**Description:**

This tool calculates geometric tolerances for holes and shafts based on user-defined parameters, including basic size, limits for diameter (D), and deviation letters for the shaft. Utilizing fundamental principles of tolerance design, the calculator computes standard tolerance units, tolerance grades, and deviation values.

Users can input specific tolerance grades and deviation letters, which the tool uses to determine minimum and maximum clearances, hole limits, and shaft limits. Additionally, the tool provides designs for Go and Not Go gauges, ensuring precise measurements for manufacturing processes. Ideal for engineers and manufacturers involved in precision machining, this calculator enhances accuracy and efficiency in the design of mechanical components.

**Features:**

* Input basic size, limits for diameter, and deviation letters.
* Calculate standard tolerance units and tolerance grades for both holes and shafts.
* Determine minimum and maximum clearances.
* Generate detailed limits for holes and shafts.
* Design specifications for Go and Not Go gauges, facilitating accurate quality control.

This tool is invaluable for ensuring that components meet stringent dimensional specifications, thus promoting quality and reliability in mechanical assemblies.