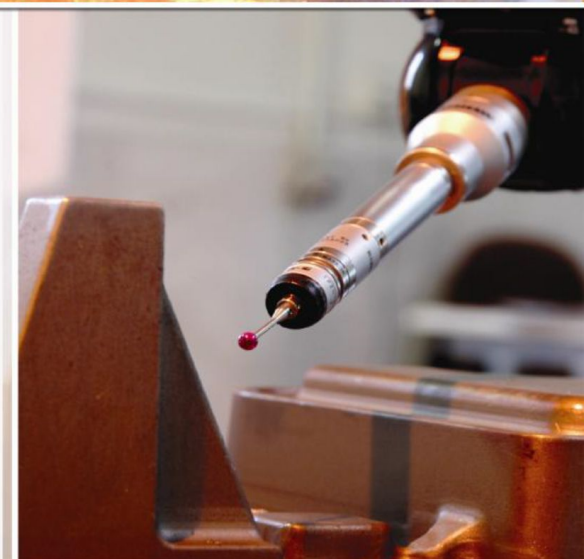




The Foundry of Iran Manufacturing Company was established in 1974 with the aim of producing cast-iron parts for Massy Ferguson tractors as well as Perkins engines. Co. the largest foundry in IRAN , has paid special attention to taking on specialists and employees who on the basis of years of experience in efficient utilization of cost-reduction management and technical know-how, can meet the requirements for manufacturing complex and elaborate components for other industrial purposes . Also , customer satisfaction has always been regarded as the top agenda of the entire company policy . Different kinds of gray , ductile , and ADI cast -iron can be produced in this leading factory, that covers an area of 513,296 square meters and 61,800 square meters of different roofed workshops .



# Technology & Pattern Shop



In pattern shop utilizes dexterous, old-handed experts as well as special computer aided facilities such as Solid Work, Power Shape, Power Mill , Catia & etc . Different types of patterns, core boxes and fixtures for a variety of cylinder blocks, cylinder heads,crank shafts, central housings,hubs,axels, etc, have been desinged and manufactured in this complex, according to customers requirments. Also , tooling department is equipped with high-tech CNC(s), different types of universal milling machines, and CMM machine. This department has the capability of producing various methods of casting patterns, such as lost foam, green-sand, die-cast and other industrial facilities.



# Line A



Molding line A, with 240 mold capacity per-hour and flask dimensions of 610 \* 457 \* 152 \* 152 mm, can produce cast-parts from 100 g, up to 25 kg . The speciality of this line is its great flexibility in manufacturing small size cast-parts using high pressure & high - speed squeeze technology.

# Line C

Molding line C , with 110 molding capacity per-hour and flask dimensions of 1,420\*915\*405\*405 mm , is one of the greatest molding lines incorporating great dimension, high speed and consequently great cast-part both in quality and volume, up to 250 kg . This Line is generally for production of several kinds of cylinder blocks and other heavy duty requirements of gray and cast-iron components . Jolt, high pressure and squeeze methods are applied in this line to reach optimum cast-part quality.



# Lost Foam



In lost-foam casting process a pattern of the desired cast-part is made from expanded materials ( foam ) , then the pattern is dipped into a ceramic coating and after drying, it is put in molding sand. After pouring the melt, the foam is lost and vaporized and the cast-part is formed .Lost foam process has several advantages over other casting methods :

- 1- Environmentally friendly, pollution reducing process.
- 2- Better quality in acquiring necessary smoother surface quality.
- 3- Cost reduction in cast-part machining.
- 4- Flexibility in designing complex components .
- 5- Omission of sand cores in molds.
- 6- Additional possibility for weight reduction .

**Lost-foam is one of the most intricate and advanced casting processes, aimed at cost-reduction.**

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**Melting shop** is equipped with 5 coreless induction furnaces each with 14 tons capacity , and 3 channel holding furnaces each with 45 tons capacity,there are also 5 automatic melt pouring machines ranging from 7 to 10 tons of melt per-hour . Around 90,000 tons of melt can be supplied yearly to 4 molding lines consisting of gray, ductile, and ADI cast-iron types . Quantometer, automatic pouring time and inoculation control system are other facilities of melt-shop . \_\_\_\_\_



**Sand-shop** in \_\_\_\_\_ has experienced technicians operating modern equipment to supply molding sand mixture needed in three lines ( A.B.C) through huge conveyor-belts. About 400 tons, per-hour , of prepared molding sand is supplied to three lines undergoing nearly 20 specific property tests in laboratories. \_\_\_\_\_



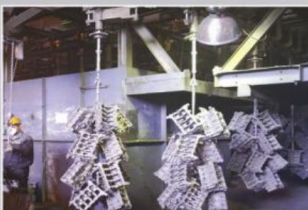
**Core - shop** .There are over 30 core producing machines in 5 types capable of producing 25,000 tons of complex cores ranging from 10 grams to 50 kg . The method of core production is cold-box system . For large and complex components several cores are assembled ,coated and put in molds by special fixtures rendering more accuracy. \_\_\_\_\_



**Molding line B**,with 180 mold capacity per-hour and flask dimensions of 965\*711\*305\*305mm can produce cast-parts up to 60 kg . This unique line has a very high-tech of computer controlled operation to achieve modern specifications of top quality molds & cast-parts. The Dynapulse process causes a high degree of uniform density throughout the mold,that is each area of the molding sand is pressed with a pre-set and desired pressure to obtain higher dimensional accuracy and smoother cast-part surface. \_\_\_\_\_



**Molding line E** , with 180 molding capacity and flask dimensions of 700\*550\*280\*280 mm,is a high-tech line that with regard to its economical productivity specifications can offer an acceptable spectrum for dimensional accuracy in cast parts. \_\_\_\_\_



**Shot blast** workshop consists of two mono-rail shot-blast machines from GF and carlo-banf companies . This workshop has the capacity to shot 185 tons of cast-parts everyday, rating from 0.5 kg to 500 kg . \_\_\_\_\_



Name : Piston 5093  
Material : Gray  
Weight : 14.350 Kg



Name : Hub 2214  
Material : Gray  
Weight : 17.570 Kg



Name : Polly Fan  
Material : Gray  
Weight : 3.750 Kg



Name : Piston 6486  
Material : Gray  
Weight : 10.700 Kg



Name : Support  
Material : Ductile  
Weight : 4.600 Kg



Name : Support 2464  
Material : Ductile  
Weight : 8.850 Kg



Name : Crank Shaft 596  
Material : Ductile  
Weight : 4 Kg



Name : Crank Shaft 496  
Material : Ductile  
Weight : 3.170 Kg



Name : Crank Shaft 606  
Material : Ductile  
Weight : 5.100 Kg



Name : Crank Shaft  
Material : Ductile  
Weight : 4.470 Kg



Name : Cover  
Material : Ductile  
Weight : 6 Kg



Name : Support 3961  
Material : Ductile  
Weight : 8.900 Kg



Name : Fork  
Material : Ductile  
Weight : 2.100 Kg



Name : Fork 583  
Material : Ductile  
Weight : 5.300 Kg



Name : Support 8635  
Material : Ductile  
Weight : 2.170 Kg



Name : Support Barra  
Material : Ductile  
Weight : 2.400 Kg



Name : Support 1759  
Material : Ductile  
Weight : 8.750 Kg



Name : Fork 393  
Material : Ductile  
Weight : 5.470 Kg



Name : Spider  
Material : Ductile  
Weight : 31.500 Kg



Name : Hub 2100  
Material : Ductile  
Weight : 21.500 Kg



Name : Hub 6703  
Material : Ductile  
Weight : 35 Kg



Name : Suppot 2538  
Material : Gray  
Weight : 5.200 Kg



Name : Hub 2200  
Material : Ductile  
Weight : 14.900 Kg



Name : Hub 4692  
Material : Ductile  
Weight : 34.900 Kg



Name : Spicer  
Material : Gray  
Weight : 46.300 Kg



Name : Hub 6096  
Material : Ductile  
Weight : 60.800 Kg



Name : Support 1244  
Material : Ductile  
Weight : 9.650 Kg



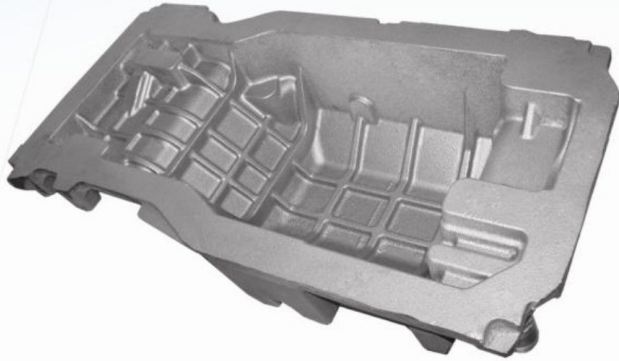
Name : Axle  
Material : Gray  
Weight : 59.450 Kg



Name : Housing  
Material : Ductile  
Weight : 28.800 Kg



Name : Center Housing 456  
Material : Gray  
Weight : 58 Kg



Name : Hydrostatic Cover  
Material : Gray  
Weight : 71.250 Kg



Name : Hub 2935  
Material : Ductile  
Weight : 34.150 Kg



Name : manifold  
Material : Ductile  
Weight : 4 Kg



Name : Front Support  
Material : Gray  
Weight : 234 Kg



Name : support 7184  
Material : Ductile  
Weight : 10.650 Kg



Name : Bar Axle Wheel ( Conic Bach )  
Material : Ductile  
Weight : 21.500 Kg



Name : support Mensolla  
Material : Ductile  
Weight : 117 Kg



Name : Hub 2935  
Material : Ductile  
Weight : 34.150 Kg



Name : ROA Cylinder Block  
Material : Gray  
Weight : 36.450 Kg



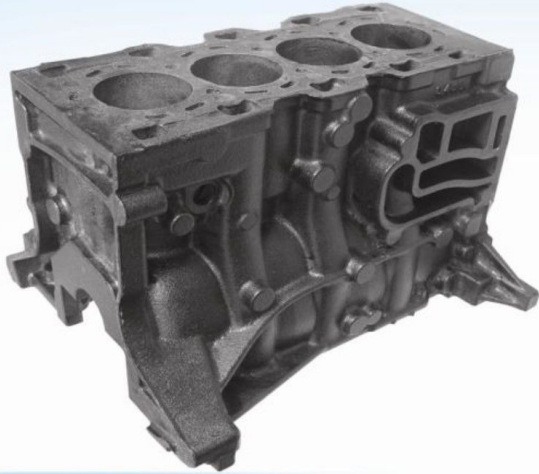
Name : Bar Axle Wheel ( Conic Bach )  
Material : Ductile  
Weight : 21.500 Kg



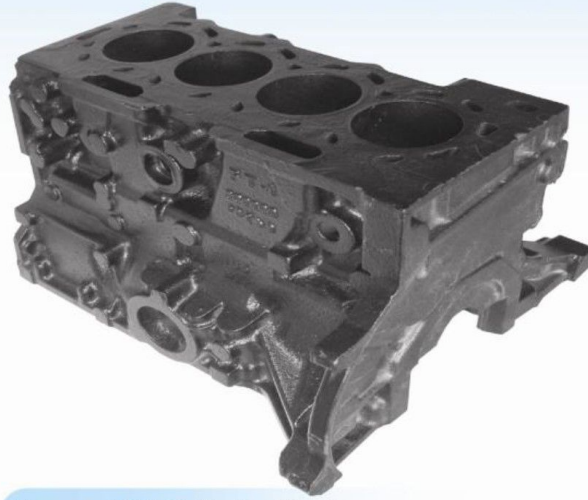
Name : Control Valve  
Material : Gray  
Weight : 2.800 Kg



Name : Tractor 6 Cylinder Block  
Material : Gray  
Weight : 187.700 Kg



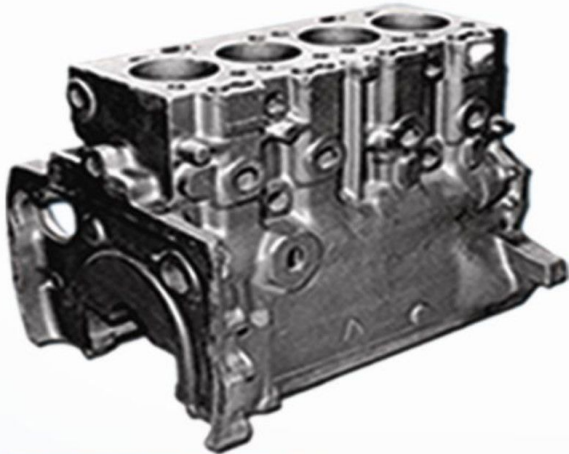
Name : EF7 Cylinder Block  
Material : Gray  
Weight : 47.250 Kg



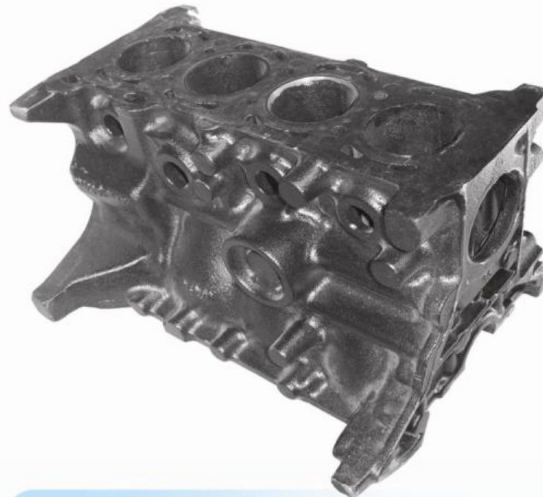
Name : TU5 Cylinder Block  
Material : Gray  
Weight : 48.700 Kg



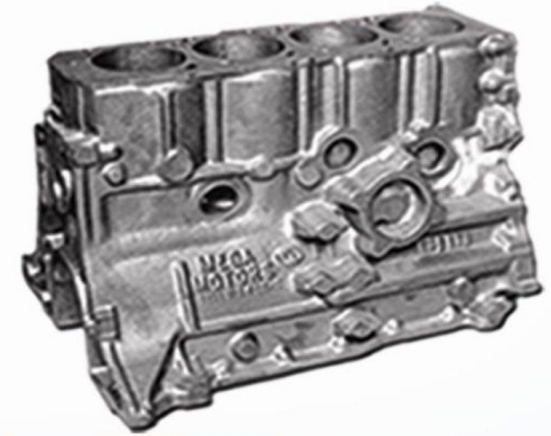
Name : Turbo Cylinder Block  
Material : Gray  
Weight : 122 Kg



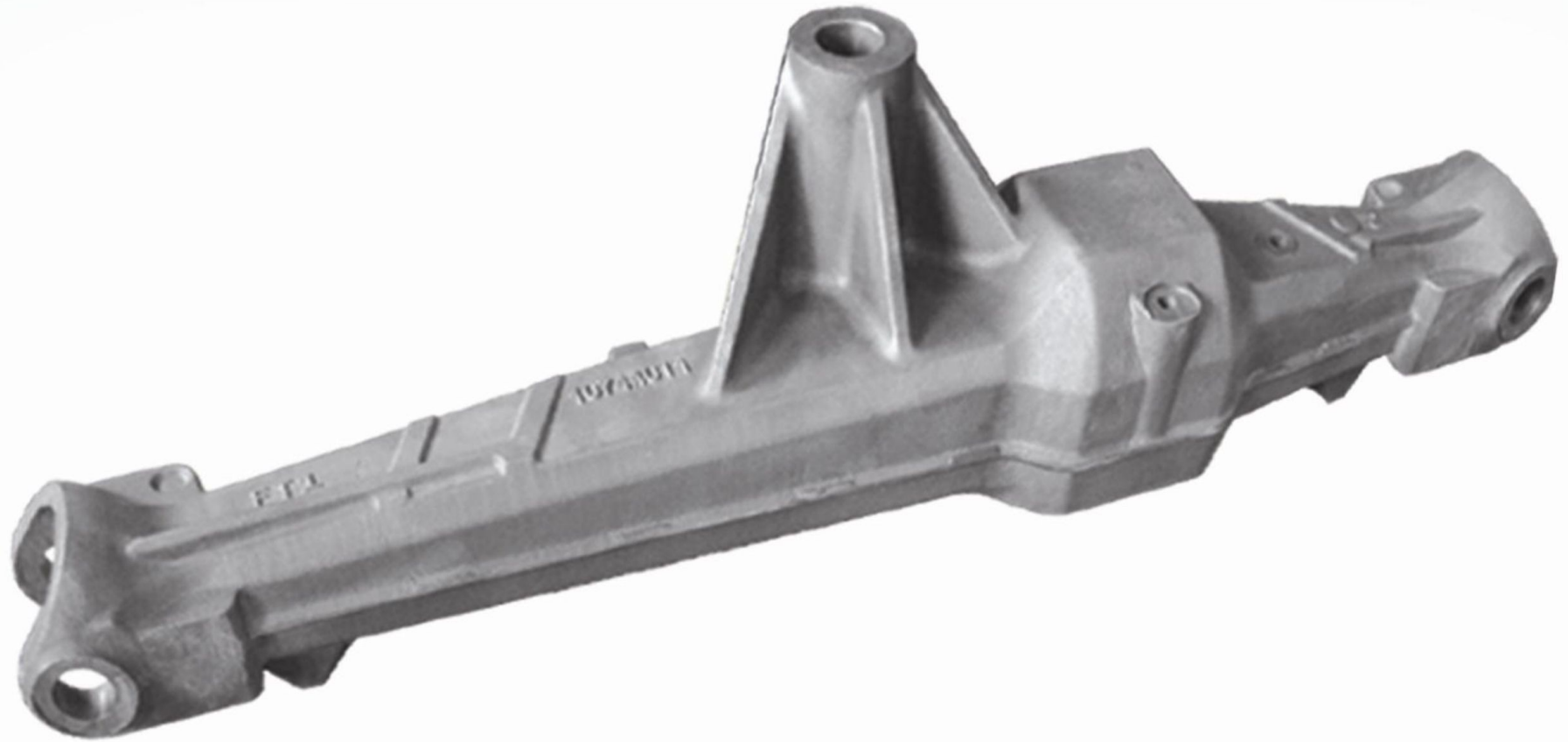
Name : Tractor Cylinder Block  
Material : Gray  
Weight : 129.400 Kg



Name : KIA Motors Cylinder Block (Pride)  
Material : Gray  
Weight : 37.250 Kg



Name : Nissan Cylinder Block  
Material : Gray  
Weight : 57.300 Kg



Name : 2 Diff Axle  
Material : Ductile  
Weight : 100 Kg