW PIPE PLANT





RPVC PIPE EXTRUSION PLANTS (Single screw)

For PVC pipes, Profiles, Trunking and casing capping



		MODELS	TCP-50	TCP-65	TCP-75	TCP-90	TCP-100
	Screw Diameter	mm	50	65	75	90	100
	L/D Ratio	-	24:1	24:1	24:1	24:1	24:1
	Main Motor	KW	10	15	22.4	30	37.3
	*Output	Kg./ Hr.	24 -35	30-60	40-80	100-125	130-150
With Supplied Die head of M/C	Pipe O. D. Min.	mm	12	12	19	25	50
	Pipe O. D. Max.	mm	32	50	50	110	150
With Extra Die Head	Pipe O. D. Min.	mm	12	38	38	75	N. A.
	Pipe O. D. Max.	mm	50	75	110	150	N. A.

High speed or heater cooler mixer will be required with above plants for making PVC compound for feeding in the pipe plant Extruder. Page 6 & 7

HDPE / PP / PP-R PIPE EXTRUSION PLANTS (Single screw)

	MODELS	THP-50	THP-65	THP-75	THP-90	THP-100	THP-125	THP-150
Screw Diameter	mm	50	65	75	90	100	125	150
L/D Ratio	-	30:1	28:1	28:1	28:1	28:1	26:1	26:1
Main Motor	KW	9.5	15	22	30	37.5	56	85
*Output	Kg./ Hr.	24 -35	30-60	40-80	100-125	130-150	150-200	250-300
Pipe O.D. Min.	mm	12	12	19	25	50	75	110
Pipe O.D. Max.	mm	65	75	90	110	150	250	350

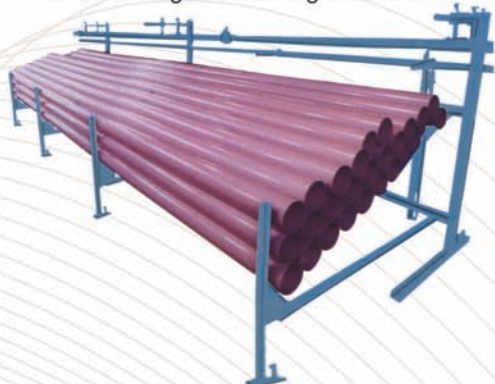


High output Plants with Groove feed Barrel & Screw are also available in above all models.

Note : Jockey extruder will be required to be connected with pipe plant for making parallel lines on outer surface of the pipes.

PIPE / PROFILE TILTING UNIT

Automatic pneumatic operated pipe tilting and stacking unit with digital counter.



FULLY AUTOMATIC PIPE CUTTER



- Plunger type and planetary type.
- Long life cutter for smooth and clean cut.
- Adjustable pneumatic clamping force for different thickness of pipes.
- Movement through pneumatic cylinder for smooth Operation.
- Optional Chamfering facility for Planetary cutter.
- Semi auto cutter for conduit & casing capping also available.

High speed mixer will be required for making PVC compound to feed the extruder of the PVC plant. (Page 6)

MIXER MACHINES



HIGH SPEED MIXER



Inside of Vessel

Models	HM-35 (Lab)	HM-130	HM-210	HM-250	HM-300
Vessel volume in liters	35	130	210	250	300
* Mixing tool motor capacity with dual/ single speed motor	4-5/ 5 HP	16-20/ 15 HP	31-40/ 40 HP	43-51/ 50 HP	50-60/ 60 HP
Mixer motor controls	Dual Speed/ Star Delta/ AC Vari Drive	Dual Speed/ Star Delta/ AC Vari Drive	Dual Speed/ Star Delta/ AC Vari Drive	Dual Speed/ Star Delta/ AC Vari Drive	AC Vari Drive
Max. Mixing capacity Kg per batch/ *Output Kg per hr.	10/ 40-50	40/ 160-200	60/ 240-300	80/ 320-400	100/ 400-500

- Option for Mixer with single speed motor and AC Variable speed drive is beneficial for electrical installation and equipments. It controls/ regulates starting heavy inrush current (6-7 times of full load current) of the motor. Resulting into increase in motor winding, bearings & vee belts life and reduce maintenance & electrical consumption.
- Motor capacities mentioned in above table are for making RPVC/ UPVC compound. Motor capacity will be higher than mentioned for making plasticized/ soft PVC compounds. **Mixers for special applications are also available.**
- Specifications same as described for Heater - Cooler Mixer on Page-7

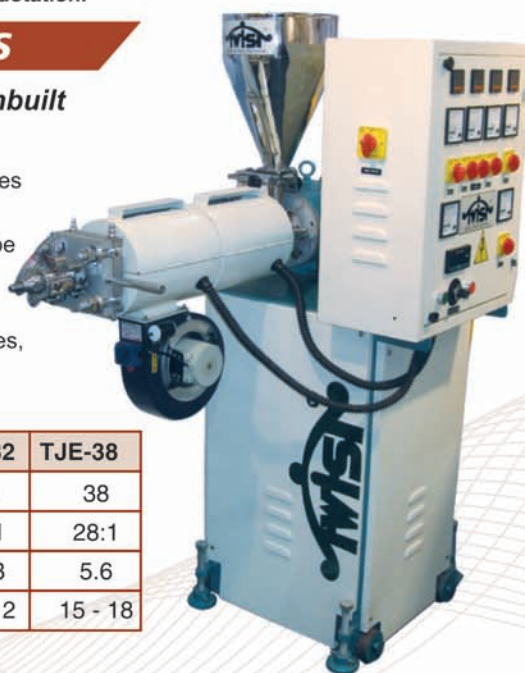
** Mixer Motor Capacity may change according to application. It will be as per our quotation.*

JOCKEY / LAB. EXTRUDERS

Portable type of mini extruder with inbuilt temperature control cabinet.

Jockey Extruders required for laboratory purposes and to be connected with pipe plants, Garden hose/ pipe plants, Pen barrel plants, Medical tube plants, wire & cable coating plants for making parallel lines on the outer surface and/or for COATING the inner or outer diameter of the pipes, hoses, Garden pipes, tubes, wires & cables.

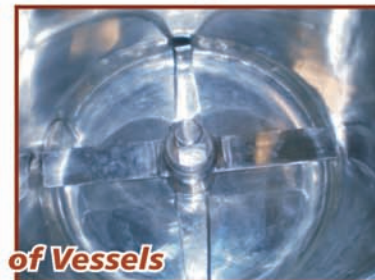
	MODELS	TJE-25	TJE-32	TJE-38
Screw diameter	mm	25	32	38
L/D Ratio	-	28:1	28:1	28:1
Main Motor	KW	2.2	3.73	5.6
*Output	Kg./ hr.	5 - 7	10 - 12	15 - 18





HEATER - COOLER MIXER (MIXER WITH COOLER)

- Vessels are dual jacketed. Inner vessel fabricated from 5 mm thick stainless steel sheet. Outer jacket fabricated from heavy steel sheet with Water inlet and outlets provided.
- Aluminum cast / fabricated lid and discharge valve will be pneumatic operated.
- Blades made from stainless steel and treated for hard face coating on the mixing edges for long lasting. Stainless steel baffles plate with facility to change the angle, for different compounds. Thermocouple provided in the bottom of baffles so that it remains in contact of material under mixing.
- It will show the real temperature of mixing batch.
- Teflon ring provided in the bottom of vessel, Oil seal housing with oil seal below the vessel providing for perfect sealing and avoid material leakage into bearings.
- Additional gland (rope type) sealing also provided in addition to above seals for special application mixers for pigments and MASTERBATCH MAKING PURPOSE.
- Specially designed heavy duty C.I. "Bearing and vessel housing" gives equilibrium during mixing.
- Specially designed cone type pulley will be provided on mixer vessel shaft to minimize cantilever loading on the shaft.
- Control Panel having mixer motor control, Ampere meter, Temperature controller, hooter/ indicator and main switch.
- Option for Mixer with single speed motor and AC Variable speed drive is beneficial for electrical installation and equipments. It controls/ regulates starting heavy inrush current (6-7 times of full load current) of the motor. Resulting into increase in motor winding, bearings & vee belts life and reduce maintenance & electrical consumption.



Inside of Vessels

MODELS	HCM-Lab	HCM-1340	HCM-2150	HCM- 2550	HCM- 3060	HCM- 4275	HCM- 4580	HCM- 50150
Batch capacity	05 Kg	40 Kg	60 Kg	80 Kg	100 Kg	120 Kg	150 Kg	200 Kg
Mixer Motor - HP*	4/5 Dual speed or 3	20/24 Dual speed or 20	31/40 Dual speed or 40	43/51 Dual speed or 40	50/60 Dual speed or 50	75.0 HP	90.0 HP	134.0 HP
Cooler Mixer Motor- HP	1.0	5.0	5.0	7.5	7.5	10.0	10.0	15.0
Mixing tool RPM	500/1000	500/1000	500/1000	430/860	430/860	100 to 750	100 to 750	100 to 750
Dual speed /Single Speed	or 750	or 750	or 750	or 750	or 750	Variable	Variable	Variable
Mixer motor control	Dual Speed/ Star Delta/ AC Vari Drive	Dual Speed/ Star Delta/ AC Vari Drive	Dual Speed/ Star Delta/ AC Vari Drive	Dual Speed/ Star Delta/ AC Vari Drive	Dual Speed/ Star Delta/ AC Vari Drive	AC Variable speed Drive	AC Variable speed Drive	AC Variable speed Drive
Cooling Water Requirement	70 Lts. / Hr.	300 Lts. / Hr.	400 Lts./ Hr.	550 Lts./ Hr.	600 Lts./ Hr.	700 Lts./ Hr.	800 Lts./ Hr.	1200 Lts./ Hr.
Total Electrical Load	3.75 KW	22.0 KW	34.0KW	44.0 KW	51.0 KW	63.5 KW	74.5 KW	112.0 KW
Floor Space Requirement	1.0 X 0.8 Mt	3.5 X 4.0 Mt	3.7 X 4.2 Mt.	4.0 X 4.2 Mt.	4.2 X 4.5 Mt.	4.5 X 5.0 Mt.	4.5 X 5.0 Mt.	5.0 X 6.0 Mt.

*Mixer Motor Capacity may change according to application. It will be as per our quotation.

COATING & STRAPPING PLANTS



WIRE & CABLE (Coating) PLANT (PVC/PE)

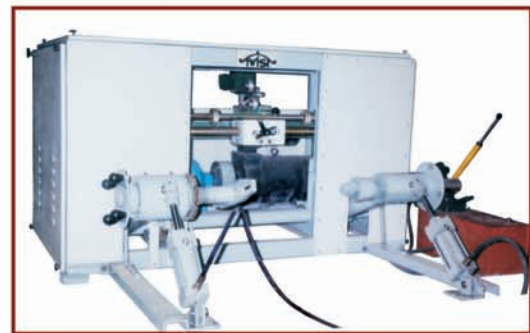


MODELS	TCW - 50	65	75	90
L/D Ratio	28 : 1	28 : 1	28 : 0	26 : 1
Extruder Motor	07.5 kw	11.5 kw	18.5 kw	30.0 kw
*Melt out put Kg./hr.	35	60	80	130
Caption/haul off unit motor	01.5 kw	02.0 kw	03.7 kw	05.0 kw
Spool/ Drum Winder Motor	02.0 kw	03.7 kw	05.0 kw	07.5 kw

Note: Jockey extruder required to be connected with wire and cable coating plant for making parallel lines on outer surface or for making coated wires. **Specs and details of jockey extruder on page-6**

Spool Winder

for winding coated wire on drum/ spool.



BOX STRAPPING, MONOFILAMENT, SUTLI (TWINE) MAKING EXTRUSION PLANT

For making PP, HDPE, PET Box Strapping : Conventional and Auto heat seal type also available with sheet die, Slitter and Multi-Station winder

MODELS	TBS-45	TBS-65	TBS-75
Screw Diameter	45 mm	65 mm	75 mm
Screw L/D Ratio	28:1	28:1	28:1
Extruder Motor KW	7.5 KW	15.0 KW	22.4 KW
*Out put Kg/Hr	28-32	40-60	90-110
Primary Gadget motor KW	1.5	3.73	5.0
Number of rollers	5	5	7
Secondary Gadget motor KW	3.73	5.0	11.2
Number of rollers	7	7	9
Orientation Unit Heating load	9 KW	15 KW	21 KW
Cam Operated Winder stations	02	04	06
Stabilizing unit load for Auto Seal type strap making plant	1.5 KW & Chilling Plant*	3.73 KW & Chilling Plant*	3.73 KW & Chilling Plant*



*Chilling plant will be required for making Auto heat seal type strap. It is not inclusive with the box strapping plant. It is to be arranged by the buyer

PVC NON-TOXIC MEDICAL TUBE PLANT

For making medical use tubes for
I V set, scalp vein tubes, Rail tubes,
Blood & urine tubes.

SPVC Blown film/ sheet Plants for
making PVC Blood & urine pouches
also available.



Models	TTX-45	TTX-50
Screw Diameter	45 mm	50 mm
L/D Ratio	26 : 1	26 : 1
Tube Size Range	1 to 30 mm	1 to 38 mm
Extruder Motor	5.0 KW	7.5 KW
Tube Puller Motor	0.75 KW	0.75 KW
*Output Kg./Hour	20-24	28-32
Total Connected Load	12.5 KW	14 KW

Jockey extruder required to be connected with the plant for making RAIL TUBES.
Specs and details of jockey extruder on Page - 6.

PVC GARDEN PIPE & HOSE PLANT

Models	TGH-50	TGH-65
Screw Diameter	50.mm	65.mm
L/D Ratio	26/ 28 : 1	26/ 28 : 1
Tube Size Range	9 to 38 mm	12 to 65 mm
Extruder Motor	7.5 KW	11.2 KW
Tube Puller Motor	0.75 KW	0.75 KW
*Output Kg./Hour	28-32	35-55
Total Connected Load	14.5 KW	20.5 KW

Coated, Zebra and Petrol Garden Pipes can be made.

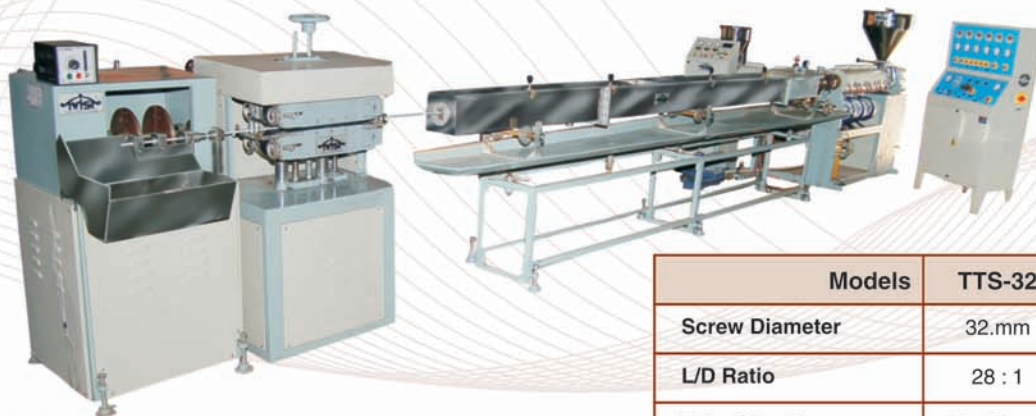
High speed will be required with above plants for making PVC compound for feeding in the Extruder. Page-6



Note : Jockey extruder required to be connected with garden pipe plant for making coated garden pipes (Petrol garden pipe) and for making lining on outer surface of the pipe. Specs and details of jockey extruder on page-6



SLEEVES, STRAW & PEN, REFILL MAKING PLANT (PP/HD/LD)



Online cutters for cutting long length and small pieces of tubes are different and customised with customer's requirement. On line Cutters are equipped with servo motor, controller & encoder or magnetic clutch brake & encoder for precise and accurate cutting length. Winder with traverse assembly is provided for flexible tubes, if required. Die and calibrating systems will be different for different items/tubes/profiles.

Models	TTS-32	TTS-38	TTS-45
Screw Diameter	32.mm	38.mm	45.mm
L/D Ratio	28 : 1	28 : 1	28 : 1
Tube Size Range	1 to 20 mm	1 to 32 mm	3 to 38 mm
Extruder Motor	3.75 KW	5.00 KW	7.50 KW
Tube Puller Motor	0.375 KW	0.75 KW	0.75 KW
*Output Kg./Hour	12-14	19-22	28-32
Total Connected Load	7.4 KW	9.7 KW	13.5 KW

Note : Jockey extruder required to be connected with plant for making lining on outer surface of the tube/straw/pen barrel.
Specs and details of jockey extruder on page-6

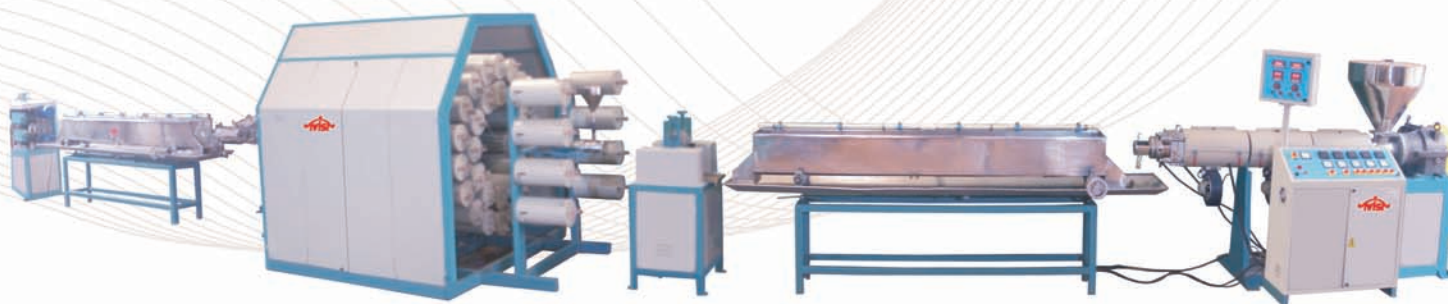
SHEET MAKING PLANT FROM LDPE/HDPE/PP/NYLON/HIPS



With Coat hanger (Tee) die, Polishing stack, hot / cold oil / water circulation & cutter.

Models	TS-65	TS-75	TS-90	TS-100	TS-125
Screw Diameter	65 mm	75 mm	90 mm	100 mm	125 mm
Screw L/D Ratio	30:1	30:1	28:1	28:1	28:1
Extruder Motor KW	15.0 KW	22.4 KW	37.3 KW	56.0 KW	75.0 KW
Sheet width min. - Max	500-800	500-900	700-1200	800-1500	1000-2000
Polishing stack motor KW	2.0 KW	3.73 KW	5.00 KW	7.5 KW	10.0 KW
Out put Kg/Hr	80-90	90-100	130-140	190-210	250-280
*Total connected load	45.0 KW	56.0 KW	82.0 KW	103.0 KW	141.0 KW

BRAIDED HOSE MAKING PLANT



MODELS	Screw diameter mm		L/D ratio	Extruder motors-KW		*Out put Kg/hr	Hose size range Diameter mm
	Tubing Extruder	Coating Extruder		Tubing Extruder	Coating Extruder		
TBH 5050	50	50	26/ 28 : 1	7.5	7.5	40-60	5 to 25
TBH 5065	50	65	26/ 28 : 1	7.5	11.2	60-80	5 to 32
TBH 6565	65	65	26/ 28 : 1	11.2	11.2	80-100	10 to 50

SUCTION HOSE MAKING PLANT

MODELS	Screw diameter mm		L/D ratio	Extruder motors-KW		*Out put Kg/hr	Hose size range Diameter mm
	RPVC Extruder	Soft PVC Extruder		RPVC Extruder	Soft PVC Extruder		
TSH 5065	50	65	23:1 & 26:1	7.5	11.2	60-80	19 to 100
TSH 6565	65	65	23:1 & 26:1	15.0	11.2	80-100	50 to 150

Note: Raw material for making braided hose is Soft PVC granules and for suction hose it is soft PVC granule as well as Rigid PVC compound. Soft PVC granules are available in market or can be made in house on extrusion plant. Braided and suction hoses can be made directly from dry blend PVC compound also. High Speed Mixer will be required for making PVC compound. (Page 6). Jockey Extruder has to be connected with the hose plant, if parallel colour line or strap is required on outer surface of the hose. Specs and details of Jockey extruder is on page-6.

PVC COMPOUNDING / GRANULATION PLANT : WITH STRAND CUTTER

- Plant consisting of extruder, temperature control panel, Die head, Stainless steel water bath and strand cutter (Pelletiser/ Granulator).
- High speed mixer/ Heater- cooler Mixer will require for preparing PVC compound for feeding into Extruder for granulation.

MODELS	TCG-65	TCG-75	TCG-90	TCG-100 / 150	TCG-100 / 180	TCG-100 / 220	TCG-125 / 180	TCG-125 / 220	TCG-150
Screw Dia. mm	65	75	90	100	100	100	125	125	150
Main Motor KW	11.0	18.5	30	37.0	45.0	55.0	45.0	55.0	75.0
*Max. Output Kg./ hr.	50-60	80-100	100-120	140-150	160-180	200-220	170-190	210-230	280-300
Cutter blades / load KW	6 / 0.75	6 / 0.75	8 / 1.0	8 / 1.0	8 / 1.5	12 / 1.5	12 / 1.5	12 / 1.5	16 / 2.0



PLASTIC RECYCLING / REPROCESSING GRANULATION PLANT : WITH STRAND CUTTER

- Plant consisting of extruder, temperature control panel, Die head, Stainless steel water bath and strand cutter (Pelletiser/ Granulator).
- Strand cutter (Pelletiser/ Granulator) is suitable for all types of polymers and recycling/ reprocessing.
- Optional Screen changer (Hydraulic or Manual operated) for filtration of dust & impurities is preferable for Reprocessing.

MODELS	TRP-65	TRP-75	TRP-90	TRP-100	TRP-125	TRP-150
Screw Dia. mm	65	75	90	100	125	150
Main Motor KW	15	20	30	40	50	75
*Max. Output Kg./hr.	60-70	70-90	110-130	170-200	200-250	270-300
Strand Ctr. blades/ Load KW	6 / 0.75	6 / 0.75	8 / 1.0	12 / 1.5	12 / 1.5	16 / 2.0

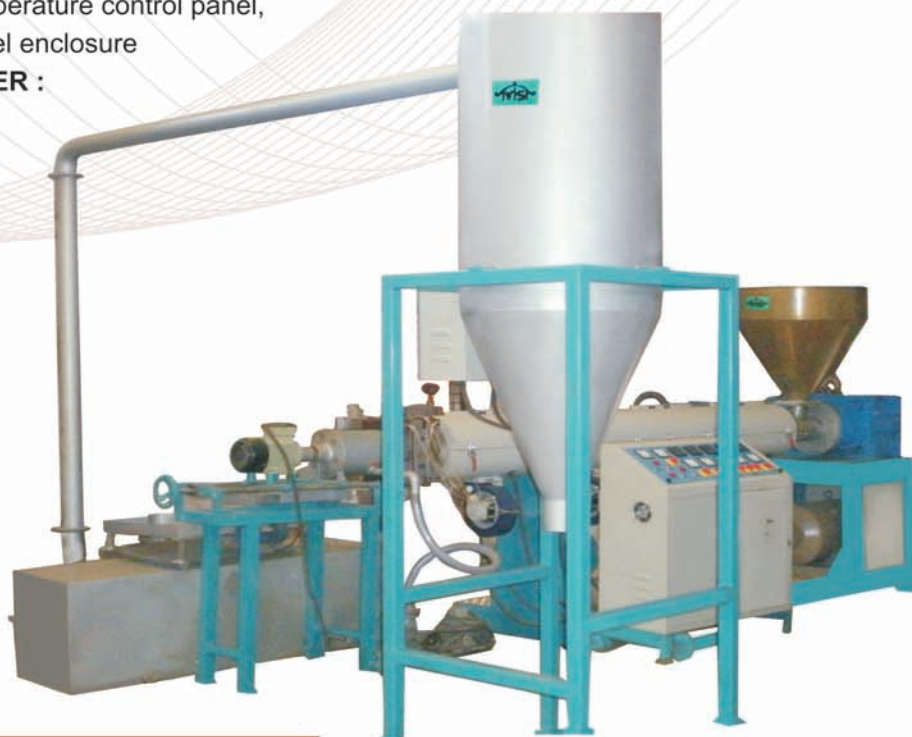


GRANULATION/ PLASTIC RECYCLING/ REPROCESSING OF PVC/ LDPE/ HDPE/ ABS etc. WITH DIE FACE CUTTER :

Plant consisting of extruder, temperature control panel, Die face Die head, Stainless steel enclosure and motorised **DIE FACE CUTTER** :

Available in TWO types :

1 - Under Water palletising
Die face cutter
for all types of polymers
except PP.



AIR COOLED DIE FACE CUTTER :

Suitable for PVC filler based compounds, cable compounds, ABS reprocessing & colouring compounds.

Moisture free and with high dielectric strength cable compounds and granules can be obtained from Plant with Air cooled Die face cutter.



MODELS	TGDF-65	TGDF-75	TGDF-90	TGDF-100	TGDF-125	TGDF-150
Screw Dia. mm	65	75	90	100	125	150
Main Motor KW	12	20	30	40	50	75
*Max. Output Kg./hr.	60-70	70-90	110-130	170-200	200-250	270-300
Die Face Ctr. Load	3.0 KW	4.0 KW	4.5 KW	6.0 KW	6.0 KW	7.5 KW



EXTRUDER WITH VENT : (Vented Extruder)

Extruders with vent are equipped with vent hole in the barrel of the extruder. Connecting bracket is mounted on vent hoel. It is connected with vacuum pump through the hose.

Extruders with vent are to extract/ remove moisture and impure gases from the polymers under process.

Extruders with vent are available for all models of plants (compounding, granulation and reprocessing) shown in the tables at EXTRA COST.



PLASTIC SCRAP GRINDER

Models	TSG-12	TSG-15	TSG-18
Rotor Type	Steps/ solid	Steps/ solid	Steps Type
Rotating blades	9/ 3 Nos.	9/ 4 Nos.	9/ 4 Nos.
Stationery blades	2 Nos.	2 Nos.	2 Nos.
Motor capacity KW	5.0 or 7.5	9.0 or 11.1	15.0



AGGLOMERATER



Models	AG-60	AG-150	AG-200	AG-350
Rotating blades	4 Nos.	4 Nos.	6 Nos.	8 Nos.
Stationery blades	4 Nos.	4 Nos.	6 Nos.	8 Nos.
Motor capacity	5.0 HP	30.0 HP	40.0 HP	80.0 HP
*Production Kg/hr	8-12	50-70	85-100	175-200

Introducing FIRST IN INDIA.... STRETCH CLING PVC FILM PLANT



For making cling films with

- Clear glass transparency
- More coverage
- More profitable
- Hygienic- Food grade
- Compatible for use in Microwave oven



Model	TCC-065
Screw Dia.	65 mm
Main Motor	15.0 KW
Die Type	Bottom Feed
Lay Flat Width	1200 mm
Max. Out Put	60 - 70 Kg/hr.
Winder	Two Station
Conn. Load	38.0 KW

Rotating Die



Heater - Cooler mixer will be required for making PVC compound to feed the extruder of the plant. (Page 7)

Heat Shrink Film Plant (PVC)



Models	THS-38	THS-50	THS-65
Screw Diameter	38 mm	45 mm	65 mm
Screw L/D Ratio	23:1	23:1	23:1
Extruder Motor KW	5.0 KW	7.5 KW	11.2 KW
Out put Kg/Hr	18-22	28-32	35-50
Primary Take up motor KW	0.32	0.32	0.75
Secondary Take up motor KW	0.75	0.75	1.5
Orientation Unit Heating load	9 KW	12 KW	15 KW
Centre type Winder stations	04	04	04
Total connected load	22.6 KW	31.0 kW	41.0 kW

- (1) Compact and user friendly operations.
- (2) Elegant look. (3) Rotating 360 degree Die & Air ring.
- (4) Separate control panel at operating level for often required operations.
- (5) Auto speed synchronism among all variable speed motors.
- (6) Balanced electrical & heating loads on 3 Phases.
- (7) Motorised nip roller height adjustments for both take off. (8) Two or Four station winder.
- (9) Oscillated extruder model is also available. (10) LDPE shrink film plants are also available.

Oscillated extruder model



Blown Film Plant For RPVC & SPVC

Mono Layer PVC Film Plants			
Models	TC or TCR-50	TC or TCR-65	TC or TCR-75
Screw Dia. mm	50	65	75
Extruder Motor KW	7.5	11.1	18.5
Die type	Bottom/Side	Bottom/Side	Bottom/Side
Lay flat width mm	700	1000	1500
*Max. Output Kg./ hr.	28-32	40-50	75-90
Nip Roller width mm	800	1100	1600
Winder Type	Centre	Centre	Centre
Connected Load KW	17.5	25.0	36.0

Models "TC" are for plant with stationery Die.

Models "TCR" are for plant with rotating Die.

Plant with Rotating die and oscillated extruder also available

High speed mixer will be required for making PVC compound to feed the extruder of the PVC Film Plant. (Page 6)



Blown Film & Mulching Film Plant For LDPE/ LLDPE/ HDPE & HM-HDPE

Mono Layer Film Plants				
Models	TH-50	TH-65	TH-75	TH-90
Screw Dia. mm	50	65	75	90
Main Motor KW	9.3	15	22.4	37.0
Die type	Spiral	Spiral	Spiral	Spiral
Lay flat width mm	700	950	1350	1850
*Max. Output Kg./ hr.	32-37	50-60	80-90	130-150
Nip Roller width mm	800	1100	1500	2000
Winder Type	Surface	Center	Center	Center
Connected Load KW	18.00	28.00	41.5	64.00

Plant with Rotating die/ Oscillated take up and oscillated extruder also available.

Wide width film plants for making mulching/ lining films also available.



PP (TQ) BLOWN FILM PLANTS



SIZING RING & WATER BATH : Aluminum / Brass sizing rings with jacketed water bath having cold / chilled water inlet and out lets with control valves. Water bath height adjustment facility provided. Chilled water is recommended for better clarity & shining of PP film. Water chilling plant is not inclusive with plant.

TAKE OFF UNIT : Having one set of rollers (Rubber and S. S. Coated steel roller) driven by AC motor coupled with reduction gear box. Stainless steel water bath provided. Stainless steel down ward lay flat flattening boards with adjustment devices. Ladder will be provided to climb on take off unit plat farm.

Models	TPQ-38	TPQ-50	TPQ-65
Screw Diameter mm	38	50	65
Screw L/D Ratio	26:1/28:1	28:1	28:1
Extruder Motor KW	5.0	9.3	15.0
Out put Kg. / Hr.	25-28	40-45	60-70
Lay flat width mm	50-250	75-600	150-900
Brass/ Aluminum Sizers	02 Nos.	02 Nos.	02 Nos.
Total Connected Load	12.5 KW	23.5 KW	36.25 KW

WINDER : Choice from Surface, Cantilever or center type winders. Winders having controller with torque motor coupled with reduction gear box. Cantilever and center type winders having set of Nip rollers with AC frequency drive & AC motor coupled with reduction gear box.

DRIER : having heater and blower with motor for drying the wet film.

- Spiral type Die head with **ROTATING DIE** is also available

MULTI LAYER CO-EXTRUSION BLOWN FILM PLANT



Models	THC 265	THC 332	THC 332	THC 350
Screw Dia. mm	2x65	3x32	3x32	3x50
Main Motor KW	2x15	3x3.75	3x5.0	3x15
Die type	Spiral 2L	Spiral 3L	Spiral 3L	Spiral 3L
Layflat width mm	1050	700	950	1850
*Max Output Kg./ hr.	100-120	34-38	60-68	160-180
Nip Roller width mm	1200	800	1100	2000
Winder Type	Center	Surface	Center	Center
Connected Load KW	54.5	20.5	33.5	63.00

Plants having Extruders with helical gear box on rotating plate farm with auto reverse-forward mechanism, temperature & control panel and blower. Take up unit rollers rotated by variable speed motors coupled with reduction gear box. Spiral type Die head with die sizes suitable for required film lay flat width. Surface type or center type winders with trimming knives are supplied with the plant.

Three layer (A-B-A) sandwich film making plant with two extruders also available.

PP/ HDPE RAFFIA TAPE PLANT

MODELS	TWS-65	TWS-75	TWS-90	TWS-100	TWS-125	TWS-150
Screw Diameter	65 mm	75 mm	90 mm	100 mm	125 mm	150 mm
Screw L/D Ratio	30:1	30:1	28:1	28:1	28:1	28:1
Extruder Motor KW	15.0	22.4	30.0	37.0	55.0	45.0
Max. Out put Kg/Hr	50-60	70-90	90-100	130-140	190-210	250-280
First Gadget motor	2.00 KW	3.73 KW	3.73 KW	5.00 KW	7.50 KW	10.00 KW
Second Gadget motor	3.73 KW	5.00 KW	5.00 KW	7.50 KW	10.00 KW	15.00 KW
Orientation chamber Heating load	12.0 KW	15.0 KW	25.0 KW	27.0 KW	30.0 KW	40.0 KW
Total load	50.0 KW	65.0 KW	90.0 KW	115.0 KW	150.0 KW	200.0 KW
No. of Cheese winders	80	80	110	110	140	200
Cheese winder load	20.0 KW	20.0 KW	27.5 KW	27.5 KW	35.0 KW	50.0 KW
Groove feed Models	TWSGF-65	TWSGF-75	TWSGF-90	TWSGF-100	TWSGF-125	TWSGF-150
Extruder Motor KW	22.4	30.0	37.0	55.0	75.0	100.0
Max. Output Kg/Hr	80-90	90-100	130-140	190-210	250-280	330-360

Gas ignition type orientation chamber is also available. Plant comprising of Extruder, Temperature and control panel including AC variable speed drives for the motors for Extruder, nip rollers, Gadget-1 & 2 and secondary take up rollers. Variable speed Drives with digital RPM meters, analogical Ampere meters and speed regulator potentiometers and speed synchronism are installed in the temperature control panel for all motors. Sheet Die according to plant models with heaters, stainless steel water bath take up, tape slitter device, 1st & 2nd gadgets, secondary take up, side tape trimming and collecting with grinding device is provided. Magnetic cheese winders are with cam traverse and individual controllers.

High Output

Real COMPACT BLOWN FILM PLANT

For making LDPE/ LLDPE/ HDPE & HM-HDPE or mix of these blown films.

Proven and tested technology and Performance Plants.

SPECIFICATIONS :

- Plasma- Gas Nitride hardened Barrel and high output - high speed Screw.
- Energy efficient and extruder application Helical Gear box.
- Temperature and control panel board with PID Digital temperature controllers, MCBs, Switches, Ameters, connectors and Main switch.
- AC drives for Extruder and nip roller motor.
- Spiral Die.
- Film embossing (RimZim) roller mounting arrangement.
- Surface Winder with Torque motor and controller.
- Minimum electrical consumption per kg production.
- Real Space saving. Choice for changeability of winder position suitable to your space- in line or right angle to take up nip roller.
- Plant with Rotating die/ Oscillated take up and oscillated extruder also available.

Energy efficient Real Power saver Plants



Models	TCHM-32	TCHM-38	TCHM-45	TCHM-55
Screw Dia.	32 mm	38 mm	45 mm	55 mm
Extruder Motor	5.0 KW	9.5 KW	15 KW	18.5 KW
Die type	Spiral	Spiral	Spiral	Spiral
Lay flat width	75-300 mm	100-450 mm	150-600 mm	200-850 mm
*Max. Output	18-22 Kg/hr	40-43 Kg/hr	55-65 Kg/hr	75-85 Kg/hr
Nip Roller	500 mm	650 mm	800 mm	1000
Winder	Surface	Surface	Surface	Surface
Connected Load	11.5 KW	19.5 KW	26.5 KW	37.0 KW

Conventional type medium speed blown film plants are also available as under. Output of these plants are long life, sturdy and maintenance free having less wear & tear. Rating of extruder motor and Max. Output in table above will be changed as table given here under. Other specifications remain same as above table.

Models	TCH-32	TCH-38	TCH-45	TCH-55
Extruder Motor	3.5 KW	7.5 KW	11.2 KW	15.0 KW
Max. Output	15-16 Kg/hr	30-35 Kg/hr	45-50 Kg/hr	50-60 Kg/hr



DOUBLE BUBBLE BLOWN FILM PLANT

Double Bubble compact blown film plants are also available with stationery & Rotating die.

TWIST ENGINEERING WORKS is one the leading manufacturers of plastic Extrusion Machineries in India. We are among the manufacturers making best quality of machineries. Backup with over decades of experience & expertise.

- **Screw and barrels** of all extruders are made from alloy Nitride steel (EN-41B) and Nitride hardened and or hard chrome plating after Nitride. It is fitted on energy efficient **Helical gear box** with inbuilt thrust assembly to withstand thrust pressure during extrusion.
- Screw is driven by AC motor coupled through a suitable Helical gear box as above. **AC variable speed drive** for extruder motor are installed in temperature control panel.
- Water circulation jacket is provided in feeding zone of barrel. Barrel is divided into heating zones with bend type heaters and blowers for maintaining the barrel temperature.
- Elegant look **Extruders** fabricated from heavy duty ISMC section. Painted with epoxy paint. Easy to open Independent enclosures for each Heating zones of the barrel are provided. All enclosures fabricated from CRC sheet and painted with Powder coating.
- **Electric & Temperature Control Panel** is fixed with imported Electronics digital PID temperature controller with Ampere Meters, rotary switches. Contactors, MCBS and thermo couple for each zones. Starter units for other equipments of the plant are accommodated in control panel.
- Variable speed Drives with digital RPM meters, Ampere meters and speed regulator potentiometers are installed on the temperature control panel for Extruder Main motor and motors of the variable speed equipments of the plants. **Speed Synchronism** among all variable speed motor of the plant are provided.
- Systematic control and power wiring with each wire end tagged.
- Voltage selector switch with voltmeter and main switch also provided in panel. Panel board fabricated from CRC sheet and painted with powder coating.
- **PLC Controlled HMI Touch Screen Panel also available.**
- All machineries made with heavy and sturdy structure and painted by epoxy/PU and powder coat paints.
- Extrusion Lines for Pipe, Profile, Tube & Sleeve, Blown Film, Compounding, Granulation, Box Strapping, High speed Mixer and Heater-cooler Mixer are with best technology and performance. These plants are energy efficient and high output with best overall efficiency.
- *Output of plants & models mentioned in the catalogue & tables are for bare EXTRUDER of the plants and approximate. It may vary with connected die, grade of raw material grade and formulation of compounding of raw materials.

OPTIONAL : Long life Bimetallic barrel and screws can be supplied for special applications. We are manufacturing Custom build and special application extrusion plants also.

OUR PRESENCE WORLD WIDE AT:



TWIST ENGINEERING WORKS

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Specifications described in this catalogue are approximate and are subject to alter / change without prior notice.