## **HDPE PIPES**

## 1. <u>INTRODUCTION</u>

High Density Polyethylene (HDPE) Pipes are manufactured all over the world by extrusion technique. Sizing methods still vary but the trend is the pressure sizing i.e. introducing air at the pressure of about 0.8 kg/cm2 to 1 kg/cm2 through one of the spider legs of the dies. HDPE Pipes are generally manufactured on single screw extruder.

HDPE Pipes find application in a variety of fields in India and abroad. The most important applications are as follows:

- Drinking water supply line
- Water lines in hilly areas. Here the property of flexibility of HDPE is exploited to the fullest extent
- Irrigation lines
- Industrial effluent disposal lines
- Sewage and gas lines
- Fuel gas line
- Mining Industry

# 2. MARKET POTENTIAL

There is a large market and very good scope envisaged for HDPE Pipes in the near future. Though some units are already in the line, there is good demand with the increase in housing/building activities spreading in rural and urban areas. Number of Chemical and Petrochemical plants are also being set up. Therefore, the demand for HDPE Pipes is also likely to rise. One of the important applications is gas pipe line. It has advantage over PVC pipe because it is unaffected even by temperature as high as 80 degree C and is inert to almost all chemicals. These pipes are also used in the effluent treatment plants and line.

### 3. BASIS & PRESUMPTIONS

(i) The output capacity is taken as 100 Kgs/hr. The unit will work at 20 hrs. per day for 25 working days in a month and 300 days in a year. The

output capacity may vary from machinery to machinery and the cost of machinery may also vary from supplier to supplier.

- (ii) The time period for achieving the full envisaged capacity utilisation is six months
- (iii) The labour wages are as per the prevailing rates in the market
- (iv) The rate of interest for fixed and working capital is taken as 12 per cent
- (v) The margin money requirement for this project is 30 per cent
- (vi) The pay back period of this project is 5 years
- (vii) The rate of land is taken @ Rs. 500/-per sq. mtr. and construction charges are taken @ Rs. 3500 per sq. mtr. This may also vary from place to place.
- (viii) The present profile has to be updated taking into prevailing cost of land, building, machinery etc. at the time of implementation of the project

### 4. IMPLEMENTATION SCHEDULE

The Time requirement for preparation of Project report : Two

months

Time requirement for selection of Site : One month

Time required for registration as Small Scale Unit : One

Week

Time required for acquiring the loan

Machinery procurement, erection and commissioning: Three months

Recruitment of labourer etc. : One month

Trial runs : One month

### 5. <u>TECHNICAL ASPECT</u>

#### MANUFACTURING PROCESS

HDPE granules are fed into the hopper of the extruder which goes into the heated cylinder of the extruder, where the granules melt and are conveyed (pumped) to the die exist. Now the melt passes through the die and takes the shape of the die i.e. circular shape and emerges from the exit of the die. It then passes through the calibrator and is forced to tale the shape of the inside of the calibrator which is round in diameter by the inside air pressure. This melt solidifies and taken round shape in the calibrator, which is cooled by passing chilled water through it continuously.

Now the solid pipe is taken out from the water and is drawn continuously from the die. The speed is adjusted according to the thickness of the pipe required and extruder out put. The pipes is either cut into 5 meters length or wound on the winder unit. Generally pipes upto 110 mm diameter can be made on this extruder.

### 6. **QUALITY & STANDARD**

HDPE Pipes for Potable Water Supply are manufactured as per IS: 8360

## 7. **PRODUCTION CAPACITY** (Per Annum)

(a) Quantity (M.T.) : 600 kgs.

(b) Value (Rs.) : 5,40,00,000.00

## 8. TOTAL POWER REQUIREMENT

Total connected load (KW) : 90

## 9. POLLUTION CONTROL MEASURES

The unit does not create any pollution. However, a proper ventilation should be made in the processing area for the better circulation of the fresh air.

## 10. ENERGY CONSERVATION

Entrepreneurs may select energy efficient machinery and proper planning has also to be made for saving energy in the unit.

## 11. FINANCIAL ASPECT

## A. FIXED CAPITAL

i) <u>LAND & BUILDING</u>: Area sq. mtrs. Rate Rs. per Sq. mtr. (Rs.)

Land 500 500.00 2,50,000.00

Building 300 3500.00

10,50,000.00

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Total:

13,00,000.00

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## ii) <u>MACHINERY & EQUIPMENT</u>:

Sr. No. <u>Description of machines</u> <u>Oty.(Nos.)</u>
(Rs.)

### (a) Production Unit

i) Complete HDPE Pipe Plant (Monolayer Single 20,00,000.00 Screw Extruder)

ii) Cooling Tower

2,00,000.00

iii) Scrap Grinder

75,000.00

(b) Testing Equipment & Other Accessories 4,00,000.00

(c) Electrification & Installation @ 10% of cost & machinery 2,67,000.00
(a) & (b)

(d) Pre-operative expenses

50,000.00

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Total cost of machinery & equipment ( a to d ) 29,92,000.00

- (e) Cost of Moulds & Dies 1,00,000.00
- (f) Cost of Office Equipment/Furniture/Computers etc. 3,00,000.00

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Total:

33,92,000.00

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Fixed Capital 46,92,000.00

(i) + (ii) = 
$$13,00,000 + 33,92,000$$

## B. WORKING CAPITAL

# i) Staff and Labour (Per Month)

	Designation (Rs.)			Salary (Rs.)		
Pro	duction Engineer/Manager	1		10,000.00	10,000.00	
Sale	es Executive	1		5,000.00	5,000.00	
Acc	ountant-cum-Store Keeper		1	4,000.00		
4,000.00						
Wat	tchman	2		3,000.00	6,000.00	
Sup	pervisor-cum-Chemist		1	5,000.00		
5,000.00						

Skill	ed Wo	orkers	3	3,500.00 10,500.00		
Help	ers		3	3,000.00	9,000.00	
					49,500.00	
Add 14,950.00		isite @ 10% of the Sala	ry			
				Total:	64,450.00	
				Say Rs.	64,000.00	
ii) (Rs.)	<u>Raw</u>	<u>Material</u> (Per Month)	Qty. (M	.T.) Ra	ate Rs. / M.T.	
	HDP	E Granules	50	75,000	37,50,000.00	
iii)	<u>Utili</u>	ties (per month):			(Rs.)	
	a)	Power			1,35,000.00	
		(60% utilisation x 90	KW x 500 h	rs. x Rs. 5 p	er unit)	
2,000.00	b)	Water				
2,000.00						
				Total:	1,37,000.00	
iv) (Rs.)	<u>Othe</u>	er Contingent Expenses	(Per month	)		
	a)	Repairs and Maintenar	nce			
	1,00	00.00				
	b)	Transportation Charge	es		15,000.00	
	c)	Postage and stationer	у		1,000.00	
	d)	Telephone/Fax/Compu	uter			
	2,00	00.00				
	e)	Consumable Stores				
	1,00	00.00				

f) Advertisement & Publicity

2,000.00

g) Insurance 7,000.00

h) Miscellaneous Expenses

1,000.00

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Total: 30,000.00

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## 12. TOTAL WORKING CAPITAL ( Per Month )

(Rs.)

i) Staff and Labour 64,000.00

ii) Raw Material

37,50,000.00

iii) Utilities 1,37,000.00

iv) Other Contingent Exp. 30,000.00

Total: 39,81,000.00

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Working Capital for 3 months 1,19,43,000.00

# 13. TOTAL CAPITAL INVESTMENT

(Rs.)

A. Fixed Capital

46,92,000.00

B. Working Capital for 3 months 1,19,43,000.00

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Total: 1,66,35,000.00

14. FIANCIAL ANALYSIS:

A. Cost of Production (per year) (300 days)

(a) Total Recurring Cost

4,77,72,000.00

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52,5	00.00						
	(c) Depreciation on machinery& equipment @ 10%						
	2,99,200.00						
	(d) Depreciation on Dies & Moulds @ 20%						
	20,000.00						
	(e) Depreciation on office equipment @ 20%						
	60,000.00						
	(f) Interest on total Capital Investment @ 12% 19,96,200.00						
						,01,99,900.00	
5,02,00,00	00.00			Or Sa	y Rs.		
	00,000.00						
B.	Sales/Turn over (per year)						
	<u>Item</u>		Oty.(MT)	Rate (MT	)	Value (Rs.)	
C.	HDPE Pipes Net Profit (Per y	/ear)	600	90,000	5	,40,00,000.00	
	Sales(Rs) -	Cost	of Production	(Rs.)	=	Profit	
(	Rs.)						
	5,40,00,000	-	5,02,00,000	)		=	
38,00,000 D.	.00 Net Profit Ratio	=	Net Profit x Sales	<u>100</u>			
		=	38,00,000 x 5,40,00,00		=	7.0 %	
E.	Rate of Return		= <u>Net Pr</u> Total Capital	<u>ofit x 100</u> I Investme			
		=	38,00,000 x 1,66,35,00		=	22.84 %	

Depreciation on building @ 5%

(b)

# F. Break-even Point Fixed Cost (Per Year) Rs. a) Depreciation on Building @ 5% 52,500.00 Depreciation on Machinery & Equipment @ 10% b) 2,99,200.00 Depreciation on Moulds/Dies & Office Equipment @ 20% 80,000.00 84,000.00 d) Insurance Interest on total capital investment 19,96,200.00 40% of salary and wages f) 3,07,200.00 g) 40% of other contingent expenses 1,01,400.00 -----Total: 29,29,500.00 Or Say Rs. 29,30,000.00 -----Net Profit (Per Year) B.E.P. % Fixed Cost x 100 = Fixed Cost + Net Profit

B.E.P. % =  $\frac{\text{Fixed Cost x 100}}{\text{Fixed Cost + Net Profit}}$ =  $\frac{29,30,000 \times 100}{29,30,000 \times 38,00,000}$ =  $\frac{29,30,000 \times 100}{57,30,000} = 51.1\%$ 

#### **MACHINERY & EQUIPMENT SUPPLIERS**

### 1) **A-ONE ENGINEERING**

71/2 Phase - 1, GIDC Vatva, Ahmedabad-382 445

Phone: 079-25834843Fax: 079-25834843 E-mail: aoneengineering@rediffmail.com

Web: www.aoneengineering.com

Products/Services: Plastic Processing machinery (Bag making machine)

### 2) A ONE INTERNATIONAL

11, Amar Estate, Anil Starch Road,

Opp: Super Bread Factory,

Naroda Road, Ahmedabad-380 025.

Phone: 079-22201482/22201861 Fax: +91-79-22203684

E-mail: aonead1@sancharnet.in Web: http: \\www.newyesh.com

Products/Services: HDPE/PP Woven Sack Machinery:

- 1) High speed 4,6 &8 shuttle circular looms
- 2) High speed magnetic type cheese winders
- 3) Flexographic printing machines
- 4) Bale Press Machines
- 5) Sutli Plant
- 6) Sutli Monofilament box strapping & all types of winders
- 7) Spares for all the above

### 3) AMBICA PLASTIC MACHINERY MANUFACTURERS

1-2, Kansawala Estate, Opp: Chakudia Mahadev,

Rakhial, Ahmedabad-23. (Guj.) INDIA

Phone: (O) +91-79-2274 5089, 6512 6275 Fax: +91-79-2278 2613

Cell: 098251 57891, 092274 48246

E-mail: info@ambicaplastic.com/ambica\_kalpesh@hotmail.com

Web: www.ambicaplastic.com

Products/Services : Reprocessing/H.D.P.E. Monofilament/P.P. Tap

**Plants** 

Sutli Plant with "T" Die HDPE/P.V.C. Pipe Plant

**Tubing Plant** 

**Ancillary Equipments** 

PP/HDPE Rope Machinery

Box Strapping Plant

Jerry Can Plant

### 4) CENTRAL MACHINERY &PLASTIC PRODUCTS

1, Lajya Estate, Mogra Road, Andheri East, Mumbai-400 069.

Phone: +91-22-28366198 Fax: +91-22-28375271

E-mail: cmp@bom3.vsnl.net.in Web: www.cmppin.com

Products/Services: Manufacturers of fully automatic blow moulding Machines for processing of PVC, HDPE, LDPE, PP materials from 5 ml. to

60 Itrs.

## 5) **DYNAMIC ENGINEERS (INDIA)**

B-54, Hari Nagar (Clock Tower),

New Delhi-110 064.

Phone: 011-25496293/25126188

E-mail: dynamicengineers@trade-india.com

Products/Services: Cooling Tower, Heat Exchanger, Indl. Chiller,

Mould Temp. Controller

## 6) FERROMATIC MILACRON INDIA LTD.

92 Phase – I GIDC, Vatva, Ahmedabad-382 445

Phone: 079-25890081 Fax: 079-25830125

E-mail: sales@fmi-ahd.com Web: www.milacronindia.comm

Products/Services: Mfg. of plastics injection moulding machines from

the

Range of 30 tons to 3000 tons and extrusion blow moulding machines.

### 7) **FIVE STAR ENGINEERS**

Bhagwati Estate, Opp: Bavri Kumbharwada, Idgah Road, Pratapnagar, Baroda-390 004.

Phone: (F) 0265-2581698 Telefax: 2580026 (R) 0265-2564896

(M) 098980 87865 E-mail: fivestarengineer@hotmail.com

Web: www.fivestarengineers.com

Products/Services: Double Die Extruder, Single Die Extruder

## 8) **FIXOPAN MACHINES PVT. LTD.**

71, Nehru Place, New Delhi-110 019

Phone: 0129-2237212/5067210-12 Fax: 0129-2237672

E-mail: roto@fixopan.net/sales @fixopan.net

Web: www.fixopan.net

Products/Services: Manufacturers of Rotomoulding machines,

Pulverisers.

Molds in cast aluminium/SS/MS, finished roto parts/planters.

## 9) **GUJARAT MACHINERY**

Plot No. 524, GIDC Phase II, Vatva, Ahmedabad-382 445.

Phone: +91-79 25830043 Fax: 079 25332439

E-mail: intek@icenet Web: www.gujaratmachinery.com

Products/Services: Plastic machinery viz: Wide Width Lamination

Plants.

## 10) **JAGMOHAN INDUSTRIES**

115 Sharad Industrial Estate, Lake Road, Bhandup (West),

Mumbai-400 078.

Phone: 25950246 Fax: 25965434

E-mail: jagmohan@vsnl.com Web: www.jagmohan.com

Products/Services: Plastic Automatic Blow Moulding Machine from

100 MI to 1000 Ltrs.

### 11) **JAI MATA ENGINEERING**

No. 734, Rajagopalanagar, B/h Maruti Theatre,

Peenya 2<sup>nd</sup> Stage, Bangalore-560 058.

Phone: 080-6763 4323 Cell.: 093437 33300, 098862 14330

Products/Services: Single Decker Cutting & Sealing Machine,

Double Decker

Cutting & Sealing Machine, Point to Point Cutting & Sealing Machine, Pouch Making Machine for Carry Bags, Slide Sealing Machine, Polyethylene/PP/HM/LLDPE Extruders, reprocessing Units, Automatic Roll Winding Nes, Scrap Grinders, Colour Mixer/Driers Card Making (sutli) Machine, Rotogravure Printing Machine, Automatic Liquid – Fill & Seal Machine, Automatic Form – Fill & Seal Machine, Thermoforming Machine, Seat Plant & Die.

### 12) KABRA EXTRUSIONTECHNIK LTD.

Kolssite House, Veera Desai Road, Andheri (West), Numbai-400 053.

Phone: 26734822/24 Fax: 267335041

E-mail: sales@kolsitegroup.com Web: www.kolsite.com

Products/Services: Twin screw extruders for RPVC pipes/profiles/pellets

high output single screw extruders for PO pipes raffia tape plants &

cheese winders monolayer & multilayer film plants.

#### 13) KONARK PLASTOMECH PVT. LTD.

Plot No. 81, GIDC, Odhav, Ambica Nagar Road, Ahmedabad-382 415.

Phone: 079-22281670 Fax: +91-79-22890874

E-mail: sales@konarkplasticmachinery.com

Web: www.konarkplastomech.com

Products/Services: Mfrs. Thermoplastic extrusion plants.

## 14) LARSEN & TOUBRO Itd.

LTM Business Unit, Mount-Poonamallee Road,

Post Bag No. 990, Chennai-600 089. Phone: 22497360 Fax: 044-22492471

E-mail: vpb@ltmindia.com Web: www.ltmindia.com

Products/Services: Injection Moulding Machines, Auxiliary Equipment

#### 15) **LOHIA STARLINGER LIMITED**

D-3/A, Panki Industrial Estate, Kanpur-208 022.

Phone: +91-5112-282001 Fax: +91-5112-282205

E-mail: sales@lohiagroup.com Web: www.lohiagroup.com

Products/Services: Complete range of Machinery for manufacture of PP and HDPE Woven sacks and Fabrics comprising of – Tape Extrusion Lines – High Speed Inverter controlled Tape Winders – Circular Weaving Machines – Fabric to Bag Conversions Machines – Compact PP

Multifilament Spinning Machine.

### 16) **MACPLAST**

49, Shreenathji Estate, Nr. Panna Estate, B/h B.O.C. Gases,

Rakhial, Ahmedabad-380 021 (Guj.) INDIA

Phone: (F) 079-22746802

E-mail: macplastbp@hotmail.com/macplastbp@rediff.com

Products/Services: Multi Layer Film Plant, Two Layer PPTQ Blown Film

Plant,

Twin Head Mono Layer Blown Film Plant, Sutli Plants, Box Strapping Plants, LDPE Kisna Pipe Plants, HDPE Plants, Reprocess Plants,

Woven Sacks Tape Plant.

### 17) MAMATA BRAMPTON ENGINEERING PVT. LTD.

5/1/1A/1, GIDC, Phase-1, Vatva, Ahmedabad-382 445.

Phone: 079-55309800 Fax: 079-25832026

E-mail: info@mamata.com

Products/Services: Multilayer co-ex blown film plant

### 18) MAMATA MACHINERY PVT. LTD.

5/1/1A, GIDC Estate, Phase-1, Vatva, Ahmedabad-382 445.

Phone: 079-55309800 Fax: 079-25832026

E-mail: info@mamata.com Web: www.mamata.com

Products/Services: Plastic Bag & Pouch making machine, Packaging

machines.

### 19) **NEOPLAST ENGINEERING PVT. LTD.**

43, GIDC Estate, Phase-1, Vatva, Ahmedabad-382 445.

Phone: +91-79-25831185 Fax: +91-79-25835298

E-mail: info@neoplastindia.com Web: www.neoplasstindia.com Products/Services: Complete compounding plant with automation, High speed heater cooler mixers, Single screw extruders, Super conical twin screw extruders, Down stream equipments for R PVC pipe, profile, pelletizing application, Under water pelletizing system, Air cooled die face pelletizing system, Material handling system, Liquid metering/Dosing system, Anti-dusting/de-gassing system, Labaoratory scale equipments like – lab mixer, single screw extruder with various attachments, two roll mill, hydraulic press.

### 20) PANCHAL PLASTIC MACHINERY P. LTD.

Plot No. 127, GIDC, Umbergaon, Dist. Valsad-396 171

Phone: 0260-2563391/92 Fax: 0260-2562892

E-mail: panchal@panchal-plastic.com Web: www.panchal-plastic.com Products/Services: Agglomerator/Densifier machine – extruder (Single Screw & Twin Screw) – Blown Film Plant – Box strapping plant, Flat Film & Sheet – Pipe & Profiles – Grinder/shredders/Crushers – Compounding Plant – Re-processing/recycling Plant – Hot die-face cutting under air & water cooling – in-line recycling plant for film waste & lumps waste – Mixer (type-high speed, tumbler, vertical) – strand pelletizer – Screen changer (Hydraulic & manual) – Grinding, washing & drying plant for PET bottle, film waste & moulded article, PET-recycling plant-bags/sacks cutting & sealing machine.

## 21) R.R. PLAST EXTRUSIONS PVT. LTD.

B-3, Nand Jyot Ind. Estate, Safed Pool, Sakinaka, Andheri-Kurla Road, Andheri (E), Mumbai-400 072.

Phone: +91-22-2852 0396/2850 5208 Telefax: 2850 9603 Cell: 9967023161 E-mail: rrengg@vsnl.net/mkt@rrengg.com

Web: www.rrengg.com

Products/Services: RR's Drip Irrigation Pipe Plant with Auto Coiler

### 22) RAJOO ENGINEERS LIMITED

Survey No.210, Plot No.1, Industrial Area

Veraval Shapar, Rajkot-360 002.

Phone: 0091-2827-252701/2 Fax: 0091-2827-252700

E-mail: rel@rajoo.com Web. www.rajoo.com

Products/Services: FOILEX:Monolayer Blown Film Lines for PE/PP/PVC. MULTIFOIL: Multilayer Upward Extrusion Blown Film Lines. AQUAFLEX: Multilayer Downward Extrusion Blown Film Lines. LAMINA: Mono & Multilayer Sheet Lines for PS/PP/PET/LDPE. DISPOCON: Thermoformers for PS/PP/PET. TWINEX: Single and Twin Screw Lines for pipes and profiles. HDPE permanently lubricated duct plant for optical fibres including nylon rope insertion.

## 23) **RANA & SONS**

Plot No. 128-A, Govt. Ind. Estate, Charkop Kandivali West,

Mumbai-400 067.

Phone: 28683897/4181 Fax: +91-22-28682244 E-mail: ranasons@vsnl.com/arun@bom7.vsnl.net.in

Web: www.ranasons.com

Products/Services: Blow Moulding Machine, Injection Moulding Machines,

PET Stretch Blow Moulding Machines.

### 24) REMICA PLASTIC MACHINERY MANUFACTURERS

2/AB Sardar Patel Ind. Estate, Near Gujarat Petrol Pump, Narol. Ahmedabad-382 405.

Phone: 079-25712741 Fax: 079-25714234

E-mail: remicaad1@sancharnet.in Web. www.remicaplastics.com Products/Services: Manufacturers of Thermoplastic Extrusion Plants for

inductor of the moral control of the moral control

Tapeline, Circular Looms, Extrusion Lamination Plants.

## 25) STAR FLEX INTERNATIONAL

A-43, Street No. 7, Anand Parbat Industrial area,

New Rohtak Road, New Delhi-110 005.

Phone: +91-11-2876 5588 Telefax: +91-11-2876 5588

Mobile: 093111 45588, (TATA) 092135 02930

Products/Services: High Class Flexographic/Rotogravure Printing

Machine.

### 26) SUNRISE PLASTIC MACHINERY MANUFACTURER

B/21-22, Ambica Estate, Ambikanagar, Nr. Hanuman Temple,

Odhav, Ahmedabad-382 415 (Guj.) INDIA.

Phone: (O) 079-65137486

Cell: 098253 58581, 098256 15776, 098793 01422 E-mail: joshi\_sunriseplasticmachinery@yahoo.co.in

Web: www.sunriseplastic.tradeindia.com

Products/Services: 'T' Die Sutli Plant, PP/HDPE Mono Filament Plant, PP/HDPE Box Strapping Plant, PP TQ Blown Film Plant, HM/LD/LLDPE Mono Layer, Blown Film Plant, Multilayer Blown Film Plant, Lamination Plant, Air Bubble Sheet Plant, PP/HDPE/Rigid PVC Pipe Plant, PP/HDPE Woven Sacks Plant, Reprocess Plant.

## 27) TWIST ENGINEERING WORKS

C/1, 4410, Phase-4, G.I.D.C. Estate, B/h Indo-German Tool Room, Vatva, Ahmedabad-382 445 (Guj.) INDIA

Phone: (O) 079-25842878, 30913587 Fax: 079-25840429

E-mail: twist@sancharnet.in, twist24@rediffmail.com

Web: www.twistplasticmachinery.com

Products/Services: Extrusion Plants for – Rigid PVC, HDPE, HM/HDPE, LLDPE, LDPE and PP Blown Film Plant, Above Plants with Rotating Extruder/Rotating Die, Pipe, Casing Caping, Section & sleeve Plants for PVC/HDPE PP & PP-R, PVC Braided & Suction Hose Multilayer Co-Extrusion Film Plants, Plastic Sheet Plant with Teedie & Steel Polishing Stack, PVC Wire/Cable Plant & Spool Drum/Winder, PVC Compounding Plant with Die-Face Cutter & Reprocessing Plant, PP/HD Box Strapping Plant, Rafia Tape Plant, Scrap Grinder and Agglomerater, Special Specification Plants on request & Extruders with 'Realloy' Barrel, LD Foam Film Plant, Automatic Pipe Cutter, High Speed Mixers & Heater-Cooler Mixers.

#### **ANNEXURE - II**

Web:

### **RAW MATERIAL SUPPLIERS**

### 1. BASF STYRENICS PVT. LTD.

**RBC Mahindra Towers** 

5<sup>th</sup> Floor B-Wing, Dr. G.M. Bhonsale Marg

Worli, Mumbai - 400 018

Phone: 55618227 Fax: 56604073

E-mail: <u>ramanamv@basf-india.co.in</u> Web: <u>www.basf.com</u> Products: ESCR Polystyrene, ABS, SAN, MABS, ASA Blends etc.

#### 2. BAYER MATERIAL SCIENCE PVT.LTD.

Building D-527, Kolshet Road, Thane – 400 607 Phone: 91-22-25311297/285 Fax: 25455069

E-mail: <u>plastics@bayerbms.com</u>

www.bayermaterialscience.com

Products: Polycarbonate (PC) PC Films & PC Sheets, PC Blends

## 3. DOW CHEMICAL PACIFIC (SINGAPORE) PTE LTD.

260 Orchard Road, # 18-01, The Heeren, Singapore - 238855

Phone: (65) 68353773 Fax: (65) 68340320

E-mail: <a href="mailto:dowcig@dow.com">dowcig@dow.com</a> Web: <a href="mailto:www.dowplastics.com">www.dowplastics.com</a>

Products: Polyethylene resins, Polystyrene, Polypropylene, Engineering Thermoplastics, Elastomers and Speciality Products, and

Wire & Cable Compounds.

### 4. DSM ENGINEERING PLASTICS INDIA (P) LTD.

"Ashirvad" 110/12 Erandawane

Lane No. 14 Income Tax Lane, Off Prabhat Road

PUNF - 411 004

Phone: 020-25461075/39506264 Fax: 020-25455259

E-mail: joydeep.sen-chaudhuri@dsm.com Web: www.dsmep.com Products: Stanyl (PA 4,6) Amite (TPE-E), Akulon (PA 6, pa 66), Amite

(PBT, PET and blends)

### 5. **GE PLASTICS INDIA**

8<sup>th</sup> Floor, Gateway Towers, DLF – III, NH – 8

Gurgaon – 122 002

Phone: 0124-5018001 Fax: 0124-5018019

E-mail: <u>rk.arora@ge.com</u> Web: www.geplasticsindia.com Products: Polycarbonate – Lexan, PBT – Valox, PPO – Noryl.

### 6. **GHARDA CHEMICALS LTD.**

Plot No. 3525 – 26 – 27, GIDC Estate, Panoli

Dist. Bharuch, Gujarat - 394 116

Phone: 02646 - 272575 /6 Fax: 02646 - 272141

E-mail: Polymer@gharda.com Web: www.ghardapolymers.com

Products: Polymers PEEK, PEK, PES, PSS, PPSU, PSU

### 7. HALDIA PETROCHEMICALS LTD.

1, Auckland Place, Kolkata - 700 017

Phone: 033-22831640/3/5 Fax: 033 - 22831654

Web: www.haldiapetrochemicals.com

Products: LLDPE, HDPE, PP, Benzene, Butadiene, MS Euro III, LGP, PY

Gas, Cyclopentane.

### 8. INDIAN OIL CORPORATION LIMITED

Scope Complex, Core-2, 7 Institutional Area

Lodhi Road, New Delhi - 110 003

Phone: 011-24360214 Fax: 011 - 24367548

E-mail: khuranavk@iocl.co.in Web: www.indianoilcorp.com

Product: PP- 600 KTA, HDPE - 300 KTA, hdpe/lldpe - 350 KTA, MEG -

300 KTA, PTA - 553 KTA.

### 9. J.P. POLYMERS PVT. LTD.

3, Shram Laxmi Industrial Est.

Opp. Indiana Bakery, Kanchpada, Ramchandra Lane Extn. Road.

Malad (W), Mumbai - 400 064.

Phone: 56998881 - 84 Fax: 56998887

E-mail: mail@jppolymers.net

Products: Polycarbonate (Dupont), Nylon'6, Nylon'66& PBT 9SRF),

Acylic-PMMA (Sumitomo), K-Resin (Philips), Transparent ABS (Toray),

POM, UHMW-PE, ABS & SAN

### 10. **RELIANCE INDUSTRIES LTD.**

Maker Chambers-IV, Nariman Point, Mumabi - 400 021

Phone: 30322100 Fax: 30322199

E-mail: tushar roy@ril.com Web: www.ril.com

Products: Polymers, Chemicals, Fibers & Intermediates

### 11. **SUPREME PETROCHEM LTD.**

17/18, Shah Industrial Estate, Veera Desai Road

Andheri (West), Mumbai – 400 053. Phone: 26736196 – 99 Fax: 26736203

E-mail: <u>sharad\_parate@spl.co</u>. on Web:

www.supremepetrochem.com

Products: Crystal Polystyrene, Impact Polystyrene, ESP, Modified Polyestyrene, Flame Retardant and Antistatic Polystyrene, Color and Additive Masterbatches, Polyolefinic Compounds.