

UDK 139

Semi-Automatic Distillation Unit

The reliable VELP Semi-Automatic Distillation Unit

- Highly resistant technopolymer housing
- Patented Steam Generator and Patent Pending Titanium Condenser
- Low Consumption of Cooling Water (from 0.5 l/min)



The UDK 139 Semi-Automatic Distillation Unit is designed to perform nitrogen and protein content analysis according to the Kjeldahl Method (TKN) in the Food & Feed industries and several other applications in environmental control (phenols, nitrogen in water, sludge, soil and lubricant) and also in the chemical and pharmaceutical industries after having digested the sample accurately.

The UDK 139 is exceptional in providing savings, by using **TEMS™** technology:

- Time Saving** - Fast and frequent analyses; no heating delay between runs.
- Energy Saving** - Cooling water consumption starting from only 0.5 l/min; excellent insulation of internal parts.
- Money Saving** - Cost reduction is substantial, in line with reduced power consumption.
- Space Saving** - The extremely compact footprint saves useful laboratory bench space.

With a **3.5" touch screen color display**, the UDK 139 achieves **automated distillation** through its addition of sodium hydroxide and water, with preprogrammed distillation protocols and reaction times. It provides regulated steam output (10 % to 100 %) and, conveniently, automatic draining of sample residues. High-precision pumps ensure constant accurate dosing of reagents. Designed with a **highly resistant technopolymer housing** for corrosion protection, the system is built around the tough, **patented steam generator**, **titanium condenser (patent pending)** and **technopolymer splash head** to ensure excellent durability and precise determination when carrying out nitrogen analysis.

The **patented VELP steam generator** operates without pressure for **safe distillation**, no heat-up delays and requires no maintenance. The **efficient titanium condenser** offers reduced water consumption, ensuring that the distillate temperature always remains below the threshold value and provides high resistance to breakage. The unique **technopolymer splash head**, that contains no glass in its robust design, ensures long life.

A **range of sensors make the UDK 139 convenient and safe** – tube positioning, closed protective door, lever to avoid touching the base of the tube during placement, drip tray, cooling water flow and reagent level alarms... all on board. Colored tubes enable an immediate identification for safety.

The UDK 139 can be connected to a printer in order to print the data concerning the tests in progress.

The Unit comes **ready to use**, supplied with test tube, pincer for test tube, collecting flask, inlet and discharge tubes.

Industry – Application Fields:

- **Food, Feed and Beverage** industries - TKN, proteins, TVBN (Total Volatile Basic Nitrogen), alcohol
- **Environmental and Agriculture** industries - TKN, Devarda, phenols, ammonia
- **Pharmaceutical and Chemical** industries - organic nitrogen, ammonia

Technical Data	Description
Structure:	Corrosion-resistant technopolymer
Display:	3.5" color touch screen
Programmable delayed start for Devarda alloy analysis:	0 – 99 min.
Protocol library:	10 customizable methods
Selectable languages:	UK, I, E, F, RUS, CN + Additional Customizable (downloadable)
Addition of sodium hydroxide / water	Automatic / Automatic
Steam flow regulation:	10 – 100 %
Tap water consumption:	From 0.5 l/min at 15 °C – fr om 1 l/min at 30°C
Reproducibility (RSD):	≤ 1 %
Recovery:	≥ 99.5 % at nitrogen levels between 1 and 200 mg N
Detection limit:	≥ 0.1 mg N
Interfaces:	2 x USB
Conformity with standards:	AOAC, EPA, DIN, ISO, GLP
Power:	2100 W
Power supply:	230 V - 50 / 60 Hz
Weight:	26 kg / 57.3 lb
Dimensions (WxHxD):	385x780x416 mm (15.2x30.7x16.4 in)
Ordering Information	Description
Code No	
F30200130	UDK 139 Semi-Automatic Distillation Unit

Your authorized agent: