

REASONS FOR USING THE METRIC SYSTEM

Twenty years ago, it appeared that the United States would connect to the metric system with a slow phase-in program. As yet, Congress has not authorized the go-ahead. Mostly this was due to consumer resistance among the general population. Science, however, uses the metric system.

The scientific community has pointed out the fact that there are well-defined advantages and disadvantages to the metric conversion. Specific advantages realized by using the metric system are as follows:

1. Metric is a Universal System. It facilitates world trade which is constantly growing.
2. The Metric System is Easier to Use. The measuring units are interrelated and are in multiples of 10 or divisible by 10.
3. Calculations are Faster. The system is particularly adaptable to computers and calculators.
4. Less Chance of Error. Decimals replace fractions which in the conventional system make calculations slower and increase chance of error.
5. Interchangeability of Machine Parts. Adoption of the metric system could lead to universal standards for machine parts and aid technology by permitting parts to be used on machines of different makes.
6. Standardization of Tools and Gauges. Universal acceptance of tools would reduce the number of each that would be needed to be produced.
7. Especially useful in the Laboratory. Tests and laboratory instruments are easily calibrated and simpler to read, and accuracy is easier to guarantee.
8. Eliminate Double Measuring System. Factories in both the U.S. and foreign countries must produce equipment for both metric and customary measurements. This double standard creates confusion and a greater cost. (Reference: "The Metric System", Wilmer Westbrook, Modern Textiles, August 1970.)

In the conversion to the metric system, the greatest disadvantage for Americans would be in the acceptance of the changeover-not in learning the system itself. There is also a concern as to the ultimate cost.

1. Reluctance to Change. Resistance to change is a natural human response. Educators and industry have a vital role to play in assisting the American population to more easily accept the changeover to the metric system of measurement.
2. Expense. The change to metric units by industry takes money. But, with careful planning, much of it can be phased into the normal costs of replacement of equipment and machinery.

Will the U.S. go metric? It is already going metric. Many large American corporations are already converting to the metric system: IBM, Honeywell, General Motors, Regal-Beloit, ITT, and General Mills are a few. Since 1974, Fords and other cars have metric engines.

Film has long been measured in metrics: 35 mm, 16 mm, etc. Sports enthusiasts should now be very aware of the 100-meter race track, or the 50-meter swimming pool. We often read in the newspaper about narcotic officers confiscating a kilo of marijuana. The pharmaceutical industry has used the metric system for years. Many hospitals have converted to metric units for patient statistics and dispensing of drugs. All distances and elevation in the firing of weapons by the U.S. Army are measured in meters. Most important of all, science is a universal (global) profession. It is necessary to communicate and replicate scientific work worldwide. Metrics is the international measuring system that science uses.

It is clear that much of the U.S. is already metric. We are still awaiting Congress to pass a bill which will provide the official direction for a coordinated, systematic, and organized conversion plan for this system of measurement. a knowledge of how to convert; estimate, and use metrics.