



Process Analyzer

Viscosity Index Analyzer Model P-950

Credible Solutions for the Oil and Gas Industry

Viscosity Index Analyzer Model P-950

Process Analyzer

To remain competitive, today's refiners must employ all optimization and product control techniques available. The use of online physical property analyzers is one of the key features to reach those objectives because they measure important quality properties in the process directly.

The viscosity index is a widely used and accepted measure of the variation in kinematic viscosity due to changes in the temperature of a petroleum product between 40°C and 100°C. A higher viscosity index indicates a smaller decrease in kinematic viscosity with increasing temperature of the product.



Your partner
for innovative
system solutions.



The BARTEC
specialists have
many years of expe-
rience. They create
system solutions
that you can rely
on: efficient and
dependable for
decades to come.

Capillary type of viscometer

Correlates with ASTM D445 / ASTM D2270

Certified for installation in hazardous areas

APPLICATION

Given today's highly competitive environment, oil refiners are demanding instrumentation that aids in the optimization of the refining process. Therefore, refineries require a reliable and accurate viscosity analysis system to meet the required specifications. This analysis will allow the operators to optimize the refining process and therefore lower production costs while improving product quality.



Special Features:

- **Customizable 2–4000 cP Sample Range** (kinematic output in cSt)
- **Continuous Sample Viscosity and Viscosity Index output**
- **Does not require atmospheric recovery system**
- **Modbus**
- **Remote Bath Temperature Set Point Change**
- **Up to 8 programmable Viscosity Points**

Norms and Standards:

Correlates with:

- **ASTM D445**
- **ASTM D2270**

Make your decision for a strong partner!

Choose **BARTEC GROUP** also for:

- **Fast Loop Systems**
- **Sample Conditioning Systems**
- **Validation Systems**
- **Recovery Systems**
- **Chillers**
- **Air Conditioning Systems/HVAC**
- **Pre Commissioned Analyzer Shelters/ Turn–Key Solutions**



EXPLOSION PROTECTION

Ex protection marking ATEX: Ex d II B + H2 [ja II C] T3 Gb
CSA/CUS Class I Div 1 Group C + D
CE₀₅₁₈

TECHNICAL DATA

Technology dual bath capillary type
Method correlates with:
ASTM D445, ASTM D2270

Measuring ranges and temperatures up to 4000 cP
Repeatability ± 1 % full scale
Reproducibility correlates with:
ASTM D445, ASTM D2270

Measuring cycle continuous
Product streams lube oils, asphalts and bunker fuels

■ **Electrical data**
Nominal voltage 220 VAC, 50/60 Hz, 1 phase Heater and Pumps
120/220 VAC, 50/60 Hz, 1 phase Electronics

Maximum power consumption 30 A, less than 6000 W
■ **Protection class** IP 65
■ **Ambient conditions**
Ambient temperature operation 5 to 40°C (41 to 104°F)
Ambient humidity up to 90 %

Sample
Quality less than 10 µm, filtered

Properties
Consumption 5 l/h (fixed meter in pump)
Pressure at inlet 1.4 to 14 bar (20 to 203 psi)
Temperature at inlet ± 38°C (68°F) of bath temperature
Process sample max temperature 111°C (232°F)

Utilities
■ **Coolant**
Consumption depends on application (consult factory)
Temperature 0 to 50°C (32 to 122°F)
Pressure at inlet 1 to 60 bar (14 to 870 psi)
Quality clean and filtered (10 µm)

Signal outputs and inputs

Analog outputs 3 standard, VI, V40 and V100
Digital outputs up to 3 dry contacts programmable, remote standby, analyzer fault, value alarm
Digital inputs up to 2, customer alarm, remote standby

Electrical data of signal outputs and inputs

Analog outputs 3 standard
Digital outputs 3 standard
Digital inputs dry contact

User interfaces

Display 7" color graphics
Keyboard 5 button magnetic, no hot work permit required

Connections

Sample inlet 1/4" FNPT
Sample outlet 1/4" FNPT

Weight and dimensions

Weight approx. 272 kg (600 lbs)
Dimensions (W x H x D) approx. 1575 x 1938 x 381 mm
(62" x 76" x 30" in)

Optional interfaces

Analog outputs optional (bath temperature, density)
MODBUS interface TCP/IP or Serial/RTU 485

Important notice P-950 is subject to continuous product improvement, specifications are preliminary and may be subject to change without notice. If your technical data do not comply with existing data, please contact us for technical clarification.



Viscosity Index Analyzer Model P-950

