



IRAN KHODRO
Aluminum Casting Company
IKACO





in the Name of GOD

Introduction / History 1

Infrastructure & General Information 3

Technology & Manufacturing Equipment 5

Product Basket 17

Certificates 23

Main Customers 25



Introduction / History

IRAN KHODRO Aluminum Casting Company (IKACO)



Introduction / History

IRAN KHODRO Aluminium Casting Company (private joint stock), has been registered in 2000, in order to provide IRAN KHODRO INDUSTRIAL GROUP's car engine aluminium casting parts beside Country's other market vehicles. In 2004, the Company succeeded to obtain Production Part Approval Process (PPAP) from Peugeot France. The company's factory is located near Abhar, a city nearby west of Tehran by 230 kilometres.

Future Perspective:


As one of the main companies of Iran Khodro Industrial Group, becoming one of the leading producer and exporter of aluminium casting components in terms of quality and quantity and preserving all beneficiaries' interest including customers, staffs and shareholders have been our main objective.

Core Values:

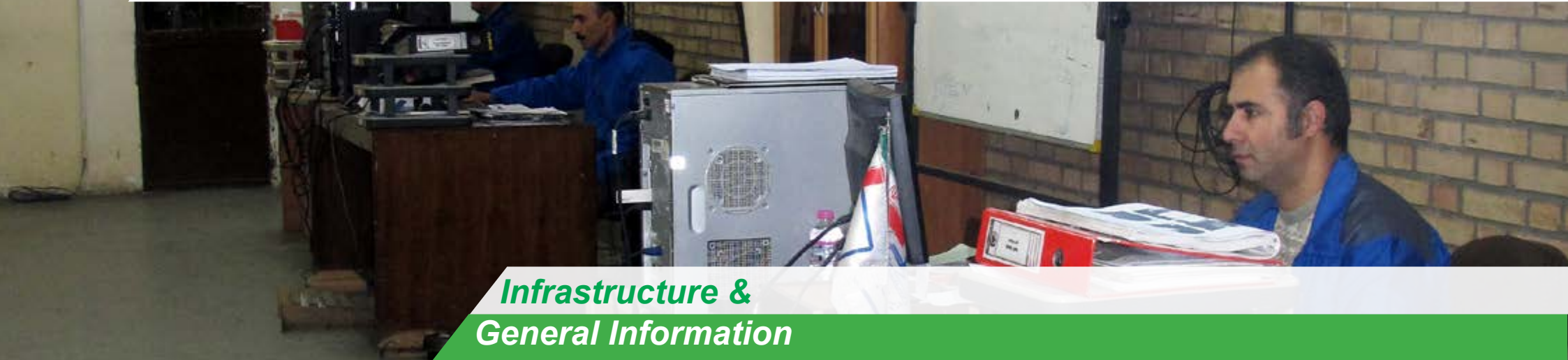
Iran Khodro Aluminium Casting Company's managers and staffs have adhered to human values and Islamic beliefs and values. In this regard, efficient human resources are considered as the largest and most important Company's capital so, the Company takes benefit of all employee's consultation in its activities.

In this regard, the following fundamental values are taken into consideration:

- * Producing high quality products to satisfy customers*
- * Train employees and improve their knowledge level*
- * Emphasize human height values and improve employees satisfaction*
- * Having job commitment, creativity and perseverance*
- * Organizational excellence and adherence to social responsibilities and environmental preservation*



Infrastructure & General Information



Infrastructure & General Information

stock:	100% IKIDO
Production capacity:	15,000 tons per year expandable to 30,000 tons per year
Production Type:	Driving force and engine's Aluminium alloy casting parts
Ground area:	32 acres
Area of heavy halls foundation:	7528 square meters and 18 meters height
Area of light halls foundation:	11096 square meters and 8.5 meters height
Area of office buildings and dormitories foundation:	2000 square meters
Electrical power:	6 MW
water:	Well, 7 litres per second output
Water purification system:	6 cubic meters per hour
Gas:	Natural Gas Network and 40 tones LPG capsule
Registered Capital:	300 Billion Rials
Number of employees:	588 people



Technology & Manufacturing Equipment





Technology & Manufacturing Equipment

Production Facilities

- A) Melting unit
- B) Gravity casting units for production of XU7, TU3, TU5 and EF7 Cylinder Heads
- C) High Pressure Diecast Unit (H.P) for production of all types of Cylinder Blocks, clutch Housing, Gearbox Housing, Differential Housing, Odometer gauge Housing, TU3 BEARING HOUSING and (EF7) national engine parts
- D) Core making unit (Cold Box and Hot Box)
- E) Laboratory units (mechanical, metallurgical, X-ray, quantometer, sand, measurement and calibration)
- F) Research Unit
- G) Molds repair and maintenance units

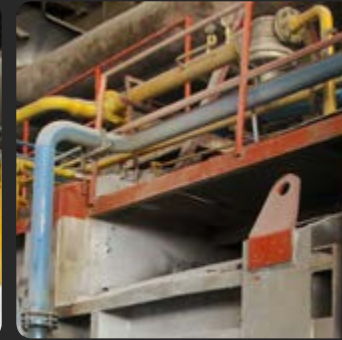


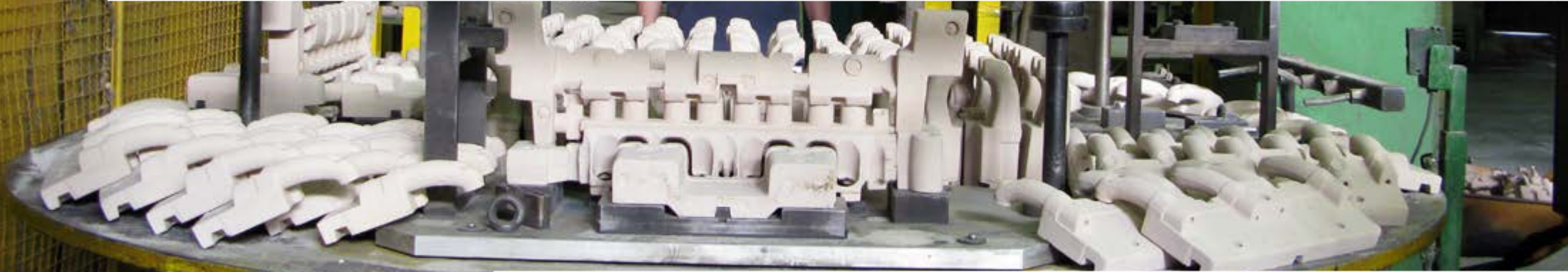


Technology & Manufacturing Equipment

Melting Equipments

- 3 units of 13 tons Furnaces (capacity 1500 Kg/h)
- 3 units of 3 tons Furnaces (capacity 600 Kg/h)
- 6 units of 400 Kg Furnaces (capacity 1100 Kg/h)
- 2 units of 2 tons Furnace
- Degasification Equipment





Technology & Manufacturing Equipment

Gravity Casting Machines

- 2 Automated Gravity Casting Lines for Cylinder Head Casting (Made by Italian FATA Co.) (6 units)
- 1 Automated Gravity Casting Line for TU5 Cylinder Heads (made by TAM) (3 units)
- An automatic Gravity Casting Line for Cylinder Head (line L3) (2 units)
- 1 Automatic Rotary Gravity Casting Line for Cylinder Head (Making IKACO) (3 units)

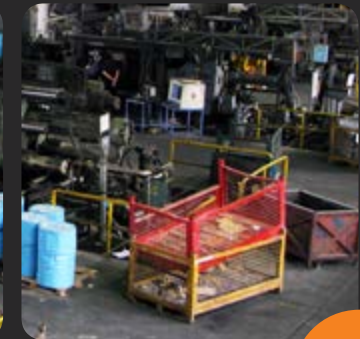
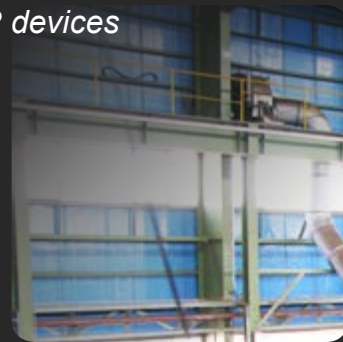




Technology & Manufacturing Equipment

High Pressure Die Cast Machines H P (Die Casting machine)

- Die cast machine 2500 tons: 1 device
- Die cast machine 2300 tons: 2 devices
- 1600 tons machine: 4 devices
- 1200 tons machine: 1 device

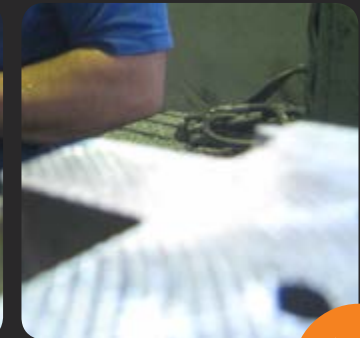
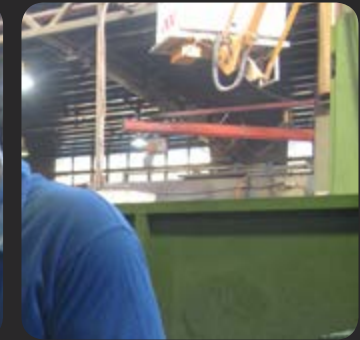




Technology & Manufacturing Equipment

Cylinder Head Trimming Machineries

- 3 Automatic Decoring machines
- 2 Feeding Cut Machines (made by TAM Co.)
- 2 Cubing machines (made by TAM Co.)
- 5 Grinding Machines
- 2 Drilling machines





Technology & Manufacturing Equipment

Coring Systems

(Cold box & Hot box)

- Fully Automatic Cold Box Sand Core Making System (5 tons/h)
- 13 Cold Box Core Making machines
- 6 Cold Box Core Making machines

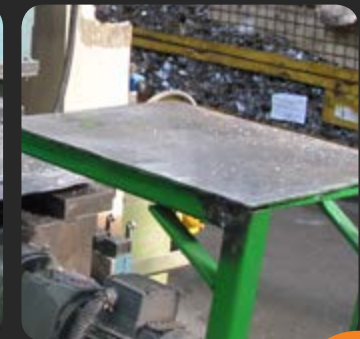
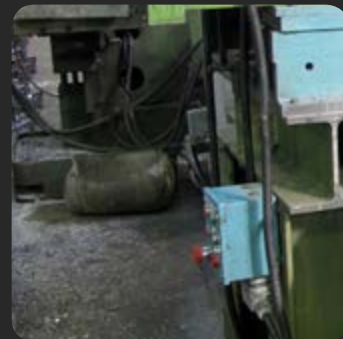
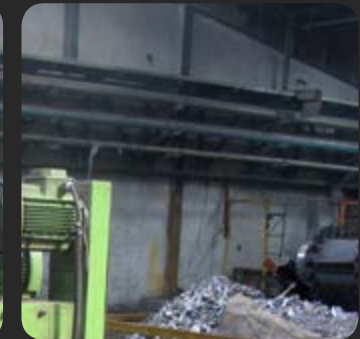
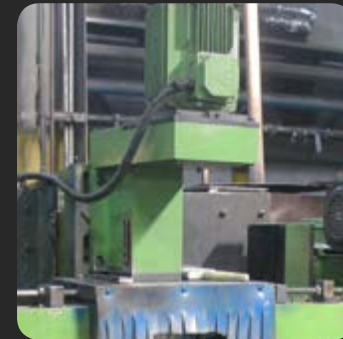




Technology & Manufacturing Equipment

Trimming Line for Many Kinds of:

- Cylinder Blocks
- Clutch Bearing
- Clutch Housing
- Gearbox
- Differential
- National Engine Parts





**Technology &
Manufacturing Equipment**

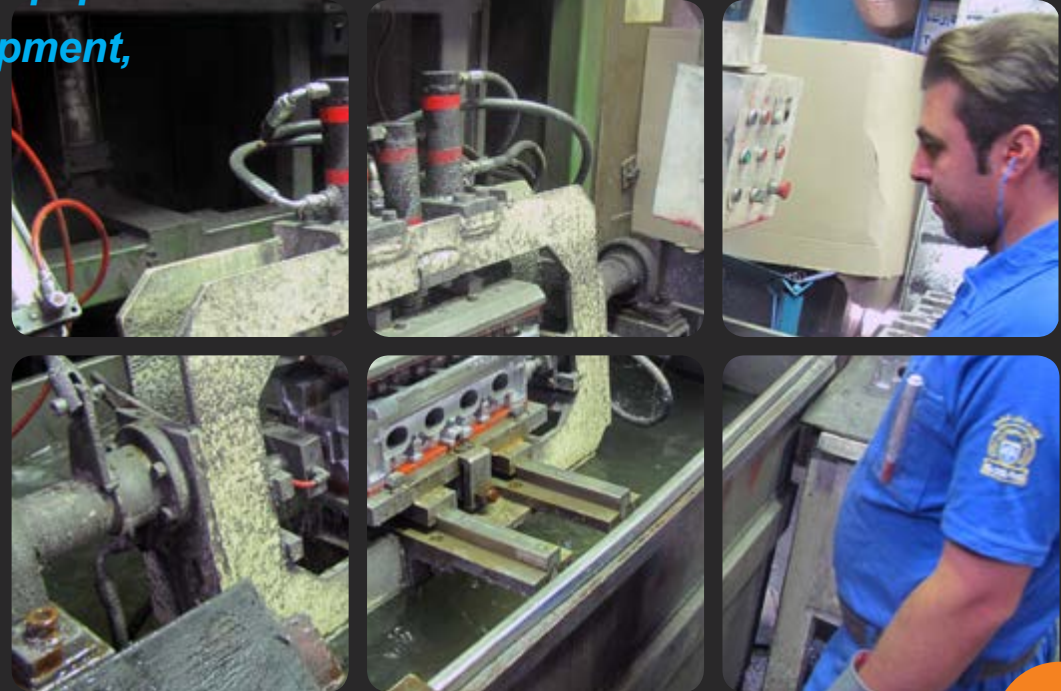
Thermal Line





Technology & Manufacturing Equipment

- Oil Carter Line Machining XU7
- Ammines Scriber Equipment
- Core Discharge Equipment, Leak Testing, Leakage, Finishing





Technology & Manufacturing Equipment

Measuring & Testing Equipments

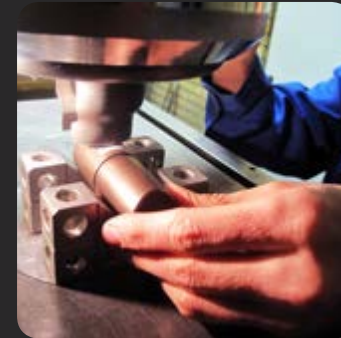
- 2 CMM Machines
- 2 Spectrometers
- 2 Radioscopy Machines
- 1 Electronic Microscope
- 1 Light Microscope
- 6 Impregnation Test Machines (Air - Water)
- Complete Metallographic Equipment
- Melting Aluminium Density testing Machine
- Complete Sand Testing Equipment(Measurement and Analysis)
- Strength Testing Machine
- Hardness Testing Machine





Technology & Manufacturing Equipment

- Gel Time Measuring system
- Tool Calibration equipment
- Viscosity of Resin-Leakage
- X-Ray
- Various Dimension Control fixtures
- Air test Machine





Product Basket



Product Basket

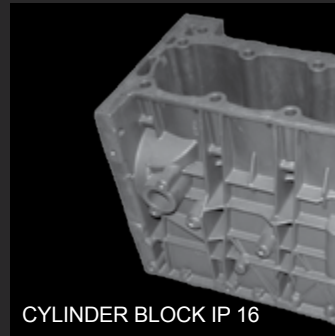
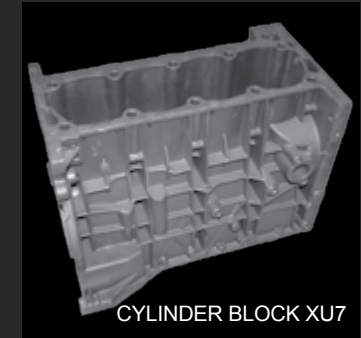
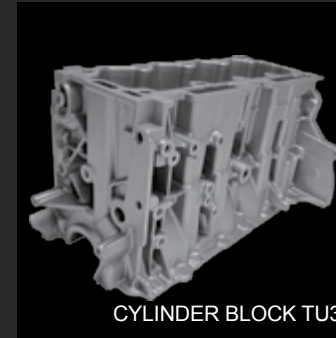
Product	Method of Production	Row	Product	Method of Production	Row
CYLINDER BLOCK XU7	Die Cast <i>(high pressure)</i>	۱	CYLINDER HEAD TU3	Gravity Casting <i>(low pressure)</i>	۱۸
CYLINDER BLOCK IP 16		۲	CYLINDER HEAD TU5		۱۹
CYLINDER BLOCK TU3		۳	CYLINDER HEAD XU7		۲۰
CLUTCH HOUSING EF7		۴	CYLINDER HEAD IP 16		۲۱
CLUTCH HOUSING XU7		۵	CYLINDER HEAD XUM		۲۲
GEAR BOX HOUSING EF7		۶	CYLINDER HEAD EF7		۲۳
GEAR BOX HOUSING XU7		۷			
GEAR BOX HOUSING RC		۸			
DIFFRENTIAL HOUSING		۹			
LADDER FRAME EF7		۱۰			
VALVE COVER EF7		۱۱			
OIL SUMP XU7		۱۲			
BEARING HOUSING EF7		۱۳			
BEARING HOUSING TU3		۱۴			
AXEL OUTLET HOUSING		۱۵			
Light bubble		۱۶			
Turtle bowl	۱۷				

Product Basket

Product Basket

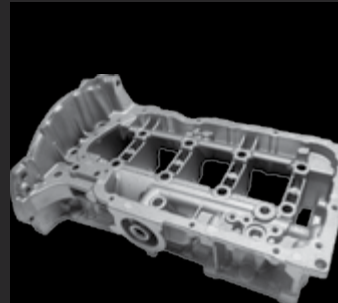
A) Die cast (high pressure):

- CYLINDER BLOCK XU7
- CYLINDER BLOCK IP16
- CYLINDER BLOCK TU3
- CLUTCH HOUSING EF7
- CLUTCH HOUSING XU7
- GEAR BOX HOUSING EF7
- GEAR BOX HOUSING XU7
- GEAR BOX HOUSING RC
- DIFFRENTIAL HOUSING
- AXEL OUTLET HOUSING EF7
- AXEL OUTLET HOUSING XU7

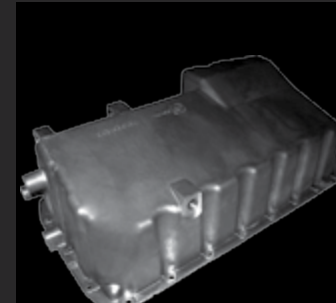


Product Basket

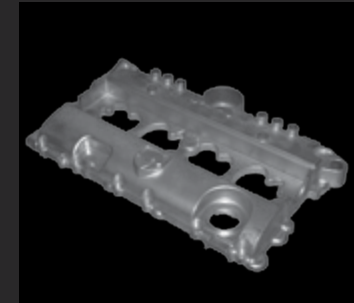
- LADDER FRAME EF7
- VALVE COVER EF7
- OIL SUMP XU7
- BEARING HOUSING EF7
- BEARING HOUSING TU3
- LIGHT BUBBLE
- TURTLE BOWL



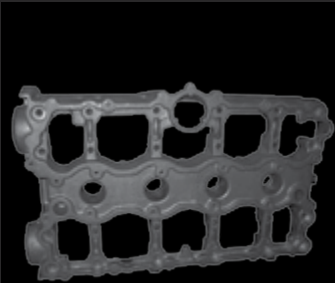
BEARING HOUSING TU3



OIL SUMP XU7



VALVE COVER EF7



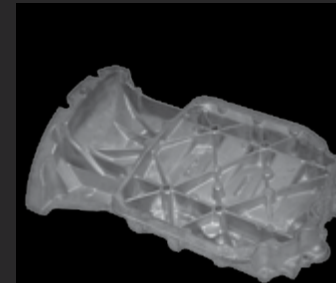
BEARING HOUSING EF7



LIGHT BUBBLE



TURTLE BOWL

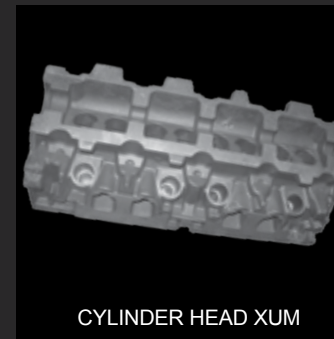
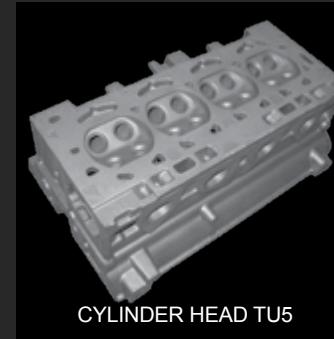


LADDER FRAME EF7

Product Basket

B) Gravity Casting

- CYLINDER HEAD TU3
- CYLINDER HEAD TU5
- CYLINDER HEAD XU7
- CYLINDER HEAD IP 16
- CYLINDER HEAD XUM
- CYLINDER HEAD EF7



Product Basket

C) Future Products

-CYLINDER HEAD TU5 +

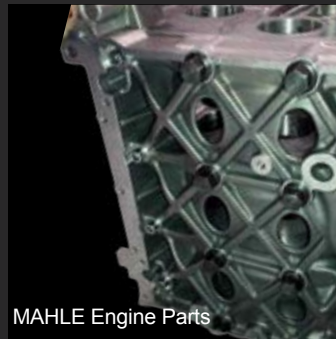
-CYLINDER HEAD EF7 +

- MAHLE Engine Parts:

CYLINDER BLOCK

BEARING HOUSING

CYLINDER HEAD



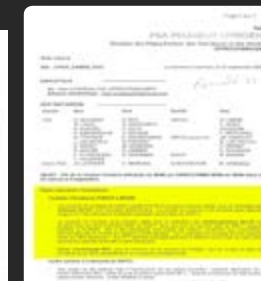
A blue-tinted graphic of a hand holding a gear with a plant inside it. The hand is cupped, holding a gear. Inside the gear is a stylized plant with three leaves. The entire graphic is set against a dark blue background.

Certificates

MOODY INTERNATIONAL
This is to certify that the
Occupational Health and Safety Management Systems of:
Iran Khodro Aluminium Casting Co.

Certificates

- Country's green industry unit Silver Statue Award (2016-2018)
- SAPCO B Grid Since 2010
- MEGA MOTOR B Grade Since 2012
- ISO / TS16949 Certificate from DQS
- Safety Management Systems
- Production Part Approval Process (PPAP) from Peugeot France
- Occupational Health and Environmental Standards:
ISO14001: 2004 and OHSAS 18001: 2007





Main Customers



Main Customers

- SAPCO is our current main customer
- Approximately 100% of Production is sent to IKCO's Main Lines
- A Part of Company's Products is Offered to After Market

