COMPOSITE MATERIALS FOR AVIATION
Invest in Israel is an integrative body within the Ministry of Economy and Industry that serves as a one-stop shop for a wide range of potential and existing investors. Invest in Israel identifies lucrative investment opportunities, maps potential obstacles and helps fast-track investment. Our advantage lies in our ability to bridge between private clients needs and government entities, and to promote activities within the framework of the government.

Forward-thinking conferences and delegations with key figures, businesses and government officials

Data, statistics, facts and figures that lead to knowledge-based decision making

Expert sector managers that lead potential investors from initial interest to successful investments

Providing ongoing assistance to overcome challenges and bureaucratic obstacles, expand operations and re-investments and promote a conductive environment for foreign investors

Israel’s excellence in various industries is well known around the world thanks to its highly skilled workforce, entrepreneurial thinking, groundbreaking research capabilities, high concentration of MNCs, collaborations with the Israeli academy, its defense industry and advanced manufacturing abilities. These unique characteristics have influenced the development of Israel’s Islands of Excellence: sectors or industries in which Israel shows extraordinary results. These areas show excellent performances, high growth rates and significant manufacturing potential.

Knowledge and Research

Foreign Investment Promotion

Investor Guidance

Post-Investment Support

ABOUT THE ISLANDS OF EXCELLENCE SERIES

Israel’s Islands of Excellence

ROBOTICS

SEMICONDUCTOR INDUSTRY

MEDICAL AND COSMETIC LASER

ADVANCED MANUFACTURING IN THE PLASTICS INDUSTRY

BATTERIES FOR ELECTRIC VEHICLES

METROLOGY AND TESTING IN THE SEMICONDUCTOR INDUSTRY

DIGITAL AND 3D PRINTING

COMPOSITE MATERIALS FOR AVIATION

THE ISRAELI ECOsystem

Human Capital

Defense Industry

Government

Full Scale Industry

Organizations and Institutions

ISRAEL’S ISLANDS OF EXCELLENCE

ISRAEL’S ISLANDS OF EXCELLENCE INVEST IN ISRAEL

3

WHERE COMPANIES COME TO SHINE
Israel economy is one of the strongest in the world, featuring high growth rates and low and declining unemployment rate, that indicate its outstanding resilience to external shocks.

No. 1 in R&D Investment as % of GDP

Gross Domestic Spending on R&D, 2016 (Total, % of GDP)

SOURCE: OECD, 2017

No. 1 in Scientific Infrastructure

Number of Scientific and Technical Journal Articles, 2015*

SOURCE: The Global Talent Competitiveness Index, 2017

No. 1 in Digital/Technological Skills

SOURCE: IMD World Digital Competitiveness Ranking, 2017

No. 1 in Venture Capital Investments as a Ratio of GDP


+300 MNC’s

+6,000 active startups
The composite materials market constitutes a part of the plastics and rubber market in Israel, with annual exports totaling $2.6B, about 6% of Israel’s total industrial exports. The industry in Israel consists of some 500 manufacturers and 23,700 employees. The workers in the field of composite materials are engaged in both production and development, and include material engineers, composite materials technicians and production workers.

The Israeli Plastics and Rubber Center deals with applied research and development in the field of rubber and plastic polymers for various industries. Special assemblies are being developed in the center and find their way into the Israeli industry and from there to the rest of the world. An important part of the center’s projects is funded by the Israel Innovation Authority and the Ministry of Defense. The center’s team of scientists operates from two locations, one at the Shenkar College in Ramat Gan and the other in the Technion in Haifa.

The Afeka College offers a specialization track in Mechanical Engineering, which is aimed at integrating into the industry in production processes and quality assurance, and in research and development of components and materials. This track in the field of complex materials, prepares the students to work in the industry.

About 20 leading companies operate in the field of composite materials for aviation, most of which control the entire product process, from planning to manufacturing.

The Israeli composite materials industry developed rapidly since the 1990s. More than 80% of composite materials companies in Israel were founded in the past 25 years.

The global composites market size was estimated at $66.61B in 2015. It is projected to expand at a CAGR of 7.8% until 2024. The global composites market size was estimated at $66.61B in 2015. It is projected to expand at a CAGR of 7.8% until 2024.
The Israeli Society for Materials and Processes, founded in 1973, includes about 1,500 scientists, engineers and technologists working in various fields of materials technology from academia, industry and research institutes. The association has professional working groups, including a composite materials group, which work to create cooperations between industry entities and scientific and material engineering professionals from the academia.

The Israeli Aerospace Manufacturers Federation (IAMF) is the network for the international promotion of the aerospace industry of the State of Israel. The goal of the IAMF is to strengthen and enhance the Israeli Aerospace Industry international awareness and competitiveness. The IAMF initiative was launched by the BrightStar Group, in association with the State of Israel and the Israeli Manufacturers Association.

Xenia-Van Leer, a joint venture of the Xenia-listed investment company and the Van Leer Foundation is an incubator in the field, which deal, inter alia, in the sector of composite materials.

Israeli companies supply aircraft parts to the defense industry in Israel. The Israel Defense Forces and Ministry of Defense work closely and continuously to design and manufacture composite parts for the defense market.

The Commercial Aircraft Group’s Aero-Assemblies Division is Israel Aerospace Industries’ (IAI) center of excellence. It designs and manufactures aero-assemples for both the commercial and defense markets, with comprehensive in-house production infrastructure & technologies.

Cyclone designs and produces unique assemblies for civil and military aircraft such as the F-15, F-16 and F-18 fighter aircraft, Boeing 737 to 787 commercial aircraft. The company developed an all-composite passenger aircraft door that uses no metal fasteners and is made in a one-shot, resin transfer molding (RTM) process.

Kanfit’s sub-contractor parts, complexes and assemblies of composite materials for the aviation industry are installed on the Gulfstream executive aircraft, Boeing passenger planes, F15, F16, F18, 22-V-15, Eurofighter typhoon fighter planes and many others.

Israel Aerospace Industries (IAI) signed a contract with Lockheed Martin to produce 40 wing sets for the F-35 Lightning II multi-role stealth fighter aircraft. IAI is scheduled to produce more than 800 pairs of F-35 wings, with a potential value of $2.5B, during the next 10-15 years.

Comparts’ composite materials are manufactured according to the requirements of its customers, including Israel Aerospace Industries, Elbit, Aeronautics and many international customers.

AeroSol’s component are customized to customer requirements, from the development stage to the production stage. The customization is made possible by integrating and involving the customer throughout the process. The company manufactures a wide range of products, including radar and antennae caps, UAV parts, payloads and cameras.
THE GOVERNMENT OF ISRAEL OFFERS AN ASSORTED RANGE OF INCENTIVES IN THREE MAIN CATEGORIES

INVESTMENTS AND MANUFACTURING INCENTIVES

<table>
<thead>
<tr>
<th>CENTER OF ISRAEL</th>
<th>PRIORITY AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced corporate tax rate – priority enterprise</td>
<td>16% (8%)</td>
</tr>
<tr>
<td>Reduced dividend tax rate (special priority enterprise)</td>
<td>20% (15%)</td>
</tr>
<tr>
<td>Investment grant</td>
<td>Up to 30%</td>
</tr>
<tr>
<td>Innovation box for IP based companies</td>
<td>12% (6%)</td>
</tr>
</tbody>
</table>

Other

- The MNC can invest in cash and/or in kind, i.e. technological guidance, using labs, discounted software licenses, regulatory advice, etc.

40 bilateral and multilateral industrial R&D support agreements, as well as participation in 5 multinational European programs

EMPLOYMENT INCENTIVES

<table>
<thead>
<tr>
<th>CENTER OF ISRAEL</th>
<th>PRIORITY AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>“High Salary” sub-track</td>
<td>NA</td>
</tr>
<tr>
<td>Special populations Ultra-Orthodox, ethnic minorities, individuals with disabilities, single parents</td>
<td>10%-37.5% of the wage cost, with a maximum monthly wage of ~$4,000</td>
</tr>
<tr>
<td>Minorities in knowledge based industries</td>
<td>30%-40% of the wage cost for 24 months with a maximum monthly wage of ~$3,000</td>
</tr>
</tbody>
</table>

Other

- If the company commercializes the technology or product and generates profit, royalty payments need to be made. Otherwise, not.

R&D INCENTIVES

GLOBAL ENTERPRISE COLLABORATION PROGRAM

| Target | Encourage the creation of MNC-Startup partnerships in Israel |
| Incentives | The Israel Innovation Authority will support the Israeli startup company with a conditional grant ranging between 20%-50% of the approved development budget |
| Qualifications | According to fund criteria |

BILATERAL & MULTILATERAL INDUSTRIAL R&D

| Target | Encourages international collaborative R&D between Israeli and foreign companies |
| Incentives | Public funding is usually 50% of the approved project |
| Qualifications | According to fund criteria |

Other

- The MNC can invest in cash and/or in kind, i.e. technological guidance, using labs, discounted software licenses, regulatory advice, etc.

40 bilateral and multilateral industrial R&D support agreements, as well as participation in 5 multinational European programs

R&D FUND

| Target | To promote R&D by lowering the company’s risk |
| Incentives | Subsidizing up to 50% of the project’s cost (60% in priority areas) |
| Qualifications | Approved by a professional committee of the Israel Innovation Authority |

Other

- Technological Incubators - the operating licensee invests only 15% of the project budget (the state invests the remaining), and receives in return 50% of the shares of the companies in the incubator.
- Magnet program for generic R&D - up to 66% of its approved R&D budget.
- Magneton - cooperation between academia and industry for technology transfer.

OTHER R&D SUPPORT

| Target | Support early stage companies as well as the development of technological infrastructure for the Israeli industry |
| Incentives | Technological Incubators - the operating licensee invests only 15% of the project budget (the state invests the remaining), and receives in return 50% of the shares of the companies in the incubator.
- Magnet program for generic R&D - up to 66% of its approved R&D budget.
- Magneton - cooperation between academia and industry for technology transfer.

| Qualifications | Approved by a professional committee of the Israel Innovation Authority |
| Other | If the company commercializes the technology or product and generates profit, royalty payments need to be made. Otherwise, not. |
| Magnet project is usually approved for a 3-year period with extensions of 1-3 years possible. |

ISLANDS OF EXCELLENCE INVEST IN ISRAEL

- If the company commercializes the technology or product and generates profit, royalty payments need to be made. Otherwise, not. |
| Magnet project is usually approved for a 3-year period with extensions of 1-3 years possible. |

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The Foreign Investments and Industrial Cooperation Authority