

## Automated nitrogen analyzer by combustion method

Nitrogen Analyzer based on Dumas principle with Auto Sampler

Application For: Nitrogen Determination of Nitrocellulose, Propellant and Protein determination

<u>Features</u>	<u>Description</u>
<b>Sample type</b>	Should be capable of doing all sample type.
<b>Water Traps</b>	Three Stage water trapping system due to applications involving liquid/semiliquid samples and to increase lifetime of consumables. Show the position of water traps in schematic diagram.
<b>Analysis Time</b>	2 - 5 min, depending on the sample substance and weight
<b>Auto Sampler</b>	Sealed autosampler with minimum 35 sample at one go . Autosampler should have cover to minimise effect of moisture absorption by samples.
<b>Sample Wt.</b>	Up to 1 gram
<b>Furnance Temperature</b>	Combustion furnace 400 - 1100 °C Reduction furnace 400 - 1100 °C Desorption furnace 50 - 350 °C
<b>Detection Limit</b>	0.003 mgN
<b>Reproducibility (RSD)</b>	< 0,5 % with 150 mg test substance (EDTA)
<b>Recovery</b>	>99.5%
<b>Carrier Gas</b>	Helium
<b>Protection class</b>	IP 20
<b>Consumables/kit/sample Handling devices</b>	For 1000 samples
<b>Suitable Balance</b>	To be supplied by supplier –Precision 0.01mg
<b>Computer/Laptop</b>	To be supplied by supplier- intel core i5 or higher
<b>Filled Cylinders ,regulators and tubing</b>	To be supplied by supplier-As per instruments requirement
<b>Automatic Degassing/Removal of CO2</b>	At least 05 inbuilt tubes packed with carbon dioxide adsorbent material. The adsorption and desorption procedure should be simultaneous ,automatic and inbuilt to machine
<b>Networking</b>	Networking facilities from manufacturer owned technology should be available to enable monitor performance of the machine remotely and secure all data on a server. Also allows data traceability.
<b>After sales service</b>	To ensure service for long term, Manufacturer should have self-owned registered service center at a nearest place or in any SAARC country .

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