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Irrigation





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The Israel Export and International Cooperation Institute (IEICI) is your premier gateway for doing business with Israeli companies. Established and funded by the government and the private sector, IEICI's expertise in technology and product scouting, joint ventures and strategic alliances with Israeli companies spans more than half a century. With expertise in Israel's leading Industries, IEICI offers access to relevant businesses and government resources and provides the information you need to connect, negotiate and do business.

This catalog demonstrates a sample of the Israeli abilities and know-how of the thriving Agro-technology sector, and as IEICI has an intimate acquaintance with the Israeli exporters, we are here to support and integrate you into this growing industry.

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International Projects

www.acs-i-p.com

Irrigation projects are aimed at developing large pressurized irrigation areas of low pressure in the most common crops including agro-export crops (tomatoes, peppers, onion, melon, watermelon, asparagus, grapes, banana, mango, cocoa, coffee , citrus, avocado, sorghum, maize, sunflower, sugar cane, grains and legumes. systems are implemented drip irrigation, micro sprinkler, mini sprinkler, sprinkler pivots and propelled. irrigation method selected for each project is recommended depending on the crop or crops selected based on markets, and agro-ecological conditions in each production unit. irrigation projects include the development of the engineering, procurement and construction.

- The conceptual engineering, basic and detailed individual projects including intake works, pumping stations, piping, emitters and automation.
- The procurement or supply electric and diesel pumps, suction pipe and fittings, control valves, self cleaning disc filters, gravel filters, hydrocyclones, disk filter mesh, irrigation controllers for automation equipment, cables electric fertigation injectors, hydraulic valves, PVC pipes, drip pipes, button drippers, micro sprinklers, mini sprinklers, sprinklers, center pivots, linear and reels propelled pivots.
- The construction of the projects based on detailed engineering.



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Water Treatment and Filtration Solutions

<https://irrigation.amiad.com/>

Amiad Water Systems develops and produces automatic, self-cleaning water treatment and filtration solutions. The company provides green solutions for the industrial, municipal, irrigation, oil and gas, and ballast water markets.

Amiad's patented products are being integrated into the core of systems including filtration and water treatment, micro-irrigation and membrane protection, wastewater and potable water treatment, cooling systems, and sea water filtration.

Headquartered in Israel, Amiad provides its water treatment and filtration solutions through 9 subsidiaries and a network of more than 170 distributors to customers in over 80 countries.



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AQUA HD

Separation and Filtration Systems for Sewage and Wastewater

www.aquahd.net

CHALLENGES

With the move to better and more precise irrigation systems, the need for a higher quality of water at the inlet to the irrigation systems is increasing. One of the main impurities that needs to be removed before use in irrigation systems is particles that are present in the water. As well as clogging the irrigation piping, requiring frequent replacement of the whole irrigation system. This inevitably resulted in high maintenance costs and long downtimes in production.

OUR SOLUTION

The Natica system can effectively treat water for fine particles removal and is capable of maintaining water quality at the inlet to the irrigation below 20 NTU (over 95% removal).



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Sensing System for Irrigation and Fertilization www.autoagronom.com

AutoAgronom has developed a sustainable precision-agriculture solution that enables growers to save up to 50% in water and up to 70% in fertilizer while increasing yields by as much as 30%.

The company's Root Sense technology "listens" to the plants, analyzes their needs in real time, and automatically delivers water and fertilizer, providing optimal growth conditions throughout the growing cycle.



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implementing 50 years of experience
and intelligent technology

[www.baccara-
geva.com/water_solutions/irrigation/](http://www.baccara-geva.com/water_solutions/irrigation/)

Over the years BACCARA has had the opportunity to form strong cooperation and partnerships with some of the world's leading irrigation companies such as: Netafim, NaanDanJain, Dorot, Irritec, Rivolis and Motorola. BACCARA solutions can be found in a myriad of irrigation types of applications including: VRI pivot systems, long distance wired operators (for irrigating remote areas), and commercial irrigation solutions. Our products offer a wide range of solenoids, high pressure solutions, water flow solutions from large to small (1/8" - 3") as well as innovative control solutions.



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Water Control Solutions

www.bermad.com

Since 1965, BERMAD has been developing proven hydraulic control valves for irrigation projects and systems. With the widest range of innovative products for field and greenhouse agriculture, BERMAD offers customers advanced control solutions specially created for irrigation – from water source to the emitters: drip, sprinkler, micro-jet and pivot.



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Soil Sensor for Irrigation

www.cropx.com

CropX is an agriculture analytics company that has developed an adaptive irrigation service, which automatically optimizes irrigation, thereby delivering an increase in crop yield as well as water and energy savings for farms.

The company generates irrigation maps and automatically applies the right amount of water to different parts of the same field.



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Water System Control and Optimization

<https://www.dorot.com/fields-of-expertise/agriculture/browse-by-control-solution>

Dorot Control Valves develops and supplies sustainable technologies and products for water system control and optimization.

With a diversified product line of hydraulic control valves, air release and vacuum break valves, and a wide range of complementary products, Dorot offers solutions for applications in agricultural and landscape irrigation, waterworks distribution, wastewater and effluent disposal, mining, firefighting, marine, and other industrial applications.

Dorot products are made from a wide variety of materials to suit various conditions, including titanium, nickel, aluminum, cast iron, ductile iron, cast steel, stainless steel, bronze, marine bronze, super duplex, PVC, polypropylene, and GRP.



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Control Systems for Water Infrastructures

<https://galconc.com/>

Galcon manufactures water infrastructure controllers and cloud-based smart solutions for residential, turf, landscape, and agriculture customers.

Galcon offers a diverse product line ranging from single, battery-operated, stand-alone controllers to multistation, wireless, web-based irrigation and fertigation systems. On commercial farms, the company's products are designed to increase yields through optimal irrigation while conserving valuable water resources and reducing energy consumption.



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Holistic Sensing Solution for Greenhouse Farming www.grofit-ag.com

grofit develops sensors and software for precision farming in greenhouses. Its IoT platform employs small, simple, low-cost sensor stations to measure key environmental and plant growth parameters such as air temperature, radiation, relative humidity, soil irrigation, fertilization, and more.

grofit is a spin-off of Syngenta, through which it has delivered its technology for several years.



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Satellite-based, sensorless Precision Irrigation <http://manna-irrigation.com/>

Manna Irrigation Intelligence is the leading precision farming company in Israel. The aim of precision farming is to optimize agricultural activities by achieving optimal input applications (fertilizer, pesticides and irrigation) in terms of location, dose and timing. Our work methods are based on Geographical Information Systems (GIS), GPS, remote sensing (aerial and satellite photography) and agricultural control systems. Manna Irrigation Intelligence is the link that bridges the gap between this elite technology and daily agricultural activity.

Four different fields, thus enabling a comprehensive, end-to-end solution of precision farming. This wide range of services facilitates the best match between the solutions and the field conditions, so that farmers can apply them based on real and defined requirements.



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Drip Irrigation and Pipelines

www.metzer-group.com

Metzer Group is a kibbutz-based manufacturer of micro-irrigation products and various types of pipelines. The Metzer projects department also has expertise in agricultural and irrigation turnkey projects for greenhouses and open fields.

Among the company's products are SP pipes for cold and hot water plumbing and PE pipes for water infrastructure and telecommunications. Its unique drippers are designed with the widest dripper inlet filter and an innovative pressure-compensating mechanism for precise irrigation and clog-resistance with low-quality water.

Metzer's HDPE infrastructure pipes comply with the most stringent international standards, making them a highly cost-effective and efficient solution for the long-distance transport of optical and electrical fibers, as well as for water, gas, and wastewater.



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Tensiometer-based Irrigation Systems

www.tensiograph.com

Mottes Tensiometers has developed a high-precision system for measuring and monitoring plant water consumption. The system utilizes remote sensing, cellular networks, and the internet to provide growers with accurate and reliable data about soil moisture tension and soil and air temperature. The results can be easily accessed through the company's web-based and mobile applications.



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Gravity Micro-irrigation Solution

<https://ndrip.com/>

N-Drip is the developer of a gravity micro-irrigation system that utilizes existing flood irrigation infrastructure to provide efficient drip irrigation. The system uses pressure lower than 0.06 bar and is compatible with dirty water, requiring no filters.

N-Drip does not rely on external energy, instead making use of the field topography and gravity power to reduce conversion costs and increase operational efficiency with the goal of conserving water and fertilizer while increasing yields.



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NAANDANJAIN

A JAIN IRRIGATION COMPANY

Tailor-made Irrigation Systems

www.naandanjain.com

NaanDanJain Irrigation offers a wide range of customized technologies in more than 100 countries worldwide. Its products promote productivity per unit of resource, resulting in higher crop yields, risk minimization, and the preservation of nonrenewable resources.

NaanDanJain Irrigation provides drip lines, sprinklers, micro sprinklers, irrirstands, residential and landscape systems, and accessories.



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Agricultural Irrigation Systems

www.netafim.com/en/

Netafim delivers tailor-made irrigation and fertigation solutions to millions of farmers, enabling growers to maximize food production with the lowest environmental impact. Specializing in end-to-end solutions from the water source to the root zone, Netafim delivers irrigation and greenhouse projects supported by engineering, project management, and financing services. Netafim is also working on digital farming, integrating real-time monitoring, analysis, and automated control into one system.



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Drip and Micro-irrigation Equipment

<http://rivulis.com/>

Rivulis Eurodrip offers a full line of irrigation devices, including drip lines, drip tapes, filters, hoses and tubing, sprinklers, sprays, and valves. Its products are designed for the above-ground and subsurface application of water and nutrients directly to the root zone of every plant, resulting in greater yields using equal or lower amounts of water and nutrients compared to other water-distribution systems.

Rivulis Irrigation was established in 2014, when FIMI acquired the former John Deere Water division from John Deere. John Deere Water was established in 2006 by a consolidation of the micro-irrigation companies Plastro, T-Systems, and Roberts. Rivulis expanded into irrigation-focused precision agriculture software services with Manna Irrigation, a fully owned subsidiary.



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Embedded Stem Water Potential Sensors

www.saturas-ag.com

Saturas develops a miniature sensor for assessing stem water potential. The sensor is implemented in an automatic system that optimizes irrigation, reduces water consumption, and increases fruit production and quality.

Embedded in tree trunks, vines, and plants, the sensors provide accurate information based on statistical analysis. The Saturas system consists of miniature implanted sensors, in-orchard communications and transponders, and a control unit.



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Analyzing Vegetation with UAS Technology

<https://sensilize.com/>

Sensilize combines smart image analysis with UAS technology to provide up-to-date agronomic information to agribusinesses. The company's user-friendly spatial decision-support system uses imagery to provide thorough information about vegetation.

The system is based on an autonomous UAS outfitted with Sensilize's Robin, which is composed of lightweight commercial multispectral sensors. The gathered data is rapidly processed in the cloud using Sensilize's expert interpretation services.



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Urban Greening Technologies

www.solidrip.com

SoliDrip developing a one-size-fits-all autonomous irrigation device that always provides the optimal amount of water for each plant. The SoliDrip system designed for public and private, outdoor and indoor gardens of any scale, including fruit orchards and vertical gardens, and supports most garden plants and planting methods.

The company's technology saves a substantial amount of clean water and reduces gardens' overall maintenance cost. SoliDrip's mission is to boost urban greening and improve the urban environment.



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Field Monitoring Technology

<http://supplant.me/>

SupPlant, an Agro Web Lab (AWL) Group brand, offers an online platform and smartphone application designed to collect real-time sensor data from farms and provide continuous, actionable feedback to farmers.

SupPlant uses wirelessly transmitted data from sensors in the field that monitor the weather and soil, as well as from specialized plant sensors that measure stem diameter, leaf temperature, fruit size, and more. With these sensors, SupPlant can monitor plants to identify changes in growth rate, detect stress situations resulting from lack of irrigation, and compute actual and potential evapotranspiration (ET) to determine how much to irrigate.



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Irrigation Tray

www.tal-ya.com

Tal-Ya Agriculture Solutions manufactures a polypropylene tray that covers a plant's root system, directing water and fertilizer straight to the root while simultaneously protecting the surrounding earth from weeds and extreme temperatures. Tal-Ya trays can help farmers save resources such as water, fertilizer, and weed killers.

Tal-Ya trays are environmentally friendly, reusable for up to 10 years, and recyclable. They eliminate the need for disposable plastic mulch along with the associated labor and pollution. In addition, the trays are fully compatible with drip irrigation and other types of watering systems, and can make use of rainwater and dew.



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Irrigation Control Systems

www.talgil.com/Home

Talgil Computing & Control offers irrigation controllers for open field, greenhouse, and landscape applications, as well as automatic filters and backflush controllers with a variety of sizes and features.

The company's products range from small-scale, stand-alone controllers with just a few outputs for single irrigation heads to networks of expandable units consisting of numerous outputs that control multiple irrigation lines, including some equipped for remote-PC communication.



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TARANIS

Complex Imagery Platform for Predictive Crop Monitoring

www.taranis.ag

Taranis offers a precision intelligence platform for agriculture. Its solution enables farmers to monitor their fields, make informed decisions, and take appropriate action, helping them to increase their yields and cut costs.

The company applies deep learning to proprietary data sets, including submillimeter aerial imagery, field sensors, satellite imagery, weather forecasts, and data from its field-scouting app to predict and prevent crop disease and pest-based losses.



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Tevatronic
AUTONOMOUS IRRIGATION

Autonomous Irrigation System

<http://tevatronic.net/>

Tevatronic develops an autonomous irrigation system designed to identify how much water plants need and then stop the flow when it reaches a precise, predetermined depth. Its system promotes increased crop health and productivity while lowering the use of water and fertilizer, thus reducing soil contamination.

At the heart of the Tevatronic system is the valve switch controller, which is connected to the cloud server. The valve switch receives data from sensors (tensiometers) placed in the ground near the plants. Each sensor on the irrigation line reads the water pressure level of the surrounding soil, and when the soil is dry, the controller sends a signal to the relevant irrigation valve to commence irrigation.



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Viridix

Soil Sensor for Irrigation

www.viridix.com

Viridix aims to reinvent soil sensing through the development of an innovative, scalable, affordable solution that has been acknowledged by top agriculture scientists and corporate entities.

The company's revolutionary, patent-pending soil moisture sensor measures the water potential available to the roots of the plant, which is considered the gold standard of measurement in fertigation. The sensor itself acts as a real plant and can be mounted on different platforms, with no electricity or network needed for operation.