Using the Wine and Beer Hydrometer

The hydrometer is to the wine or beer maker what the compass is to the mariner. The proper use of a hydrometer will allow the maker to guide his wine or beer from the initial fermentation to final perfection, and to discern all the steps in between.

Your hydrometer can be used for several things when brewing your beer or making your wine:

- To indicate what approximate percentage alcohol you can expect.
- To indicate when it is time to transfer to the secondary fermenter.
- To indicate when the wine is ready to bottle.
- To indicate how dry your wine or beer is.
- To provide a relative starting indicator.

Specific Gravity (S.G)

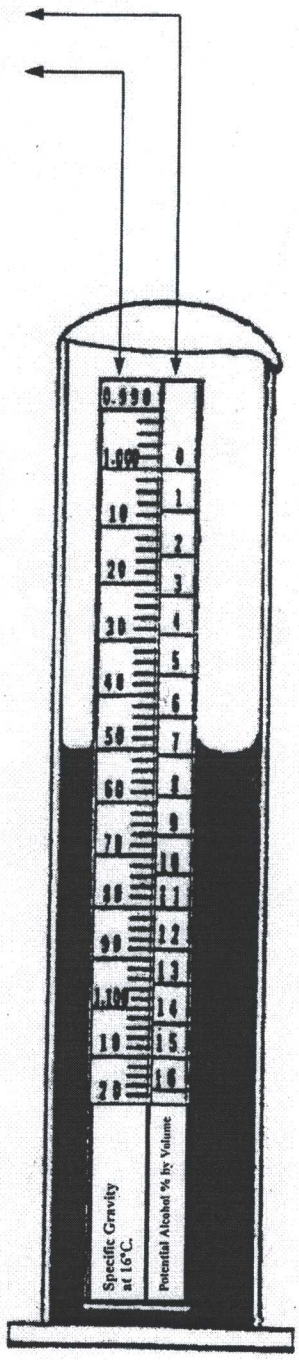
The hydrometer actually measures the weight of a liquid solution in comparison to water. The specific gravity (S.G.) of water is 1.000 and as you add sugar and other soluble materials, the hydrometer will float higher in the solution, thereby giving a higher S.G. reading. As the yeast converts the sugars into alcohol, the hydrometer will sink and the readings will become lower.

Potential Alcohol

The hydrometer also includes a scale which, by taking the beginning and ending readings, can be used to calculate the approximate alcohol percentage of the wine or beer.

Directions:

To use your hydrometer, fill the test jar with a sample of the wine or beer. Be careful to not fill it too much as the displaced liquid will spill out when you put the hydrometer in. Gently lower the hydrometer into the test jar until it is floating. Give the hydrometer a spin to dislodge any clinging bubbles, which could cause an error in the reading. At eye level, take a reading at the flat (not the meniscus) where the hydrometer emerges from the liquid.



Temperature Corrections:

The hydrometer is accurate at a liquid temperature of 21°C. The following table lists the corrections for temperature variations:

10°C - subtract .5
16°C - zero
21°C – add 1
25°C – add 2
29°C – add 3
35°C – add 5
41°C – add 7

For example, if the liquid is at a temperature of 25°C, and the hydrometer gives a S.G. reading of 1.075, the corrected S.G. will be 1.077 (1.075 + 2).