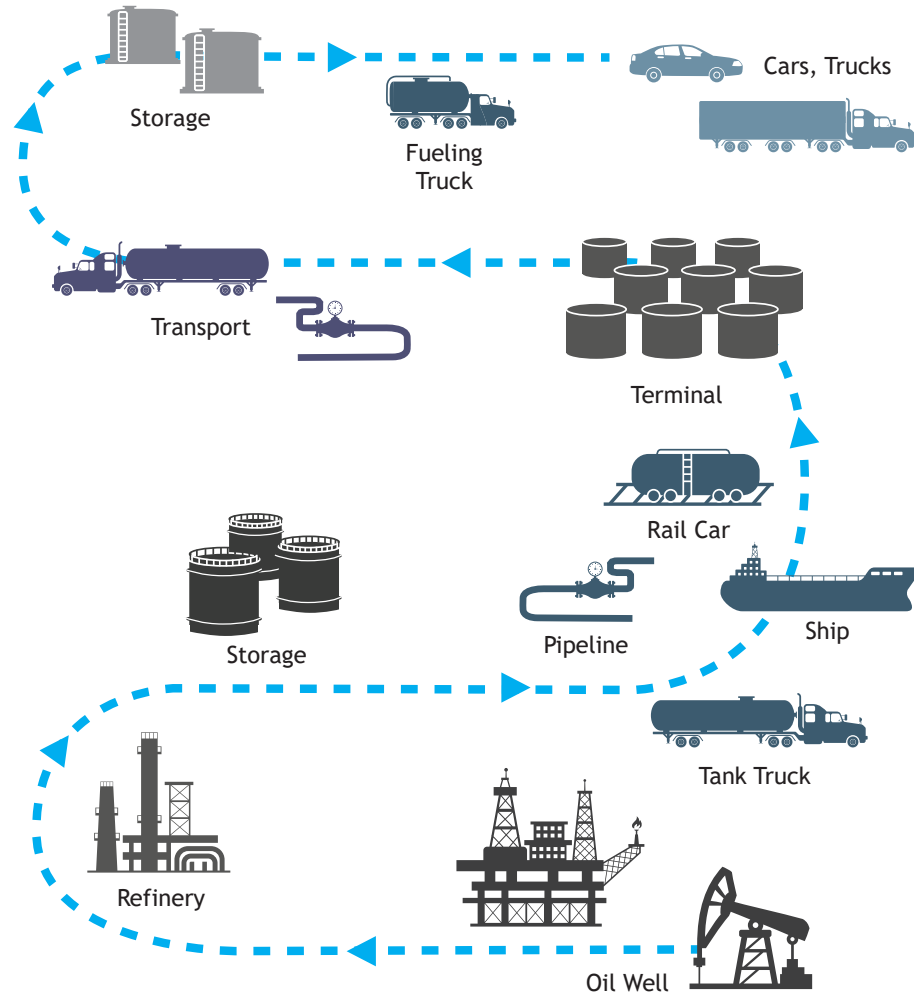


Helping Stake Holders in Every Step

The quality of gasoline needs to be measured every time its custody is transferred during its production, storage and distribution. Fuel suppliers, refineries, storage terminals, pipeline operators, third party testing labs and fuel transporters need to comply with standards and specifications to ensure the highest degree of gasoline quality. PAC instruments help you ensure compliance with regulations, specifications and contractual requirements that are always getting tighter.



Gasoline Solutions

Gasoline analysis is critical to maintaining fuel quality, safety, regulatory and environmental compliance, while maintaining consistency of performance and seasonal requirements. Our reliable, easy to use, leading edge analyzers help you maintain an efficient and effective lab operation while reducing your operating costs and increasing productivity.

ABOUT PAC

PAC is a leading global manufacturer of advanced analytical instruments for laboratories in the Hydrocarbon Processing Industry. With a product portfolio of over 200 testing instruments, PAC serves its customers with innovative technologies that are easy to use, comply to regulations, have an unmatched quality with a worldwide support. PAC also complies with ISO 9001-2015 standards.

Our solutions are from industry-leading brands: AC Analytical Controls, Advanced Sensors, Alcor, Antek, Herzog, ISL, Cambridge Viscosity, PSPI, and PetroSpec. We are committed to delivering superior and local customer service worldwide with 14 office locations and a network of over 50 distributors. PAC operates as a unit of Roper Technologies, Inc., a diversified technology company and a constituent of S&P 500, Fortune 1000, and Russell 1000 indices.

AFTER SALES SUPPORT






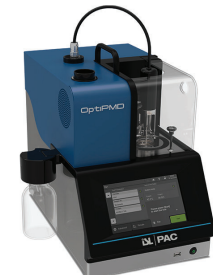

PAC is dedicated to providing global service with local, personalized attention to customers wherever they are in the world. We offer field services for preventative maintenance, calibration, installation, as well as emergency site visits.

Our individualized instrument service programs help our customers ensure maximum quality and repeatability, while complying with standards and regulatory requirements.

PAC has Service Repair Centers located around the world. They are all ISO-9001 accredited. All our facilities have the technology and know-how necessary to inspect, repair and calibrate your equipment. All work is performed by our factory trained and certified technicians who use only approved spare parts to guarantee your instrument performance.



Method-Compliant Gasoline Analysis Solutions

Standard	Sulfur	Density	Benzene	Oxygenates	Vapor Pressure	Distillation	Existent Gum	
ASTM D4814	ASTM D5453	ASTM D4052		ASTM D5845	ASTM D5191 ASTM D6378	ASTM D86	ASTM D7345	ASTM D381
OTHERS	SH/T 0689 KS M 2027 JIS K 2541-6	EN ISO 12185 JIS K 2249-1	EN 238 ASTM D6277	GOST R 52256 GSO-ASTM-D5845	EN 13016-1 GOST R EN ISO 13016 GB/T 8017 SH/T 0794 KS M ISO 3007 JIS K 2258-1 JIS K 2258-2 IS 1448 P:39 IRAM-IAP A 6504	GOST R 2177 EN ISO 3405 GB/T 6536 KS M ISO 3405 JIS K 2254	IP 596	GOST 1567 EN ISO 6246-98 GB/T 8019 KSM ISO 6246 JIS K 2261 IS 1448 P:29 SASO-151
PAC INSTRUMENTS								
	ElementS Analytical Range: < 30 ppb Application Range: Low ppb to % level Repeatability: <2% op 5 ppm	VIDA Measurement Range: 0 to 3 g/cm ³ Temperature Range: 0°C to +100°C (32 to 212°F) Pressure Range: 0 to 10 bar (0 to 145 psig)	OptiFuel Scan Range: 550 - 4000 cm ⁻¹ Measurement Time: 30 seconds Operating Temperature: 5°C to 45°C	HVP 972 Measurement Time: 10 minutes Pressure Range: 0 - 1000 k Pa Liquid Vapor Ratio Variable: 4 to 0.5	OptiDist Measurement Range: 0 to 450°C (32 to 842°F) Pressure Range: 70 to 110 kPa A Temperature Range: 0 to 65°C (32 to 149°F)	OptiPMD Measurement Time: <10 minutes Temperature Range: 0° to 400°C (32° to 752°F) Sensitivity: ±0.1°C (±0.1°F)	HGT 915/917 HGT 915: Air evaporation HGT 917: Air or steam evaporation	



Leading fuel specifications like **EURO 6** and **Tier 3** have set new vehicle emission standards and lowered the sulfur content of gasoline to a maximum of 10 ppm. This is a prerequisite for the use of exhaust after-treatment technologies that drastically reduce the NOx and particle matter (PM) emissions from passenger cars, light-duty trucks, medium-duty and some heavy-duty vehicles.

Sources:
EPA Gasoline Standards
"A technical summary of Euro 6/VI vehicle emission standards" ICCT 2016

BLENDSTOCKS FOR OXYGENATE BLENDING

(BOB, RBOB, CARBOB, etc.) are supplemented with additives, such as ethanol or ethers, throughout the supply chain to comply with local or international regulations and seasonal requirements. Testing is needed after blending to ensure that the optimal amount of additive was blended to the finished gasoline complies with the desired specification and other economic, legal, and technical considerations.

Our instruments can be customized to your specific needs. Due to continuing product development, specifications are subject to change at any time without notice.

Gasoline Demand Continues to Grow

The total vehicle stock is estimated to grow by around 1.1 billion between 2017 and 2040 to reach 2.4 billion vehicles by 2040.
Source: OPEC

Passenger cars are estimated to grow by around 877 million



Commercial stock is forecast to more than double to 462 million

