

Iran Heavy Diesel Engine Mfg Co.

(DESA)

Private Joint Stock

Affilated with Industrial Development & Renovation of Iran (IDRO)

In the Name of God

1- Company Introduction

- ... Shareholder: Industrial Development & Renovation of Iran (Ministry of Industries and Mines)
- Establishment year: 1991
- Egistration number: 4148
- Economic Code: 115-568-574
- Company Capital: 105.800.000.000 Rls.
- Äddress of Sales Office: No 243, Dastgerdi (Zafar) St., Tehran, Iran
- Sales Office Tel: 88787070 Sales Office Fax: 88677665
- Factory Address: Emamzadeh Abdollah Road, 5th Kilometer of Haraz Road, Amol
- Exactory Tel: 012122-3253 Factory Fax: 012122-3252
- ... Company Directors:
 - 1- Mr. Mostafa Mirsalim, Chairman of the Board;
 - 2- Mr. Karbalaei, Member of the Board;
 - 3- Mr. Moharebi, Member of the Board;
 - 4- Mr. Ali Mirzabozorg Fashandi, Member of the Board;
 - 5- Mr. A.Ghorban alibeik, Managing Director & Member of the Board

2- Scope of the Work

- Management in construction of industrial factories for production of different kinds of diesel engine and its by-products such as land, marine and industrial engines and preparing for exploitation in water and electricity industries, generators, motor powers and in any industrial, manufacturing and service fields.
- Importing machinery, tools, raw materials, or any authorized good for factories and manufacturing sections
- ✓ Exporting, selling and after-sales services for company products
- ✓ Technical designing and engineering with the services, consultancy
- ✓ Assigning and obtaining internal and international agency
- Investment, Partnership, and authorized activities in the work scope.



Products and Services

Products:

This company, licensed by the most famous diesel producers in the world, is capable to produce the average speed engines with 500 to 4000 KW output power and high speed engines with 200 to 2000 KW output power having the following applications:

- × Power Plant Application (Permanent and Urgent)
- × Marine Application
- × Railway Application
- × Dual fuel and Gas Applications
- Services:
 - Conversion of powerplant diesels to dual fuel diesels (gas oil + gas)
 - × Performing CHP plans

× Producing electricity from waste-based gas (Land Fill)





4- Personnel

Educational level	Number	Full-time	Part-time	Age Average	Experience Average
Graduated & Post-graduated	68	61	7	33	7
Non-graduated	113	113		42	12
Total	181	174	7	38	10

- **ü** Company enjoys the cooperation of consultant companies in order to reach the objectives.
- **Ü** Personnel of Company have passed the following specalized courses in most leading companies in the world like MAN, Ruston, Wartsila and AfS in Finland, England, Germany and Canada:
 - 1- Assembly
 - 2- Test
 - 3- Repair
 - 4- Service & Maintenenace
 - 5- Installation & Start-up
 - 6- Supervision on UIC test
 - 7- R&D
 - 8- Conversion to dual fuel



Facilities

- Manufacturing Halls and Workshops: Iran heavy diesel engine factory is constructed on a 80-hectars land including the following halls and buildings:
 - $\ddot{\mathbf{U}}$ Production and assembly hall (7500 m²)
 - Ü Diesels repairing workshop, assessory production workshop, warehouses and semi-industrial buildings (3000 m²)
 - **Ü** Logestical buildings
- Company has a laboratory eqiupped with the unique facilities for quality test of the parts
- Designing and engineering facilities/ Conducting research
- Set of technical documents (Archive)
- Applied standards: ISO, Din
- **ISO** certificate is obtained from licensor.
 - **Ü** Note: The products are produced under the license of MAN and Wartsila with the trade marks of DESA Wartsila and DESA

Ruston. Therefore all of the standards for these companies are followed.



Item	Machine Name	Type/Model	Number
1	Engine Test Equipment	SCADA	1
2	Heat Exchanger	ELIN M10- FBGS	1
3	Drilling Machine	IUF 605	1
4	Milling Machine		1
5	Differrnt Transformers		5
6	Resistors		2
7	Endoscope		1
8	Portable Drill		1
9	MIG-TIG Welding Equipment	KEMPPI PRO	4
10	Nazzel	ELIN	1
11		CV-, 24 P=0.0,INCH	1
12	Magnetic Compound		1
13	Compressor		1
14	Rotating Device		1
15	Assembly Line Equipment		5
16	Woodward Test Machine		1
17	Pumps Tester		1
18	50 Tons Overhead Crane		1
19	25 Tons Overhead Crane		1
20	Column type crane		14
21	Engine Block Washing Machine		1
22	Piston, Connecting Rod Assembling Fuxture		

6- Equipment and Machinery

Item	Machine Name	Type/Model	Number
23	Special Tools for Assy, Engine Block, Connecting Rod, Piston, Cylinder Head, Turbocharger, Pumps, Injection Pump, etc	Different Types with general and specific applications	
24	Hot water/Steam maker		1
25	Compressed Air/Water Pipe Test Bench		1
26	Lab with Special Equipment for Component Test (Dimentional Calibration)		Complete Set
27	Special Engine Block Rotating Device		1
28	Flame Cutting Equipment		
29	Lath Machines Welding Eqiupment Descaling Machines		
30	Cooling Tower	Safiad	2
31	Engine Water Transfer System	Different Equipments	
32	Heat Exchanger	1750 KW	2
33	Primary Water System	Different Equipments	
34	Pumps		Different Numbers
35	Fuel Consumption System Equipment	Alfa vall	2
36	Engine Loading System and Equipment		
37	Painting Equipment		2

After-Sales Services

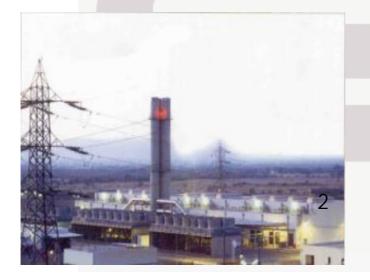
- Offering after-sales services using the submitted standards of the world leading companies, deploying experienced human force with relible specialized certifications;
- ✓ Monitoring products transportation
- ✓ Supervision in guarantee period and providing necessary services in product lifecycle
- ✓ Supplying the spare parts for 10 years
- ✓ Offering guarantee for one year after intsallation and start-up or 18 months after tranporting from the factory.
- ✓ Offering training courses for service and maintenance, after installation and start-up with issuing the operation certification.



Completed Projects by DESA

Powerplant Projects

Item	Employer	Number of Gen- Sets	Power (MW)	Project Name
1	Iran Telecommunication Company	104	18	Emergency Diesel Generators
2	Iran Khodro	2	10	Permanent
3	Potas Plan	4	6	Powerplant
4	Iran National Drillimg Co.	6	5/4	Diesel Supply
5	Sugarcane & by- products	2	2/4	Emergency
6	Press set of Iran	2	1/76	Powerplant
7	Ministry of Energy	2	1/42	Permanent Powerplant
8	Razi Serum Making Co.	1	1	Emergency
9	Saipa Ring	1	0/71	Powerplant
10	The United Bus Co. of Tehran & Suburbs	1	0/32	Diesel Generator
11	Zarrin Sooleh Co.	1	0/125	
12	Khuzestan Water & Power	9	8/72	Diesel Generator
13	G.S.I Co.	1	0/71	Diesel Generator
	Total	136	56/565	





Railway Projects

Item	Subject of the Project	The other Party	Number of Engines	Power (KW)
1	Locomotive Diesel Engine	Iranian Islamic Republic Railways (IIRR)	70	210.000
2	Trainset Engine	IIRR	120	66.000
3	Generator Wagon (2 engines)	RAJA Co.	2	800
4	Diesel Generator	RAJA Co.	9	3.600
5	Generator Wagon Leading	RAJA Co.	18	9.000
6	Generator Wagon (2 & 3 engines)	RAJA Co.	12	4.500
7	Generator Engine (2 Engines)	RAJA Co.	8	3.000
8	Research Contract of Generator Wagon (2 engines)	IDRO	2	800
9	Rail Bus Engines	RAJA Co.	60	33.000
10	MTU Engine (montage)	IIRR	115	2400
11	Generator Wagon	RAJA Co.	12	5280







Marine Projects

Item	Project Name/ Employer	Number of Vessles	Number of Main Engines	Power of each Main Engine (hp)	Number of Diesel Generators	Power of Diesel Generato rs (KW)	Expl.
1	Iran Shipbuilding & Offshore Industries Complex (ISOICO)	1	2	1200	-	-	Supplying Complete leading System
2	Shahid Darvishi	2	4	760	4	64	as above
3	Sadra	3	6	5200	6	740	as above

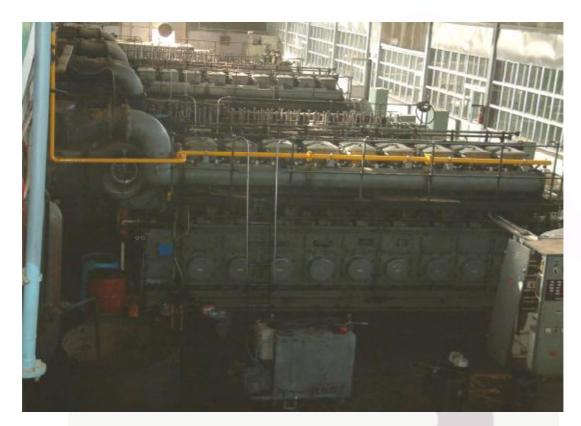
Marine Projects

- × Number of all equipped vessles: 6
- × Total power of the Main Engines: 36640 hp
- × Total power of Diesel Generators 4696 KW



Dual Fuel Projects

Item	Subject of the Project	Employer	Power (KW)	Number
1	Dual Fuel Engine	Sanandaj Powerplant- West section of power supplying office	12000	4
2	Dual Fuel Engine	IDRO	700	1





Item	Subject of the Services	Employer	Number
1	Modification in 16RK215 Cylinder Head	IIRR	40
2	Modification in Crankshaft & Camshaft	IIRR	40
3	15000 hours overhall of LOCO233	IIRR	1
4	Trainset Services	RAJA Co.	3
5	Supervision and Guarantee for 16RK215 Engine	IIRR	70
6	Overhall of Trainset Engine	RAJA Co.	21
7	Delivering Services for RUSTON 6RK215 Engine	Iran National Drilling Co.	6
8	Overhall of RUSTON 6RK215 Engine	Iran National Drilling Co.	1
9	Repairing Wartsila Engine	Saipa Ring	1
10	Repairing & Maintenace of Wartsila 12V22/26	Potas Plan	4
11	Repairing RK215 Engines	IIRR	50

After-Sale Services Projects

