







PARS ETHYLENE KISH COMPANY

Pars Ethylene Kish Co. is one of the leading manufacturers of Polyethylene pipes in Iran and the Middle East, cooperating in the majority of the national projects.

Just to name a few, we can list them as follows:

1. Majority of the National Iranian Oil Company's projects, as well as the affiliated companies of the

2. Iranian Petrochemical Company's projects.

Ministry of Oil.

- 3. 90% of the National Power Plant Construction projects.
- 4. Red Cross Projects in Africa, Central Asia, Iraq and Afghanistan.
- 5. The majority of the projects ordered by National Water & Wastewater Engineering Company of Iran.

6. Mineral water production projects, and many other huge construction projects.

Pars Ethylene Kish Company, producing Polyethylene pipe and fittngs from 20 mm up to 1500 mm in diameter according to DIN 8074 standard and INSO 14427.

The raw material for production is supplied by reputable PE suppliers such as Basell, BP Solvay, Sabic, and Borouge. Pipes, fittngs and manholes made of PE (Polyethylene) are considered as the best choice for fluid transportation systems in industrial projects, power plants and water supply systems. PE usage is firmly recommended for urban sewage systems, gas supply systems and underground firefighting projects.



Pars Ethylene Kish owns one of the most developed and well equipped production lines of Polyethylene pipes and fittngs in the world. Our machinery is made in Germany. We have been able to meet international standards and now known as the major competitor for foreign products in the Middle East.

The Extruders are made by Reifenhauser and Battenfeld which own the most advanced

automated online control system.





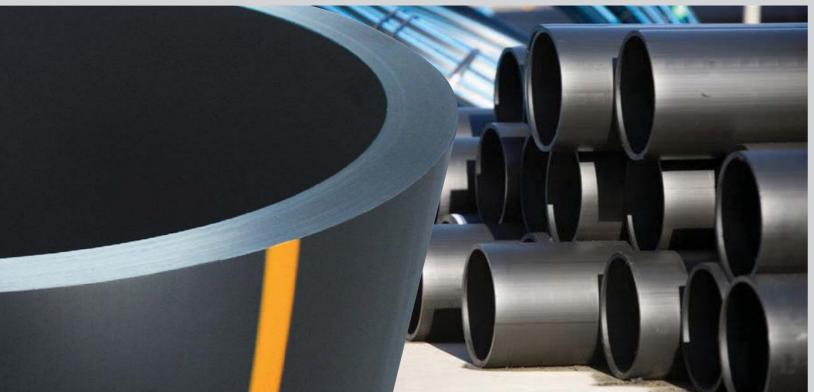
RAW MATERIAL

Borouge is the leading raw material supplier for the pipe industry in the Middle East and Asia. Together with Borealis, they have had more than 40 years of experience in this field, extending well beyond producing and providing plastic pellets. HE3490-LS is a black, bimodal, HD polyethylene classified as a MRS 10.0 Material (PE 100) produced by the advanced Brostar technology. Well dispersed carbon black gives outstanding UV resistance. Long term stability is ensured by an optimized stabilization system.



Pars Ethylene Kish offers a wide range of PE pipes and fittngs with different applications applied by latest technology. Today PE pipes and fittngs are considered as the best choice in various projects based on their high quality. high reliability, easy loading, transferring and installation due to their low weight. These products also have high bending capability and high resistance to impact and pressure in low temperature environment. HDPE pipe (Polyethylene pipe) has been produced in the world since the mid-1950s. Since then, the use of polyethylene has been growing worldwide due to its advantages over iron, steel and cement.





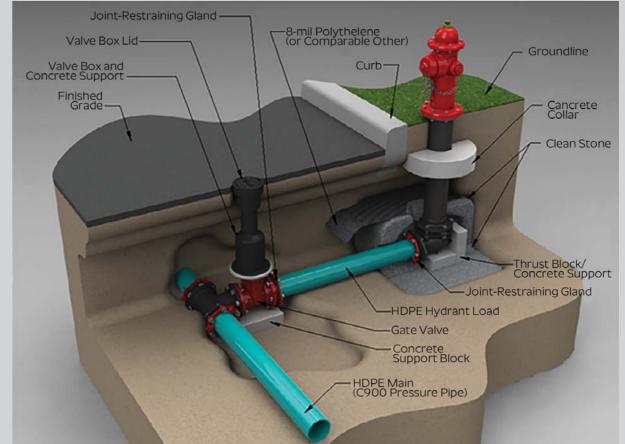
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1600	(1200	1000	900	800	710	630	500	450	400	355	315	280	250	225	200	180	160	140	125	110	90	75	63	50	40	32	25	20	16	12	10	mm	d	PE100	PE80	PE63	SDR	PIPE Series
31.3	27.4	23.5	19.6	17.6	15.7	13.9	12.3	9.8	8.8	7.9	7.0	6.2	5.5	4.9	4.4	3.9	3.6	3.2	2.8	2.5	2.2	1.8	1.8	1	1	1	1	1	1	1	1	1	mm	S	PN3.2	P	PN2	(A)	2
31.3 154.0 39.2	118.0	87.0	60.5	48.9	38.8	30.5	24.0	15.2	12.3	9.82	7.73	6.12	4.83	3.83	3.12	2.46	2.05	1.63	1.25	1.00	0.786	0.525	0.436	1	1	1	į	1	į	1	ī	ı	kg/m	mass		PN2.5		51	25
39.2	34.4	29.4	24.5	22.0	19.6	17.4	15.4	12.3	11.0	9.8	8.7	7.7	6.9	6.2	5.5	4.9	4.4	4.0	3.5	3.1	2.7	2.2	1.9	1.8	1	1	1	1	1	1	1		mm	S	P	PN3.2	PN2.5	41	20
192.0		0.801	75.2	60.9	48.1	38.0	29.9	19.0	15.3	12.1	9.55	7.52	5.98	4.83	3.86	3.05	2.49	2.0	1.54	1.23	0.943	0.643	0.457	0.364	ī		-	-	ī	-	ī	-	kg/m	mass	PN4				
49.0	42.9	36.7	30.6	27.6	24.5	21.8	19.3	15.3	13.8	12.3	10.9	9.7	8.6	7.7	6.9	6.2	5.5	4.9	4.3	3.9	3.4	2.8	2.3	2.0	1.8	1	1	1	1	1	1	1	mm	S	PN5	P	P	7.3	16
238.0	183.0	134.0	93.1	75.6	59.7	47.2	37.1	23.4	19.0	15.1	11.8	9.37	7.40	5.92	4.77	3.84	3.07	2.42	1.88	1.51	1.17	0.791	0.551	0.399	0.287	1			1		1	1	kg/m	mass		PN4	PN3.2	33	
61.2	53.5	45.9	38.2	34.4	30.6	27.2	24.1	19.1	17.2	15.3	13.6	12.1	10.7	9.6	8.6	7.7	6.9	6.2	5.4	4.8	4.2	3.5	2.9	2.5	2.0	1.8	1	1	ī	1	1	ı	mm	S	P.	P	P		
295.0	226.0	166.0	115.0	93.4	73.9	58.4	45.9	28.9	23.5	18.6	14.6	11.6	9.10	7.30	5.89	4.69	3.79	3.04	2.32	1.84	1.43	0.98	0.675	0.494	0.314	0.227	ī	1	Ī	ì	1	1	kg/m	mass	PN6.3	PN5	PN4	26	12.5
7	63.7	54.6	45.5	41.0	36.4	32.3	28.7	22.8	20.5	18.2	16.2	14.4	12.8	11.4	10.3	9.1	8.2	7.3	6.4	5.7	5.0	4.1	3.5	2.9	2.3	1.9	ī	1	ī	1	1	ı	mm	S	Ρĵ	ų	PN4.8	22	10.5
=	267.0	196.0	136.0	110.0		68.7	54.1	34.2	27.7	21.9	17.3	13.6	10.8	8.59	7.00	5.51	4.47	3.54	2.72	2.16	1.67	1.14	0.807	0.563	0.361	0.238		1	Ĭ	1	1	ı	III kg/m	mass	PN7.5	PN6			
7.	66.7	57.2	47.7	42.9	38.1	33.9	30.0	23.9	21.5	19.1	16.9	15.0	13.4	11.9	10.8	9.6	8.6	7.7	6.7	6.0	5.3	4.3	3.6	3.0	2.4	1.9	ī	1	ī	1	1	1	mm	SO	P	Ρĵ	PN5	21	10
150		205.0	142.0	115.0	91.1	71.8	56.4	35.7	28.9	22.9	18.0	14.2	11.3	8.93	7.30	5.78	4.67	3.72	2.83	2.27	1.77	1.18	0.828	0.580	0.374	0.239	ī	ī	ī	ī	ī	ī	kø/m	mass	PN8	PN6.3			
1		68.0	56.7	51.0	45.3	40.2	35.7	28.4	25.5	22.7	20.1	17.9	15.9	14.2	12.8	11.4	10.2	9.1	8.0	7.1	6.3	5.1	4.3	3.6	2.9	2.3	1.8	1	ī	ī	ī	1	mm	S	PΙ	PN7.5	PN6	17.6	8.3
(E)		241.0	167.0	136.0	107.0	84.4	66.5	42.0		26.9	21.2	16.7	13.2	10.6	8.55	6.79	5.48	4.35	3.34	2.66	2.08	1.39	0.976	0.688	0.440	0.285	0.179	1	ī	1	ì	1	kø/m	mass	PN9.6				
150 A	1	1	59.3	53.3	47.4	42.1	37.4	29.7	26.7	23.7	21.1	18.7	16.6	14.8	13.4	11.9	10.7	9.5	8.3	7.4	6.6	5.4	4.5	3.8	3.0	2.4	1.9	1.8	ī	1	ì	1	mm	s	Ρĵ	P	PN	17	8
i n s	1	-	175.0	141.0	112.0	88.1	69.4	43.8	35.4	28.0	22.1	17.4	13.7	0.11	8.93	7.05	5.71	4.52	3.46	2.76	2.17	1.46	1.02	0.721	0.453	0.295	0.187	0.137	ī		I		In kø/m	mass	PN10	PN8	PN6.3		
1	1	1	a	66.1		52.2	46.3	36.8	33.1	29.4	26.1	23.2	20.6	18.4	16.6	14.7	13.3	11.8	10.3	9.2	8.1	6.7	5.6	4.7	3.7	3.0	2.4	1.9	1.8	ı	1	1	mm	S	PN	P	P]	13	6.
=	313	8	3	172.0	136.0	107.0 64.5	84.6	53.3	43.2	34.1	26.9	21.2	16.8	13.4	10.9	8.56	6.98	5.50	4.22	3.37	2.62	1.77	1.24	0.873	0.549	0.356	0.232	0.144	0.107	-	1		ln kg/m	mass	PN12.5	PN10	PN8	13.6	6.3
1.77	1	1	(i)	I	100		57.2	45.4	40.9	36.3	32.2	28.6	25.4	22.7	20.5	18.2	16.4	14.6	12.7	11.4	10.0	8.2	6.8	5.8	4.6	3.7	2.9	2.3	1.9	ĩ	ī	ī	mm	S	PN	PN	PN	_	
(7)	1	-	Œ.	(7)	(70)	130.0	102.0	64.5		41.3	32.5	25.6	20.3	16.2	13.1	10.4	8.42	6.67	5.08	4.08	3.14	2.12	1.47	1.05	0.666	0.430	0.272	0.171	0.112	1	1		In kg/m	mass	PN16	PN12.5	PN10	11	Si
-	1	1	9	1	2	1	1	55.8	50.3	44.7	39.7	35.2	31.3	27.9	25.2	22.4	20.1	17.9	15.7	14.0	12.3	10.1	8.4	7.1	5.6	4.5	3.6	2.8	2.3	1.8	1	ı	mm	S	PN16 PN20	P	PN		4
-	1	+/		= =		-	3	77.3	62.7	49.6	39.1	30.8	24.3	19.4	15.8	12.4	10.1	7.96	6.11	4.87	3.78	2.54	1.76	1.26	0.788	0.509	0.327	0.200	0.133	0.084	3	1	In kø/m	mass		116	PN12.4	9	
-	a a	2	1	1	7 .00	1	1	68.3	61.5	54.7	48.5	43.1	38.3	34.2	30.8	27.4	24.6	21.9	19.2	17.1	15.1	12.3	10.3	8.6	6.9	5.5	4.4	3.5	2.8	2.2	1.8	Ţ	mm	s	PΝ	PI	PN	7.4	3.2
8 		. 155	S.	(m	857	ï	1	91.8	74.4	58.8	46.3		28.9	23.0		14.8	11.9	9.44		5.77	4.49	3.00	2.09	1.47	0.936	0.600	0.386	0.240	0.154	0.099	0.060	1	lii kg/m	mass	PN25	PN20	PN15.9		
	ā	ű.	1	1	(A)	1	ī	î	ā	66.5	59.0	52.3	46.5	41.6	37.4	33.2	29.9	26.6	23.3	20.8	18.3	15.0	12.5	10.5	8.3	6.7	5.4	4.2	3.4	2.7	2.0	1.8	mm	S	PN	P	PN		2.
1	1	1	1	1	3	1	1	,	1	68.9	54.3	0 7	33.8	27.0	21.8	17.2	14.0	11.0	8.47		5.24	3.51	2.44	1.73	1.09	0.701	0.454	0.278	0.180	0.115		200.0	kg/m	mass	PN32	PN25	PN19.9	6	2.5
3	130	1	1994	1	1	1	1	1	3	1	1	63.2	56.2	50.1	45.1	40.1	36.1	32.1	28.1	25.1	22.1	18.1	15.1	12.7	10.1		6.5	5.1	4.1	3.3		2.0	mm	w	PZ	P	PN		
1	a	1		1	1	1	1	1	,	1	1	49.3	39.0	31.1	25.2	19.9	16.1	12.7	9.76	7.79	6.04	4.05	2.82	1.99	1.26	0.809	0.520	0.320	0.207	0.133	0.074	0.052	III kg/m	mass	PN40	PN32	PN24.9	5	2

Wallthickness and mass table according to DIN 8074

APPROVED









Why use the HDPE Pipe?

Plastic piping offers numerous benefits for many firefighting applications. They are corrosion-free, have excellent chemical resistance and superior abrasion-resistant qualities compared with less advanced materials. HDPE pipe has been used extensively in both the mining and chemical industries. In addition to the benefits in performance and life cycle costs, plastic piping is easy and safe to install because of its light weight, long pipe lengths and flexibility Properties and specifications of plastics -particularly polyethylene - has increased trends of their usage in industry only in short time after their production.

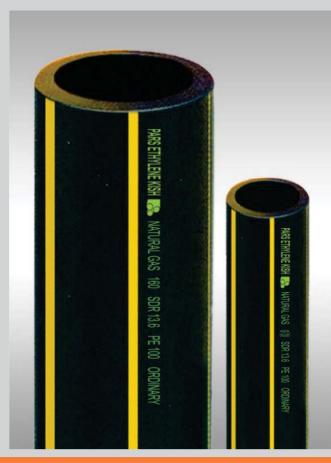




Underground pipes need to have high corrosion resistant in high working pressure. Having so many properties like high strength, chemical resistance and anti sediment made them the best option during recent years. Polyethylene firefighting pipes have removed all the problems related to corrosion, lack of strength, hard execution and so many other problems which were unavoidable in old firefighting systems. Pars Ethylene Kish Polyethylene pipes & fittings which are manufactured with the same material (PE 100 original black Borouge, Basell) are suitable for pressure ranges 4...25 bar.







Gas distribution was among the first applications of high density Polyethylene (HDPE) pipe. In fact, many of currently use systems have been in continuous service since 1960 at a high success rate.

Today, over 90% of the pipes installed for the natural gas distribution industry in the U.S. and Canada are made of plastic, 99% of which are HDPE pipe. ParsEthylene Kish produced PE pipes, are suitable for gas supplies since they reduce cost and time of running projects all over the country.



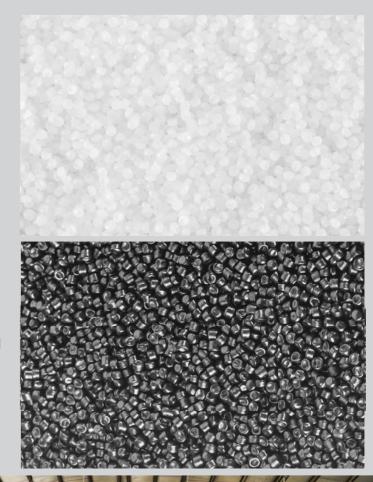
HDPE Gas Pipe Advantage:

- Easy connection
- Flexibility
- Installation advantages
- Resistance to corrosion and chemicals
- Longer lifetime potentials, durability and cost reduction



HE3490-LS is a black, bimodal, high density Polyethylene classified as a MRS 10.0 Material (PE 100) produced by the advanced Brostar technology. Well dispersed carbon black gives outstanding UV resistance. Long term stability is ensured by an optimized stabilization system. Brostar HE3490-LS is recommended for pressure pipe systems in the applications field of drinking water and natural gas, pressure sewerage, relining, sea outfall and industrial. It is especially designed for the production of larger diameter, thick wall pipe, but can slow crack growth.

be processed for the whole range of diameters. It also shows excellent resistance to rapid crack propagation and **Borouge**





NEW GENERATION OF CORRUGATED PIPES

GERMAN TECHNOLOGY



QUALITY CONTROL LABORATORY

Pars Ethylene Kish Co's quality control laboratory has been established with the purpose of creating a professional center to provide special facilities to experiment polyethylene pipe and fittings according to the national and international standard. Pars Ethylene Kish laboratory has been assessed and certified as meeting the requirements of ISIRI-ISA/IEC 17025 and certified by National Accreditation Center of Iran (NACI).



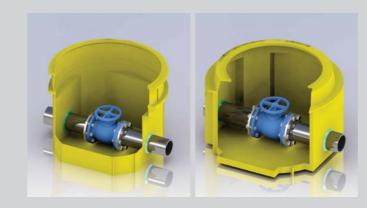


Polyethylene manhole is the new product of Pars Ethylene Kish, made of the finest raw material with the best design, compare to rival. This product has wide range of applications such as oil, gas and petrochemical industry, power plants and urban transmission pipelines.

Polyethylene manholes are applied in industrial and domestic sewage. Regarding increasing the usage of polymeric products in various global industries, this product is an appropriate alternative to concrete or other construction materials.



- Polyethylene manholes are a kind of fittings -used for connecting, checking and repairing.
- In transfer network for connecting several sewage pipeline to conduct another route PE, manholes should be applied.
- Also in the telecommunication systems manholes are used to access underground cable routes.
- PE manholes are produced in both traditional and prefabricated, each of them has their own advantages.
- Pars Ethylene Kish PE manholes are the best one comparing to those of rival companies because of using the best PE raw material and design.





POLYETHYLENE FITTINGS













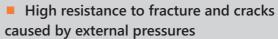






According to the type of application, same type Polyethylene pipelines require various Polyethylene fittings Polyethylene pipes are used in sewage, water supply, fire systems, cable and gas covering in which each pipe fitting is suitably designed as per application demands. Electro fusion fittings are applied for gas supplies, where as screw fittings are used in water supplies up to 10 ATM pressure & for other projects polyethylene welded fittings are applied according to German DIN16963. It should be noted that the domestic sewage systems do not follow the regulations above. See articles connection methods, for more information. Pars Ethylene Kish as the oticial and exclusive agent of FOX Fittings Co. -European Company- in Iran and

Middle East, supplies a wide range of Electro fusion fittings such as Coupler Elbow 90 and 45, Tee and Tee Reducer, Reducer, Cap, Saddle with different sizes.



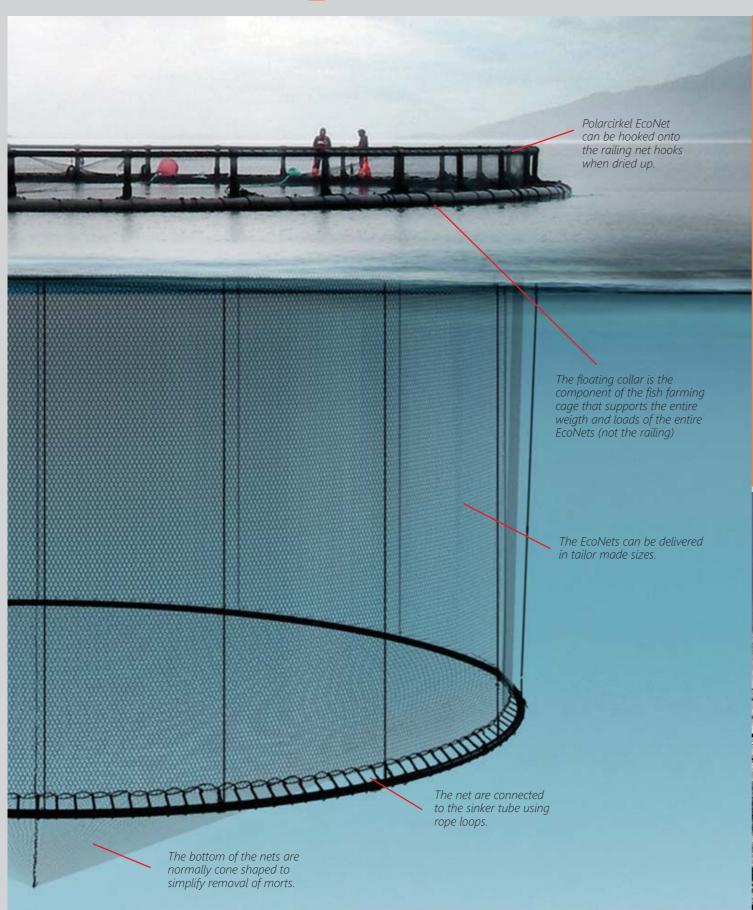
- Impact resistant
- Corrosion and abrasion resistant
- Rust resistant
- High resistance to vibrations earthquake's.
- Chemical resistant
- Significantly low scum sedimentation due to smoothness of inner and outer walls
- Very low pressure drop due to low friction of internal wall surface
- High flexibility, low cost installation & no special tools required for installing or running the pipelines







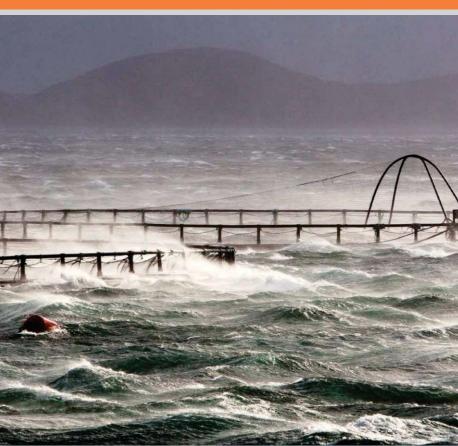
CAGE FARMING - AQUACULTURE



POLYETHYLENE CAGES

Benefits of PE Cage Fish Darming

- Low cost relative to fish farming in earthen ponds or CCTV system Polyethylene cage fish farming.
- Cost effective and user-friendly.
- Ease of observation and study of fish nutrition and health.
- Easy and economical treatment against parasites and diseases.
- Compare to earthen ponds and CCTV system it requires a
- In case of environmental pollutants and suspended solids, moveable which can be problematic for the cage.















Why use the SBR system?

Outstanding cleaning performance Even during load fluctuations and underload

Excellent value for money Only 2 chambers required Can be retrofitted in existing tanks Only a small tank volume









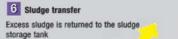
No live electrical parts in the water, low power consumption optional. Automatic adjustment to living situation, optional remote monitoring high-quality components mean low maintenance costs. Telescopic cover state of the art manufacturing for maximum stability suitable for vehicle loading in conjunction with

telescopic vehicle dome shaft 100% watertight and corrosion resistant.



Wastewater enters the pre-treatmen

nber where solids settle to the



out of the treatment chambe After 8 hours the complete cycle has ended. In the case that sufficient

cycle begins again.

waste-water is available in the pre-treatment chamber, the entire 8 hours

In the case that no or little wastewate has been collected, the Inno-Clean+ automatically goes into energy savings



8 hour wastewater treatment BEATMENT CTC



The pre-treated wastewater is pumped to the treatment chamber.

3 Treatment / Ventilation

The 6 hour treatment phase begins -the wastewater is intermittently sup-plied with bursts of oxygen.

nisms with required oxygen to begin their treatment process (denitrification

Can be istalled in groundwater sequencing batch reactors use a separate pre-treatment section to mechanicaly hold back solids and a biological aerationand settling

SBR wastewater treatment system clean incoming waste-water over a number of cycles.



After the 6 hour treatment phase a 1 or 2 hour sedimentation phase begins where sludge settles to the base and the treated











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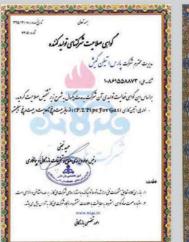






The agreement between Pars Ethylene Kish and Norway country has signed in presence of Iran's Minister of Agriculture Mr. Mahmoud Hojjati

















- FM approval certificate





- Road and city planning research center Technical certificate



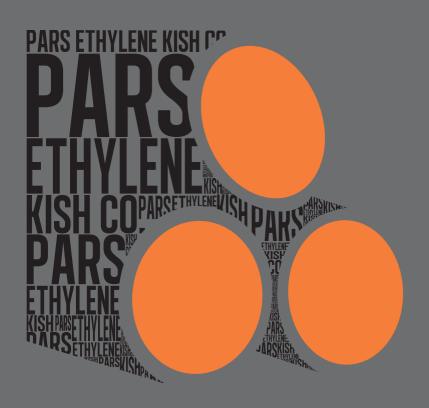
























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دفتر مرکزی: تهران، خیابان آفریقا، بلوار مینا، پلاک ۱۸

تلفن : (۵۰خط) ۸۸ ۲۰۲۰۶۰ (۲۱ – ۹۸+) فکس : ۸۸ ۲۰۲۰۸۱ (۲۱ – ۹۸+)

آدرس کارخانه: ایران، تهران، شهرک صنعتی اشتهارد،

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