CLAIMS

What is claimed is:

~~1. A method of manufacturing an orthopedic screw comprising:~~

~~loading a bar stock of material into a screw cutting machine;~~

~~moving a cutting tool into contact with the bar stock for a predetermined amount of time to cut a portion of the thread;~~

~~removing the cutting tool from cutting contact with the bar stock before the end of the predetermined amount of time;~~

~~rotating either the bar stock or cutting tool;~~

~~moving the cutting tool back into contact with the bar stock for a second predetermined amount of time to cut another portion of the thread; and~~

~~removing the cutting tool from cutting contact with the bar stock before the end of the second predetermined amount of time;~~

~~wherein the cutting of the bar stock is performed such that at least two adjacent cuts have different radii with respect to a central axis of the bar stock.~~

~~2. The method of claim 1, wherein a radial distance of said moving of the cutting tool into contact with the bar stock is varied during each subsequent predetermined time period such that the two adjacent cuts form concave facets in the cut thread.~~

~~3. The method of claim 2, wherein the variation in radial movement of the cutting blade is within a range of 0.001 to 0.01 inches.~~

4. An orthopedic screw comprising:

a shaft;

a thread cut into at least a portion of said shaft, said threads having a leading edge, a trailing edge and a depth; and

at least one groove formed in one of the leading edge or the trailing edge and configured to increase a surface area of the respective leading or trailing edge.

~~5. The orthopedic screw of claim 4, further comprising one or more facets cut into the at least one groove.~~

6. The orthopedic screw of claim 4, wherein the at least one groove is radially cut into the leading or trailing edge of the thread.

7. The orthopedic screw of claim 4, wherein the at least one groove is cut into the leading or trailing edge of the thread with a varying radii with respect to the shaft throughout the groove.

8. The orthopedic screw of claim 4, wherein said at least one groove has a V-shaped cross section.

9. The orthopedic screw of claim 4, wherein the at least one groove has an upside down V-shaped cross section.

10. An orthopedic screw comprising:

a shaft;

a thread cut into at least a portion of said shaft, said threads having a leading edge, a trailing edge and a depth; and

a spiral one groove formed in the shaft between at least one leading edge and trailing edge and being configured to increase a surface area of the shaft.

11. The orthopedic screw of claim 10, wherein said spiral groove is formed such that it defines a thread within the thread, wherein a space defined by adjacent grooves forms a crest of the thread within the thread.

~~12. The orthopedic screw of claim 11, further comprising at least one facet disposed within said groove.~~

13. An orthopedic screw comprising:

a shaft;

a plurality of first threads cut into at least a portion of said shaft, said first threads having a leading edge, a trailing edge and a depth, wherein a portion of the shaft remains between the leading edge and trailing edge of adjacent first threads; and

at least one groove formed in the portion of the shaft between the leading edge and trailing edge of adjacent first threads and being configured to increase a surface area of the shaft.

14. An orthopedic screw comprising:

a shaft;

a plurality of first threads cut into at least a portion of said shaft, said first threads having a leading edge, a trailing edge and a depth, wherein adjacent threads are separated by a portion of the shaft; and

a spiral groove formed in the portion of the shaft between adjacent threads and being configured to increase a surface area of the shaft.