ALI DEHGHAN FOUNDED SHEGARF ABZAR (MOULD WORKSHOP) 1980

1990

ESTABLISHMENT OF FIRST PRODUCTION SITE (MOJDEH VASL SHIRAZ) FOR PRODUCING HOME APPLIANCE

1995

GOING ON A JOINT VENTURE WITH A GROUP FOR ENGINE PART PRODUCTION

2003

STARTING THE PRODUCTION OF AUTOMOTIVE COMPONENTS

2004

ESTABLISHMENT OF SECOND PRODUCTION SITE CLOSE TO CUSTOMERS IN TEHRAN

2006

START OF CORPORATION WITH HISPAMOLDES SPAIN FOR MOULD WORKSHOP

2009

ESTABLISHMENT OF FILTERATION PRODUCTION LINE

2013

DOUBLE INJECTION

2016

ESTABLISHMENT OF THE RUBBER SEGMENT
ENGINEERING RESOURCES OVERVIEW

A- Skills Centres

- Activities Comprise:
  - Product design (CAD/CAE)
  - Engineering leadership
  - Methodology
  - Prototypes - Mold

B- Technical Centres

- Main Activities Comprise:
  - Product design (CAD/CAE)
  - Methodology
  - Prototypes

- Total Project Accomplishment More Than 100 Automotive Component

<table>
<thead>
<tr>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2016</th>
<th>2017</th>
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<tbody>
<tr>
<td>Aspirator Tu3, Tu5</td>
<td>Rail fuel Tu3</td>
<td>Air intake manifold pride</td>
<td>Aspirator EC5</td>
<td>Aspirator Sp100</td>
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<tr>
<td>Resonator Tu3, Tu5</td>
<td>Air intake manifold Tu3</td>
<td>Cam cover pride</td>
<td>Air intake manifold EC5</td>
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<tr>
<td>Mud gvard207</td>
<td>Mud gvardrunna</td>
<td>Mud gvarddena</td>
<td>Frame timing belt EC5</td>
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<tr>
<td>Rail fuel tiba</td>
<td>Air intake manifold tiba</td>
<td>Cam cover tiba</td>
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Brief summary of MVS Group:
Mojdeh Vasl Shiraz was founded in 1980 with 11 graduated students & some of the lecture of Siemens college in Iran as a mold shop, after a while they start manufacturing plastic parts and established Mojdeh Vasl Shiraz (MVS). 10 years later, they shifted to automotive market and soon they became the biggest plastic engine automotive manufacturer in Iran.
With strategic choice of buying 5 production lines from well known Companies (MCP) which is the best supplier of Mercedes Benz, BMW, Volvo, Ford, Peugeot & more than 20 other car makers around the world they transferred the knowledge and highest technology for mold design, plastic manufacturing and quality system to MVS Group. MVS is producing parts for Peugeot 206, Peugeot 405 & Citroen engine parts.

MVSCO Mission
Satisfy the needs of countries industrialization in producing polymeric/plastic parts for automobiles and non-auto motives.
At the attention of the leaders Customers are to be the key factor of the survival and persistence and, employers on the other hand are also to be the major element of profitability and development of this organization.

Vision:
MVSCO is willing to be the best manufacturer in producing lateral polymeric engines and be among the top 5 manufacturers in producing automobile’s decorative at the internal market in the next 3 years.

Our Expectation:
To be number one in reputation of producing high qualified products among inner and international customer satisfactions.
BUSINESS & ACTIVITIES

Automotive Industry
- Under-hood applications
- Exterior trim
- Filtration: air, and cabin air (OEM, OES, IAM)

Other Industries
- Plastic parts for Rail-Ways transportation industry
- Plastic parts for Home Appliance industry
- Plastic parts for Packaging industry
## Summary of main manufacturing processes and technologies

### Engineering Resources
- Test & Assembly machine design and manufacture
- Industrialization
- Redesign & modification
- Tiba Manifold welding fixture

### Technology Resources
- Dual Injection
- Injection Machine
- Hotplate
- Vibration
- Ultra Sonic
- Central Material Handling
- Sequential Valve Gate Controller
- Ultrasonic welding
- Vibration welding
- Hot plate welding

### Transformation
- Injection moulding (thermoplastic)
- Gas assisted injection
- Bimaterial injection
- Decoration overmoulding
- Rotation moulding
- Bending
- Filtration

### Assembly
- Glueing (plastic/plastic, plastic/glass)
- Rotation welding
- Freeweld® infrared welding
- Laser welding
- Automatic clip assembly
ENGINEERING AND TECHNOLOGY RESOURCES

Construction

Our Fixtures

Softwares

PowerMILL

MODFLOW

Ultra Sonic

Redesign

Abilities

Technology
R&D / ENGINEERING DEPARTMENT

With highly educated experts and capable equipment in the development of new projects (Production and designing injection molds) are underway in 3 technical centers as the following:

**MVSCo, (Qazvin)**

**Exterior & Engine Parts**

- Key local contact for OEMs in product development
- Main activates:
  - Product Realization (APQP) from design to product validation.
  - Knowledge Management
  - Industrial engineering
  - Improving Quality and cost reduction projects.
  - Transfer of knowledge and technology innovation led to localization parts.
- Total over of 8 technicians and engineers.

**Head Office (Tehran)**

Spare parts (AM)

- Promotion of technology to penetrate spare parts (AM) market.
- Total over of 3 engineers.

**SHEGARF ABZAR Fars (Fars)**

Designing and manufacturing moulds

- Total over of 10 Engineers.
- Producing 4 kinds of fuel rails such as TU5, TU3, L3 & TibaFuel rails with OEM share market more than 90%.
  The single source for TU5, TU3 and TibaFuel rails.
- Producing 5 kind of Air Intake manifolds such as TU5, TU3, XU7 & Tiba, RunaAir Intake manifolds with share market more than 60%.
  The single source for TU5, Pride and TibaAir Intake manifolds.
- Producing 4 kind of Cylinder head cover such as TU5, XU7, Pride and Tiba with share market more than 65%.
- Producing Air Intake pipe such as TU3, TU5 and S81 Air Intake Pipe with share market more than 80%.

- The EC5 engine project for air intake parts and Fuel supplier parts by cooperation with PSA company.
- The Air Intake projects is running for new projects by cooperation with Saipa Company.
- The research projects for Air Intake Manifolds is going to be done to change the material base from aluminum to plastic in order to reduce Engine Oil Pan weight about 30%.
  For EF7 Air Intake Manifolds reduction weight will be done about 30%.
- The Air Intake Manifolds and Fuel supplier parts projects for new OEM customers (negotiation with Renault Nissan, Kerman motor etc.)
- Research and development project for new origin thermostat and its housing for OEM customers.
• Producing 5 kind of mudguards such as Runa, Dena, Pars, 206 & 207 Peugeot with share market more than 80%. The Single sources for 207 Peugeot, Runa and Dena Mudguards.
• Producing 2 kind of Door protectors such as S90 and 206 Peugeot with share market more than 50%.
• The Single sources for S90 Door protectors.
• Producing 2 kind of Wind shields such as Runa and 206 Peugeot with share market more than 70%.
• The Single sources for Runa Wind shield.
• Strategic focus to penetrate new market for the part with high added value.

• The exterior parts for 301 & P208 Peugeot projects by cooperation with PSA.
• The research and development projects for exterior parts (For example: redesigning the air inlet channels from the fixed clip to moveable in order to prevent breaking and scraping the part.)
• The Exterior parts projects for new OEM customers (negotiation with Renault Nissan, Kerman motor etc.)
**PRODUCT SEGMENTS**

<table>
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<tr>
<th>Fuel Rail Ass</th>
<th>Under hood Applications</th>
<th>Air Intake Systems</th>
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<tr>
<td></td>
<td>PRIDE EURO 4</td>
<td>XU7/XU10</td>
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<td>XU7JP/L3</td>
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Based on our experience and high technology machinery and well educated human resource we become the first and only producer of plastic fuel rail for 15 years.
OUR TOTAL WORK FORCE

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