HALLIKAINEN

INDUSTRIAL and SCIENTIFIC

## 750 NATIONAL COURT, RICHMOND, CALIFORNIA, 94804

COALESCER

MODEL 133652

The Hallikainen COALESCER has been developed to satisfy the need for a small, simple, water coalescing unit with low residence time to permit its being used on sampling systems for fluid stream analyzers.

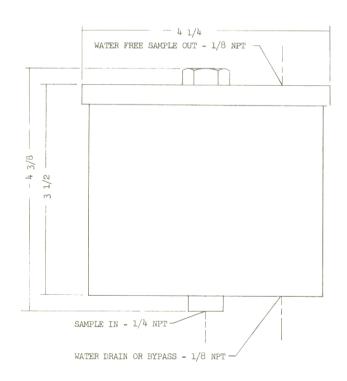
The Model 1336S2 COALESCER will remove all the water from the sample stream containing quantities ranging from ppm to rather large percentages.

All metal parts of the COALESCER are made of 304 Stainless Steel. The COALESCER is suitable for use up to a 250 pound maximum working pressure (test 375 pound) and a maximum temperature of 160°F. The element consists of a molded glass fibre suitable for use on all streams from gasoline to and including gas oils.

The COALESCER has been designed to permit its installation in a slip stream from the process line. The small amounts of dehydrated sample required for fluid stream analyzers suggests the desirability of returning to the process line the drain sample containing the water. The recommended piping of the COALESCER, to reduce residence time, would be per the sketch (back of page) and should include a rotameter (as shown) with a needle valve installed in the drain line to regulate the flow from the drain. This flow should be the maximum obtainable without water carryover in the sample to the analyzer. A pressure gauge in the discharge sample line from the COALESCER to the analyzer is desirable to permit visual observation of inlet sample pressure.

Water removal should be done with the sample as cool as possible to maximize total water removal. If the COALESCER is piped according to the sketch shown below, residence time will be about 1 minute, based on a bypass flow through the drain of about 200 ml/min and a water-free sample flow of 100 ml/min.





## ANALYTICAL INSTRUMENTS FOR CONTINUOUS PROCESSES

## **GENERAL SPECIFICATIONS**

## COALESCER Contaminant Removal Rating - 5 micron, or better

COALESCER Capacity— Gas Oil or Materials with Sp.Gr. of .82 to .90 — Up to 250 ml/min (about 4 gal/hr) with no free water carryover Kerosene or Materials with Sp.Gr. of .78 to .82 — Up to 350 ml/min (about 5 gal/hr) with no free water carryover Gasoline or Materials with Sp.Gr. of .68 to .78 — In excess of 500 ml/min (about 8 gal/hr) wih no free water carryover COALESCER Liquid Volume — Approx. 300 ml

Pressure Limitation - 250 psi

Temperature Limitations - 160°F.

Materials of Construction - All metal parts are 304 Stainless Steel

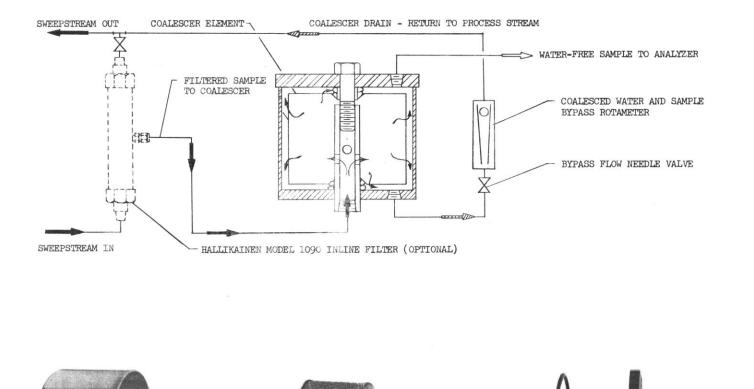
Connections — Sample In — 1/4 NPT

Sample Out — ½ NPT

Drain or Bypass — 1/8 NPT

Dimensions — 4 3/8 " high by 4 1/4 " diameter

Weight — 4 Lbs.



Part Numbers for Replacement Parts Cap Screw — #KH61SS53 Teflon Spacer Gaskets — #BN-481 and Viton Spacer O Ring — #BY-437

Viton Top Cover O Ring — #BY-465 Cap Screw O Ring — #BY-451 Element — #CF-445