| **Option** | **Description** | **Values** |
| --- | --- | --- |
| AcceptanceFcn | Function the algorithm uses to determine if a new point is accepted. Specify as 'acceptancesa' or a function handle. | Function handle | {'acceptancesa'} |
| AnnealingFcn | Function the algorithm uses to generate new points. Specify as a name of a built-in annealing function or a function handle. | Function handle | function name | 'annealingboltz' | {'annealingfast'} |
| DataType | Type of decision variable | 'custom' | {'double'} |
| Display | Level of display | 'off' | 'iter' | 'diagnose' | {'final'} |
| *DisplayInterval* | Interval for iterative display | Positive integer | {10} |
| FunctionTolerance | Termination tolerance on function value  For an options structure, use TolFun. | Positive scalar | {1e-6} |
| HybridFcn | Automatically run HybridFcn (another optimization function) during or at the end of iterations of the solver. Specify as a name or a function handle.  See [When to Use a Hybrid Function](https://www.mathworks.com/help/releases/R2022a/gads/when-to-use-hybrid-function.html). | 'fminsearch' | 'patternsearch' | 'fminunc' | 'fmincon' | {[]}  or  1-by-2 cell array | {@solver, hybridoptions}, where solver = fminsearch, patternsearch, fminunc, or fmincon {[]} |
| *HybridInterval* | Interval (if not 'end' or 'never') at which HybridFcn is called | Positive integer | 'never' | {'end'} |
| InitialTemperature | Initial value of temperature | Positive scalar | positive vector | {100} |
| MaxFunctionEvaluations | Maximum number of objective function evaluations allowed  For an options structure, use MaxFunEvals. | Positive integer | {3000\*numberOfVariables} |
| MaxIterations | Maximum number of iterations allowed  For an options structure, use MaxIter. | Positive integer | {Inf} |
| MaxStallIterations | Number of iterations over which average change in fitness function value at current point is less than options.FunctionTolerance  For an options structure, use StallIterLimit. | Positive integer | {500\*numberOfVariables} |
| MaxTime | The algorithm stops after running for MaxTime seconds  For an options structure, use TimeLimit. | Positive scalar | {Inf} |
| ObjectiveLimit | Minimum objective function value desired | Scalar | {-Inf} |
| OutputFcn | Function(s) get(s) iterative data and can change options at run time  For an options structure, use OutputFcns. | Function handle | cell array of function handles | {[]} |
| PlotFcn | Plot function(s) called during iterations  For an options structure, use PlotFcns. | Function handle | built-in plot function name | cell array of function handles | cell array of built-in plot function names | 'saplotbestf' | 'saplotbestx' | 'saplotf' | 'saplotstopping' | 'saplottemperature' | {[]} |
| *PlotInterval* | Plot functions are called at every interval | Positive integer | {1} |
| ReannealInterval | Reannealing interval | Positive integer | {100} |
| TemperatureFcn | Function used to update temperature schedule | Function handle | built-in temperature function name | 'temperatureboltz' | 'temperaturefast' | {'temperatureexp'} |