

# DOSING SYSTEMS OVERVIEW

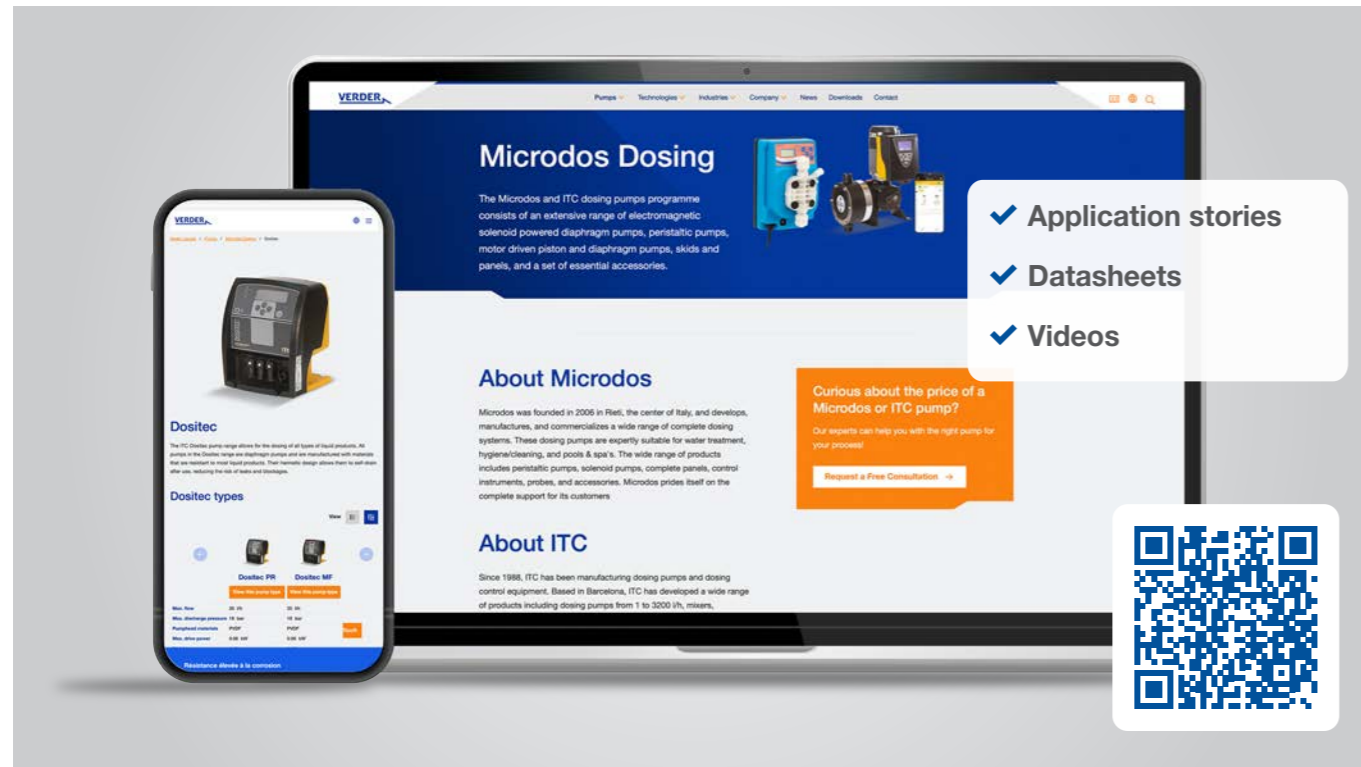
Solenoid pumps  
Peristaltic pumps  
Piston & diaphragm pumps  
Stepper motor pumps  
Controllers  
Panels  
Plug and play systems



- ✓ Large range in capacities, options and materials
- ✓ Competitive prices
- ✓ Fully adaptable to specifications
- ✓ Dosing solutions for every application sector

# GET IN TOUCH

With the dosing pump manufacturer



## Contact VERDER

If you would like to know more about MICRODOS and/or ITC products then please visit our website [www.verderliquids.com](http://www.verderliquids.com) where you will find the full breakdown of our pump range as well as application stories, latest news and technical datasheets and more.

### VERDER LIQUIDS BV

Utrechtseweg 4A  
3451 GG Vleuten  
The Netherlands

To provide you with the best possible service MICRODOS/ITC are supported by a distribution network that covers all five continents and is continuing to expand. Our group of distributors includes members of the VERDER GROUP and experienced independent companies. Our worldwide distribution network also help to provide our customers local support and spares availability.

**MICRODOS** and **ITC** are companies of the VERDER GROUP.

# THE VERDER GROUP

Enabling progress

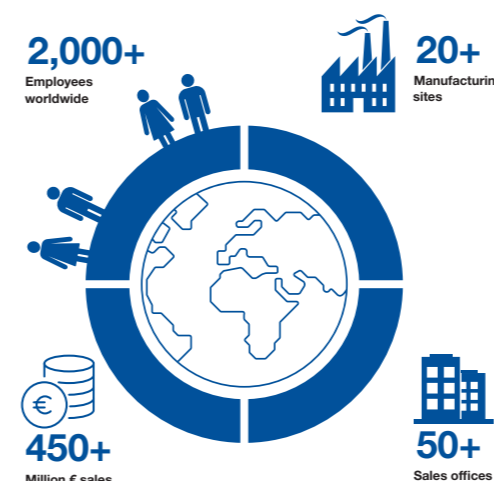


The VERDER group is a family-owned business formed over 60 years ago in the Netherlands; the group consists of a worldwide network of production and sales offices. Group companies are involved in the development and distribution of industrial and hygienic pump solutions, high-tech equipment for quality control and Research & Development into solid material (solids sample preparation and analytical technologies).

- 1 Company
- 27 Countries
- > 60 Years of expertise
- > 20 Manufacturing companies
- Global network
- Local distributors
- In-house service & maintenance
- A solution for every application
- In-depth knowledge of processes and applications

For years, Verder has led in innovation, driving our and our customers' success. Our global network of over 70 sales and manufacturing sites offers personalized sales and technical services, ensuring close customer relationships crucial for providing specific support and building lasting, trusting partnerships.

Verder is dedicated to making a positive impact by aligning with the UN's Sustainable Development Goals (SDGs) through our Environmental, Social, and Governance (ESG) program. Our goal is to lessen our environmental footprint, enhance employee well-being, and uphold ethical practices.



## Inventing to make the world a better place

We leverage our expertise in sample preparation, analytical equipment, and professional pumping to empower our customers. We enable progress by improving their operations, we contribute to safer, more efficient, and sustainable processes, products, and services. Our contributions are pivotal in securing safe food supplies, ensuring responsive healthcare, and safeguarding clean drinking water in millions of households.

As a united family, we embrace our societal responsibilities with passion and a commitment to excellence. Our collective efforts are aimed at fostering a healthier, safer, and more sustainable world for all.

**ENABLING PROGRESS.**



# MICRODOS DOSING SOLUTIONS

Taking pride in complete customer support by in-house manufacturing

MICRODOS has developed a strong position in Southern European countries for applications in water treatment, detergent dosing and swimming pool industry.



MICRODOS dosing systems produce superb solenoid and peristaltic pumps including related professional control instruments and complete dosing systems combining best functionality with the highest dosing accuracy.

## Water treatment

MICRODOS is a highly skilled partner in water treatment dosing, offering solutions for chemical labs, food applications and potable water treatment. Every application is combined with the best functionality and absolute dosing accuracy. The MICRODOS technical department offers a specific consultation to every request in order to find the best solution and the best product.



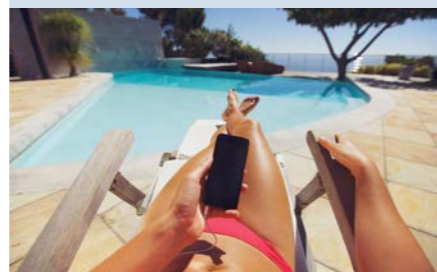
## Cleaning & hygiene

MICRODOS specializes in design and production of dosing equipment suitable for cleaning industries. MICRODOS peristaltic pumps and dosing systems are used in many applications like industrial dishwashing machines, icemaking machines and fragrant dosing systems. They are distinguished by usability, reliability and high safety standards.



## Pool control

MICRODOS offers a wide equipment range of dosing products and accessories for residential and public pools. MICRODOS is able to offer customized solutions and to improve on any requirement. A wide range of dosing pumps, tools and complete panels enable easy and automated dosing and analysis of swimming pool water.



# ITC DOSING SOLUTIONS

Precise chemical injection for water treatment and industrial processes

ITC is a dosing pumps manufacturer located in Barcelona with 35 years of experience, offers an agile, direct, and local service with global presence.



ITC offers a wide range of dosing solutions, including solenoid, electric motor-driven and advanced control pumps. Its portfolio of products is complemented by controllers that are specific to different applications. Both, pumps and controllers are available with IoT connectivity, allowing complete remote control.

## Water & Industry

ITC dosing pumps are specially suitable for water treatment applications as chlorination in drinking water and pH adjustment with acids and alkalis, as well as chemical products for industrial processes.



## Livestock

ITC offers advanced control dosing equipment for livestock farming to ensure the quality of the drinking water, as well as the administration of pharmaceuticals for special treatments. Advanced control metering pumps with a wide turndown ratio and low pulsated injection flow for the precise and uniform administration of medication on farms.



## Fertigation

ITC is the worldwide leader in fertigation with the most innovative solutions in the market. ITC's dosing pumps are a step ahead of traditional systems. Thanks to the dosing pumps and controllers for this application, the crop production is improved and fertilizer consumption is reduced.





# THE DOSING PUMP PROGRAM

An overview



**ITC PLUG & PLAY SOLUTIONS**

Full, compact equipment that saves on space and installation time. They can include pre-assembled sensors, controllers and support elements, allowing for easy, fast system assembly.



**ITC ELECTRIC PISTON & DIAPHRAGM PUMPS**

Dosing pumps with positive displacement for dosing chemical products with a high yield rate and precision.



**MICRODOS ME SERIES**

Digital solenoid pump with manual adjustable flow rate. Potential free, adjustable from 0 to 180 pulses per minute via touch controls. Easy to install and minimal maintenance required.



**MICRODOS MP SERIES**

Microdos MP peristaltic tube pumps are compact pumps ideal for precision dosing of chemicals offering models with integrated functions such as timer, pH control or Redox control.



**MICRODOS POOL MANAGEMENT SYSTEMS**

New and innovative fully digital multi parameter instruments for the control and regulation of pool water treatment from small spa's to public pools.



**ITC CONTROLLERS**

Multi-parameter controller for adjusting free chlorine and pH and ORP reading in water treatment plants and drinking water reservoirs.



# MICRODOS SOLENOID PUMPS

## ME Series



### Key features

- ✓ Constant/proportional adjustable
- ✓ Different flow rates / back pressures
- ✓ IP 54 or IP 65 available

Custom built solenoid powered diaphragm dosing pumps with flow rates from 1.5 up to 15 litres per hour and pressure range up to 12 bar. The ME1 series of solenoid powered diaphragm dosing pumps is available in different configurations. A wide range of wetted materials and accessories for dosing almost all chemicals in all water treatment applications is available.



Model	ME1	ME2	ME3
Max. flow (l/h)	15	7	24
Max. pressure (bar)	12	12	18
Options	Level predisposition / On-off switch	Level predisposition / On-off switch	Level predisposition / On-off switch
Protection degree	IP 65	IP 65	IP 65
Power (V)	230V 50/60Hz	230V 50/60Hz	230V 50/60Hz
Pump head materials	Polypropylene / PVDF	Polypropylene / PVDF	Polypropylene / PVDF
Models	Constant (digital or analog) / Pulses mA / pH / Redox	Constant (digital or analog)	Constant (digital or analog) / mA / Pulses/ pH / Redox / Chlorine / Multifunction

# DUAL SOLENOID PUMPS

## ME Series



The Dual series of pumps in Microdos range, offer a compact all in one solution for monitoring water parameters like pH, Redox, Chlorine and T° via a built in instruments and solenoid metering pumps to adjust those parameters. The ME DUAL series of pumps offer a wide degree of settings to the installer and are easy to program and maintain.



**ME DUAL PH-RX**  
Double system with built in PH/ REDOX and temperature controls.



**ME DUAL PH-CL**  
All in one double PH-CL system

Max. flow (l/h)	10
Max. pressure (bar)	5
Pump head material	PVDF
Connections (mm)	4 x 6
Valve material	PVDF
Protection degree	IP65



# MICRODOS PERISTALTIC PUMPS

## MP Series



### Key features

- ✓ Virtually wear-free drive
- ✓ No lubrication on bearings or shafts
- ✓ Easy to install
- ✓ Extremely low maintenance

Microdos MP peristaltic tube pumps are compact pumps ideal for precision dosing of chemicals offering models with integrated functions such as timer, pH control or Redox control. The system is self priming with an innovative stable flow control to maximise tube life. Common application areas are in the chemical industry, medical industry, laboratory and analysis, swimming pools, cleaning and hygiene.

Verder engineers are always seeking to further improve the user-friendliness and the accuracy of our dosing systems and panels, through research and development in cooperation with our customers. We can build any pump needed for your application!



Model	MP OEM series	Built-in controllers	MP2-HT
Max. flow (l/h)	30	6	20
Max. pressure (bar)	3	1	4
Options	Level predisposition / On-off switch	Level predisposition / On-off switch	Level probe Predisposition, Flow sensor / Relay alarm output, On-off switch
Roller	POM - Polyoxymethylen (Delrin®)	POM - Polyoxymethylen (Delrin®)	2 or 3 - POM - Polyoxymethylen (Delrin®)
Power (V)	12/24 Vdc / 110 v / 230 Vac		
Tube materials	Silicon / Santoprene / Tygon / Viton®	Silicon / Santoprene / Tygon / Viton®	Santoprene
Models	MP1 - MP2-P / MP2-B / MP2-R MP3 / MP3 / MP5	Ph / Redox / Timer / Oxygen mA / Multifunction / Chlorine	Ph / Redox / Timer / mA / Pulses / Multifunction / Chlorine

# NEW DUAL PERISTALTIC SERIES

## MP Series



The Dual series of pumps in Microdos range, offer a compact all in one solution for monitoring water parameters like pH, Redox, Chlorine and T° via a built in instruments and peristaltic pumps to adjust those parameters. The MP DUAL series of pumps offer a wide degree of settings to the installer and are easy to program and maintain.



### NEW DUAL Basic

#### The 'simple' version

Set Point easy calibration. BASIC + version includes a free mobile APP to control values of ph/orp with proximity Wi-Fi.

### NEW DUAL Pro

#### The professional version

Double system with built in PH /ORP and temperature controller. Set Point programmable on the total ph/orp scale.

### NEW DUAL Smart

#### The complete version

Control and set values with a dedicate website/App. New screen on board. Wi-Fi and Ethernet connection.

Max. flow (l/h)	6
Max. discharge pressure (bar)	1
Hose material	Santoprene
Connections (mm)	4 x 6
Protection Class	IP55
Parameters	pH-Rx / pH-Chlorine

# MICRODOS COMPLETE PANELS

All-in-one solutions



## Key features

- ✓ Customizable
- ✓ Easy to install
- ✓ Ready to use

Verder pumps range has varied and different models for different applications from water treatment, to drinking water to swimming pool. Several of the Microdos ME and MP units can be mounted on pre-assembled panels, complete of all the needed accessories to be put in place and ready to be turned on.

## Save time and money

All the panels are wired and IP65 with easy to reach connections and simple sliding brackets to remove the units, if maintenance or replacement is needed. Panels are ideal when the dosing and reading point are close to one another and space is an issue, but also to speed up the set up of the system and save time and money. All base configurations can be customized following customer request.

## Properties:

- Easy operation via LCD display
- Dosing programs: Manual, ON/OFF, Proportional
- Real-time display of water values (PH / CL)
- Display of water temperature and flow rate
- Overdose alarm
- Switch-on delay
- Password Protection



Model	MP Dual Panel PH-RX	MP Dual Panel PH-CL	ME DUAL Panel PH-RX	ME DUAL Panel PH-CL
Type	Peristaltic		Solenoid	
Max. flow (l/h)	3	3		10
Max. discharge pressure (bar)	1	1	5	5
Hose material	Santoprene	Santoprene	PVDF	PVDF
Connections (mm)	4x6	4x6	4x6	4x6
Protection Class	IP55	IP55	IP65	IP65
Parameters	pH-RX	pH-Chlorine	pH-RX	pH-Chlorine



# NEW SMART PRODUCTS

Innovative parameter instruments



## MICRODOS PH / CHLORINE PANELS

All in one solution of instrument plus solenoid metering pumps, to check and adjust various parameters in the water. High chemical compatibility is guaranteed by PVDF pump head and valves.

Max. flow (l/h)	24
Max. pressure (bar)	18
Pump principles	Solenoid or peristaltic
Connection	Wi-fi / Ethernet on some models
Spa versions	Minimum flow rate 0.1 / 0.2
Options	Level probe Predisposition, Flow sensor / Relay alarm output, on-off switch
Models	Pool Gold/ Pool ME3 / Pool Mp-pro / DualPooltec



## POOLTEC All-in-one digital control system

POOLTEC is a digital all-in-one control system with which various pool components can be checked and controlled at any time and from anywhere, without having to be on site. This is also easily possible via your mobile phone thanks to the free APP. The measured values are stored and can be viewed in the history at any time. Thanks to the modular system, it is possible to optimally adapt to the conditions and customer requirements. The easy accessibility to the components, the quick exchange and the flexible positioning of these are the strengths of the modular system.



# 100%

ecological

safe

smart

Hydrolysis  
**NO** chemicals  
chlorine  
salt

## Oxy - The ecological pool management system

OXY contributes actively in the protection of the environment. Thanks to the hydrolysis system, the disinfection of the water takes place without the use of chlorine and without the use of salt. An advanced technology based on the use of hydroxide ions and completely eco-friendly.



Automatic water preparation



Control of additional equipment



Winter mode



Intuitive navigation



Completely remotely controllable



Help function for each screen



WiFi and LAN



10"-Touch color display



Password protection



7 System languages





ITC's range of electric pumps includes diaphragm or piston models, with positive return mechanism or stepper motor, among other features, but all of them offer the best regulation on the market for efficient and precise dosing of chemical products.

All ITC electric dosing pumps are manufactured with highly resistant materials that are compatible with the vast majority of liquid chemical products for processes that require dosing or supply to a hydraulic network, such as: agriculture, water treatment, chemical, food, textile, etc. Resistant and robust, they facilitate the dosing of any chemical product required in the process.

The choice of pump depends on the user's needs. Pumps such as the Dostec AC and DOSmart AC feature remote control, alarm programming, and multiple dosing modes. Meanwhile, the Tekdos FP and EFR pumps are best suited for continuous operation in demanding conditions, handling all types of fluids, high pressures, extreme temperatures, or classified atmospheres.



### DOSTEC 40

The Dostec series is a range of high-precision, piston or diaphragm electric pumps designed for dosing liquid products. Manufactured with heavy-duty materials, they can resist a wide range of chemical products, including acids.

Model	Dostec 40		Dostec 40 12/24VDC	
	diaphragm	piston	diaphragm	piston
Max. flow (l/h)	342	600	355	500
Max. discharge pressure (bar)	16	20	8	15
Max. drive power (kW)	0.37	0.37	0.13 / 0.30	0.13 / 0.30
Max. temperature (°C)	45	45	45	45

### DOSTEC 50

The Dostec series is a range of high-precision, piston or diaphragm electric pumps designed for dosing liquid products. Manufactured with heavy-duty materials, they can resist a wide range of chemical products, including acids.

Type	diaphragm	piston
Max. flow (l/h)	1254	1200
Max. discharge pressure (bar)	10	12
Max. drive power (kW)	0.74	0.74
Max. temperature (°C)	45	45



### EFR

The EFR metering pump series is unique in its kind. The most robust and durable metering equipment, with positive return system, piston or diaphragm configuration for the dosing of liquid products.

Type	diaphragm	piston
Max. flow (l/h)	1044	1600
Max. discharge pressure (bar)	10	12
Max. drive power (kW)	1.5	1.5
Max. temperature (°C)	45	45



### EFR DUPLEX

The EFR metering pump series is unique in its kind. The most robust and durable metering equipment, with positive return system, two heads, piston or diaphragm configuration for the dosing of liquid products.

Type	diaphragm	piston
Max. flow (l/h)	2508	3200
Max. discharge pressure (bar)	10	12
Max. drive power (kW)	1.5	1.5
Max. temperature (°C)	45	45



### TEKDOS FP

TEKDOS FP series are plunger heavy duty dosing pumps for continuous operation in extreme temperature conditions, high pressure, high viscosity and hazardous areas (ATEX).

Model	Tekdos 56-J	Tekdos 56-L
	piston	piston
Max. flow (l/h)	94.4	940
Max. discharge pressure (bar)	70	350
Max. drive power (kW)	0.186	0.75
Max. temperature (°C)	60	60



# ITC SMART PRODUCTS

Complete control of your process



## DOSITEC

The ITC Dositec pump range allows for the dosing of all types of liquid products. All pumps in the Dositec range are diaphragm pumps and are manufactured with materials that are resistant to most liquid products. Their hermetic design allows them to self-drain after use, reducing the risk of leaks and blockages.

Model	Dositec PR	Dositec MF
Max. flow (l/h)	20	20
Max. discharge pressure (bar)	18	18
Max. drive power (kW)	0.06	0.06
Max. temperature (°C)	65	65



## DOSMART

The DOSmart series is the ultimate dosing solution. DOSmart pumps are stepper motor metering pumps with advanced control functions to accurately and efficiently automate the dosing of liquid chemicals.

	DOSmart AC	DOSmart AC 24Vdc
Max. flow (l/h)	60	60
Max. discharge pressure (bar)	16	16
Max. drive power (kW)	0.32 100-250 Vac (50/60Hz)	0.32 24 Vdc
Max. temperature (°C)	45	45



## DOSTEC AC

Dostec AC is the new generation of dosing pumps. Available in diaphragm or piston, its advanced control allows precise and efficient automatic dosing. This series allows many modes such as Manual, Analogue, Proportional, Batch. As an option, a gateway is available for remote control via APP or browser.

Model	Dostec AC1 /2		Dostec AC3	
	diaphragm	piston	diaphragm	piston
Max. flow (l/h)	360	342	1254	1200
Max. discharge pressure (bar)	16	20	10	12
Max. drive power (kW)	0.43	0.43	0.43	0.43
Max. temperature (°C)	45	45	45	45

## WTRTEC

Multi-parameter controller for adjusting free chlorine and pH and ORP reading in water treatment plants and drinking water reservoirs.



	WTRtec Blue	WTRtec White	WTRtec Grey	WTRtec Red
Inputs	Cl. ORP. pH. Flow. Temperature	Cl. ORP. pH. Flow. Temperature	Cl. pH. Flow. EC. Temperature	pH. Flow. Temperature
N° Pumps outputs	2	2	2	2
Pump outputs	Cl. pH	Cl. pH	Cl. pH	pH
Alarms	Cl. ORP. pH	Cl. ORP. pH. Flow	Cl. pH. EC	pH. Flow
Max. temperature (°C)	45	45	45	45



## Plug & Play Solutions

### Measurement and control panel

Specialized measuring and control units associated with WTRtec controllers. Equipped with filter, flow and temperature sensor. Measurement of Cl, pH, RedOx, and conductivity. Highly adaptable systems to specific customer requirements.



### Dosing Kits

Preparation and injection of stock solutions. The kit integrates a mechanically driven dosing pump or an advanced control dosing pump, making it a complete and autonomous dosing equipment solution. Available in standard sizes of 100, 125, 250, 350, 500 and 1000 litres. Easy to install. Only requires power supply and injection point.

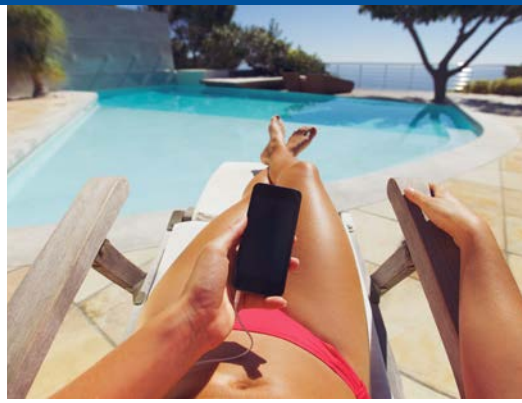


### Dosing Skids

Full, compact equipment that saves on space and installation time. They can include pre-assembled sensors, controllers and support elements, allowing for easy, fast system assembly.







VERDER LIQUIDS

# The leading pump manufacturer

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**VERDER**  
passion for pumps

Austria, Belgium, Bulgaria, China, Croatia, Czech Republic, France, Germany, Hungary, India, Italy, The Netherlands, Poland, Republic Of Korea, Romania, Serbia, Slovakia, South Africa, Spain, Switzerland, United Kingdom and United States of America.