



## Requisition Form

Requisition Number: 7038/26/0026

Last Date for Submission: 09/03/2026

S.N.	SQU Product Code	Description	Qty	UOM	Remarks
1	EQUINSRES0529	DISTILLATION SYSTEM	1	Nos	<p>Automated Atmospheric Distillation Unit</p> <p>Fully automated atmospheric distillation analyzer utilizing advanced video-imaging technology or similar technology for Groups 0–4 fuels, volatile organic solvents, and stabilized crude oils. Sample volume 100 mL (for D86/Crude) and 200 mL (for D1078) capability. Low-mass heating system with dynamic optimization algorithms to automatically maintain the required distillation rate (4–5 mL per minute), crucial for handling the foaming characteristics of crude oil. Automatic temperature recording via calibrated PT100 probe (range ambient to +450°C, resolution 0.1°C) with automatic barometric pressure correction. Volume detection system: High-resolution video camera or similar technology to simultaneously monitor the receiver meniscus level and the boiling flask behavior. Glassware: Specific accessory kits for ASTM D86 (125 mL flask) and ASTM D1078 (200 mL flask). Safety features: Built-in fire extinguishing system (UV sensor), vapor sensor for hydrocarbon leak detection, and automatic heater cutoff. The output data includes true visual IBP, temperatures at prescribed recovery points, Dry Point (with image verification), FBP, % Residue, and % Loss calculation.</p> <p>Standards/Methods: Primarily ASTM D86 – The apparatus meets the precision criteria for Groups 1–4 and Group 0. Fully compliant with ASTM D1078 and ASTM D850. The unit's software includes specific library programs for petroleum products, chemical solvents, and crude oil profiles, with LIMS connectivity for automatic reporting.</p> <p>Typical Sample Types: D86 distillation on stabilized crude oils to determine light-ends content</p>

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					<p>(IBP, 5%, 10% recovery) and evaporation loss estimation. Precise automated determination of IBP and Dry Point in Gasoline and Naphtha. Verification of T90 and T95 recovery points of Diesel and Gas Oil. ASTM D1078 for purity analysis of MEG, DEG, and TEG. The dynamic heater control allows for safe distillation of unknown blends or slop oils by automatically adjusting thermal power to prevent boil-over.</p> <p>Training: Onsite training on instrument operation for both Petroleum (D86) and Chemical (D1078) modes, creation of custom heating programs for Crude Oil, optical system cleaning/maintenance, and data management. Certified Reference Materials: certified Multi-Component Diesel/Gasoline Reference Standard.</p>