Selected items from the pages of the monthly magazine of ASM International: Metal Progress.

When the tendency to employ hardness specifications of ferrous and non-ferrous sheet and strip metal increased, it became more and more evident that the principal difficulty in the getting together of the mills and their customers on suitable specifications was the absence of a suitable testing method.

The “ROCKWELL” Hardness Tester, because it had proven so successful on heavy sheet and strip metal was being forced into the testing of thinner metal than it was designed for.

To meet this need we set about the development of the light load, supersensitive machine which upon its completion was called the “ROCKWELL” SUPERFICIAL Hardness Tester. Its indentations were so minute that it lent itself readily to the hardness testing of sheet metal far thinner than the regular “ROCKWELL” could be used for.

Such a machine really does not “arrive” until it comes into use for specifications; for that is its real license to live, granted by users of testing machines who alone can judge its merit.


Spectrography, the science of detecting and measuring the elements by means of their light (given off under proper conditions of excitation), is by way of becoming an art. Well known for years to the astronomer and physicist, this instrument in its newest form is rapidly being taken up by plant laboratories as an indispensable piece of apparatus for the analytical chemist. In fact it is essentially the industrial chemists—who are furnishing the present impetus.

Over-enthusiasm, however, must be guarded against. The spectograph is not a cure-all and exaggerated statements, sometimes made as to precision, speed, sensitivity and low cost must be accepted with a grain of salt. In most cases such rosy views are born of either over-enthusiasm or insufficient experience with industrial problems. Here as in many other scientific instances, understatement rather than overstatement is preferable and indeed at times inspires the necessary confidence.

No chemist who is worthy of the designation “progressive” (and the same applies to the metallurgist) can afford to ignore spectrography. It is not only going to find new applications but is quite likely going to result in new ideas and open up new fields for metallurgists and engineers as well as biologists, physicians, physicists and astronomers.


Perhaps you will remember the “Critical Point” titled “Should We Go To The Metric System?” published [in August 1959 Metal Progress]. It presented some pros and cons concerning the adoption of the metric system by this country [U.S.], and asked for your opinions on what we should do. Well, letters from many of you have been received and the editors of Metal Progress are pleased to announce that the final tally was better than 15 to 1 in favor of adoption of the metric system. Such a result might have been expected, but it is gratifying to know that metals engineers are in truth the progressive group we have always felt they were. Actually, the average engineer’s natural passion for simplicity and efficiency made the result a foregone conclusion.

It seems to the editors of Metal Progress that any American industry of firm with any aspiration to do business outside of the United States should carefully assess the advantages of the metric system of measurement as applied to their product and weigh the cost against the expected profit of a change to a new measurement system. Here is where the metals and materials engineers can exercise some influence.