## Tape measure, how to read and understand it.

Tape measures are only one of many devices use for taken measurements but it is the most widely used in one form or another.

In any woodworking project there is the requirement of making and understanding measurements.
Once you have decided the project you are going to build it will be necessary to measure and mark the stock to get the require length and width.

To avoid any waste of time and material accuracy is needed in making measurements. Always remember the golden rule of measure twice cut once and this will help you avoid costly mistakes. In general most of the rules has inch markings on one side that starts with one and goes to the extent of the tape, example being that a 12 foot tape measure will have inch markings up to at least 120 inches. The other side of the tape will be in feet that is indicated with a big black arrow and in between these arrows are inch markings from one to eleven with the twelved one being a foot.

Most rules has the inch markings in sixteenths, which means that there are sixteen marks between each inch and each of these marks represents a measurement (see illustration above). There are smaller increments marks on some rules but in general you most likely will not use these unless you get into a really detailed project. As with anything the more you use your tape measure or rule the more it will become second nature in reading and understanding it.

Lets try a example, I measure my desk, I get my rule and hook one end and pull it to the other end. It will show on my rule $473 / 4$ inches, it will read $473 / 4$ inches on one side and the other side will read 3 foot 11 3/4 inches, ( see illustration above to find the $3 / 4$ mark on the rule). Try measuring things around the house and you will see how easy it can be to read and understand measurement.


Kohinoor Survey


## CHAIN MEASURE

## Description

The chain is divided into 100 links, marked off into groups of 10 by brass rings which simplify intermediate measurement. Each link is 7.92 inches long, with 10 links making slightly less than 6 feet 8 inches. The full length of the chain is 66 feet. A square link is exactly one hundred-thousandth of an acre and one ten-thousandth of one square chain or $0.0404685642 \mathrm{~m}^{2}$. It is about $62 \frac{3}{4}$ square inches. Gunter's chain reconciled two seemingly incompatible systems: the traditional English land measurements, based on the number 4, and the newly introduced system of decimals based on the number 10. Since an acre measured 10 square chains in Gunter's system, the entire process of land measurement could be computed in decimalized chains and links, and then converted to acres by dividing the results by 10 .

1 Gunter's chain =
SI units
$20.12 \mathrm{~m} \quad 2,012 \mathrm{~cm}$
US customary / Imperial units
$22.00 \mathrm{yd} \quad 66.00 \mathrm{ft}$

1 Gunter's link =
SI units
$0.2012 \mathrm{~m} \quad 201.2 \mathrm{~mm}$
US customary / Imperial units
$0.6600 \mathrm{ft} \quad 7.920 \mathrm{in}$

