



## VERAGON™ V20 DEP

**VERAGON'S V20 DEP HARNESSSES HUMIDITY IN THE NATURAL AIR TO PRODUCE HIGH-QUALITY, MINERALISED DRINKING WATER, AT A LOWER COST THAN CONVENTIONAL BOTTLED SUPPLIES, WITH MINIMAL ENVIRONMENTAL IMPACT.**

Like all Veragon products, the V20 DEP (Deployable) has been used in the field by some of the world's most demanding commercial operators. Veragon's technology has been tried, tested and successfully deployed on operations by both the UN World Food Programme and NATO.

The V20 DEP 'Air to Water' Generator (AWG) initially draws the humid air through a filtration system before it enters the condensation chamber. This filtered air then makes contact with cold plates which cool the air to its dew point. This induces condensation of the water vapour in the air, changing it from gas to liquid.

The condensed water is collected in the storage tank. The water is then purified using ozone, or alternatively chlorine, in order to oxidise and inactivate organic and chemical impurities, as well as any bacteria present in the water.

The sanitised water is then mechanically filtered, removing unpleasant odours and tastes. The sanitised and filtered water is then mineralised via special mineralising cartridges, or, optionally, via the micro-dosage and dilution of hyper-concentrated mineral salts.

Before delivery, the water is finally

cooled by a chiller which makes it pleasantly cool to drink. To avoid contamination from the tap, the last stage of treatment is the irradiation of ultraviolet rays. The quality of the water meets standard potability requirements. Dedicated probes constantly monitor the quality of the water.

Veragon's V20 DEP produces up to 2,000 litres of water a day, under optimal conditions. This provides a viable alternative solution to wells or to other water supply systems, such as bottled water, reverse osmosis or desalination.

### AIR TO WATER - THE PROCESS



**TRIED AND TRUSTED BY THE WORLD'S LEADING OPERATORS**

## V20 DEP TECHNICAL FEATURES

<b>WATER PRODUCTION</b>	Up to 2,000 litres/day (approx. 80 litres/hour)
<b>WORKING CONDITIONS</b>	T = 17-45 °C / RH = 20-100%
<b>UNIT FRAME</b>	Stainless steel AISI 304
<b>TANK</b>	PE 1,800 L - polyethylene for drinking water
<b>SIZE / WEIGHT</b>	H 177 cm x W 318 cm x L 219 cm / 1,450 kg
<b>PURIFICATION</b>	UV / ozone or chlorine
<b>REFRIGERATING GAS (AIR TREATMENT)</b>	R-410C
<b>ELECTRICAL SUPPLY</b>	380 V - 50 Hz / 5 pin plug (three-phase + neutral)
<b>REQUIRED ELECTRICAL POWER SOURCE</b>	60.0 kW
<b>POWER CONSUMPTION</b>	Approx. 16.0 kW (tropicalised type) / Approx. 22.0 kW (standard type)
<b>NOISE</b>	Approx. 120 dB
<b>WATER CHILLER CAPABILITY</b>	$\Delta T = 20^\circ$ (up to external T = 50 °C)
<b>WATER QUALITY</b>	Certified drinking water
<b>COMPLIANCE WITH WATER STANDARD</b>	World Health Organization, Food and Agriculture Organization of the United Nations (Rome 2007 - D.L. 2001 n. 31 Italy)
<b>CERTIFICATION</b>	ISO9001:2008 / CE / DM174
<b>COLOUR</b>	Steel (other RAL colours available on request)

## V20 DEP MODELS

TYPE*	PURIFICATION	VERSION	CODE	BASIC EQUIPMENT
STANDARD (S)	OZONE (O)	BASIC SPEC (B)	V20DEP-S-O-B V20DEP-S-C-B V20DEP-T-O-B V20DEP-T-C-B	Electromechanical operation, water quality monitor, hydraulic pipes and fittings in polyacetal, air filter, activated carbon block filter, mineralisation cartridges, water chiller.
TROPICALISED (T)	CHLORINE (C)	TOP SPEC (T)	V20DEP-S-O-T V20DEP-S-C-T V20DEP-T-O-T V20DEP-T-C-T	Electromechanical, water quality monitor, hydraulic pipes and fittings in polyacetal and HDPE, air filter, activated carbon block filter, mineralisation cartridges, water chiller, PLC control panel, display for alarm and vital function.

\*STANDARD: T ≤ 35 °C, RH ≤ 70% TROPICALISED: T > 35 °C, RH > 70%

## V20 DEP RECOMMENDED OPTIONAL FEATURES

OPTIONAL FEATURE	DESCRIPTION	CODE
MICRO-DOSAGE MINERALISATION SYSTEM	The Micro-Dosage Mineralisation System (MMS) automatically checks the micro-dosage and dilution of the solution of hyper-concentrated salts, allowing the production of water with the desired mineral content.	MMS
BIOFILM PROBE	Microorganisms (pathogenic and not) may generate an organic film on the inner walls of the hydraulic circuits. The Biofilm Probe (BP) constantly monitors the state of such biofilms and the consequent change of the biocide. <i>If the machine is in a highly polluted area (e.g. industrial site), option may be deemed necessary following water testing. (Option only applicable if the units are equipped with a PLC).</i>	BP
HEAVY METAL FILTRATION SYSTEM	The Heavy Metal Filtration System (MF) ensures separation of any heavy metals from the generated water. The product is certified WRAS - DVGW for drinking water. <i>If the machine is in a highly polluted area (e.g. industrial site), option may be deemed necessary following water testing.</i>	MF
PACKAGING MACHINE PREPARATION	The Packaging Machine Preparation (PM) allows the hydraulic and electrical connection for a packaging machine.	PM
HUMAN MACHINE INTERFACE	The Human Machine Interface (HMI) enables remote control of the main functions of the generator and the treatment process via software connecting to the PLC control panel (10" colour touch display) on the machine. The software can issue alarm signals via email or telephone. <i>(Option included in top spec on request).</i>	HMI