Holding the end of a tape hook in a specific position can be difficult in many circumstances, particularly for a person working alone. This difficulty often results in increased labor costs and/or decreased measurement accuracy. These devices provide a simple and versatile solution for holding a tape measure hook at the desired location. Additionally, they can rotate 360°, allowing for multiple measurements from the same anchoring point. A further innovation enables the precise confirmation that measurements are taken at a right angle. This invention has potential applications in construction, surveying, home improvement, landscaping and engineering.

Overview:
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Advantages:
- Design enables one person to quickly and accurately take measurements, thereby reducing effort and labor costs
- Spring clamp version (top picture) positions hook at inside face of work surface, thereby eliminating costly layout mistakes due to errors in subtracting material thicknesses
- Bar clamp version (bottom) attaches to most popular bar clamps, enabling anchoring to most items that can be clamped
- 360° rotation enables multiple measurements from the same anchor point, further reducing labor requirements
- Design allows for release of tape measure hook from a distance, increasing ease of use
- Simple, rugged construction allows for inexpensive production and longevity under job site abuse; cost allows users to own multiple units, further increasing layout accuracy & efficiency

Description:
Performing accurate measurements is a critical part of the construction layout process. However, the typical retractable steel tape measure is designed to only hook over items with square edges. This means that to make accurate measurements it often requires two people: one to hold the hook end of the tape and a second to extend the tape and measure. In addition, hooking the tape over the outside edge of a form board conflicts with typical building plans that measure from the inside edge. This situation introduces the possibility of "hooking errors" when the thickness of the form is not accounted for. Also, variations in the angle of measurement can cause inaccuracies. Taken together, these can result in costly delays (e.g., tearing up a foundation) in the construction process.

This set of products helps to alleviate these labor and accuracy problems by providing a stable anchoring point for the end of a tape measure. The spring clamp version clamps to materials from 1-1.5" thick and positions the tape hook at the inside face of the form work. A single worker can affix the clamp and then make multiple measurements from a desired origin point. Leaving the clamp in place improves accuracy, efficiency and repeatability of measurements throughout the layout process. A laser-based guide can further improve accuracy by ensuring measurements are taken at right angles. For more challenging situations, a bar clamp or other designs (e.g., suction cups) allow placing the origin point almost anywhere.