WHAT IS CLAIMED IS:

1. A method of assembling an earth boring drill bit to meet a finished product tolerance relative to a desired aggressiveness of the finished bit using components built to a manufacturing tolerance that, the method comprising the steps of:

selecting one or more legs from a plurality of pre-manufactured legs;

selecting a bit body from a plurality of pre-manufactured bit bodies, the bit body having a slot for receiving the leg the slot having an axial wall, a radial wall, and at least one circumferential wall;

placing the leg within the slot; and

fixing the leg within the slot to meet the desired aggressiveness within the finished product tolerance by placing one or more shims between the leg and at least one of the walls of the slot.

2. The method of claim 1, further including the step of welding the leg and shims into the bit body.

3. The method of claim 1, further including the step of bolting the leg and shims into the bit body.

4. The method of claim 1, further including the step of selecting a number of shims to bring the earth boring drill bit within the finished product tolerance.

5. The method of claim 1, further including the step of selecting a shim thickness to bring the earth boring drill bit within the finished product tolerance.

6. The method of claim 1, wherein the shims adjust an axial position of the leg with respect to the slot, thereby adjusting the axial position of roller cone cutting elements associated with the leg with respect to fixed cutting elements secured to a blade of the bit body.

7. The method of claim 1, wherein the shims adjust a circumferential position of the leg with respect to the slot.

8. The method of claim 1, wherein the leg and the bit body are selected such that the leg will not fill the slot.

9. The method of claim 1, wherein the bit body is manufactured to ensure the slot will not meet the desired aggressiveness, given the manufacturing tolerance.

10. The method of claim 1, wherein the leg is manufactured to ensure the leg will not meet the desired aggressiveness, given the manufacturing tolerance.

11. An earth boring drill bit designed to meet specified aggressiveness, within a finished product tolerance, using components built to a looser manufacturing tolerance, the bit comprising:

one or more legs;

a bit body having a blade and a slot for receiving the leg; and

one or more shims between the leg and the slot fixing the leg within the slot to meet the finished product tolerance.

12. The bit of claim 11, wherein the leg and shims are welded into the bit body.

13. The bit of claim 11, wherein the leg and shims are bolted into the bit body.

14. The bit of claim 11, wherein a number of the shims is selected to bring the earth boring drill bit within the finished product tolerance.

15. The bit of claim 11, wherein a shim thickness is selected to bring the earth boring drill bit within the finished product tolerance.

16. The bit of claim 11, wherein the shims adjust an axial position of the leg with respect to the slot, thereby adjusting the axial position of roller cone cutting elements associated with the leg with respect to fixed cutting elements secured to the blade.

17. The bit of claim 11, wherein the shims adjust a circumferential position of the leg with respect to the slot.

18. The bit of claim 11, wherein the leg does not fill the slot.

19. The bit of claim 11, wherein the slot does not meet the desired aggressiveness, given the manufacturing tolerance.

20. The bit of claim 11, wherein the leg does not meet the desired aggressiveness, given the manufacturing tolerance.

WHAT IS CLAIMED IS:

1. A method of assembling an earth boring drill bit to meet a finished product tolerance relative to a desired aggressiveness of the finished drill bit using components built to a manufacturing tolerance, the method comprising the steps of:

selecting a bit body from a plurality of pre-manufactured bit bodies, the bit body having one or more axially extending slots;

selecting one or more legs from a plurality of pre-manufactured legs, the one or more legs including a region that is shaped to correspond with the shape of the one or more slots;

placing the one or more legs within the one or more slots; and

fixing the one or more legs within the one or more slots to meet the desired aggressiveness within the finished product tolerance by placing one or more shims between the one or more legs and at least one of the walls of the one or more slots wherein the one or more shims adjust an axial location of the one or more leg in an axial direction parallel to a longitudinal axis of the bit body.

2. The method of claim 1, further including the step of welding the one or more legs and one or more shims into the bit body.

3. The method of claim 1, further including the step of bolting the one or more legs and the one or more shims into the bit body.

4. The method of claim 1, further including the step of selecting a number of the one or more shims to bring the earth boring drill bit within the finished product tolerance.

5. The method of claim 1, further including the step of selecting a thickness of the one or more shims to bring the earth boring drill bit within the finished product tolerance.

6. The method of claim 1, wherein the one or more shims adjust an axial position of roller cone cutting elements associated with the one or more legs with respect to fixed cutting elements secured to a blade of the bit body.

7. The method of claim 1, wherein the one or more shims adjust a circumferential position of the one or more legs with respect to the one or more slots.

8. The method of claim 1, wherein the one or more legs and the bit body are selected such that the one or more legs will not fill the one or more slots.

9. The method of claim 1, wherein the bit body is manufactured to ensure the one or more slots will not meet the desired aggressiveness, given the manufacturing tolerance.

10. The method of claim 1, wherein the one or more legs are manufactured to ensure the one or more legs will not meet the desired aggressiveness, given the manufacturing tolerance.

11. An earth boring drill bit designed to meet specified aggressiveness, within a finished product tolerance, using components built to a loose manufacturing tolerance, the bit comprising:

a bit body having a longitudinal axis defining an axial center of the bit body;

one or more bit legs;

rolling cutters mounted to each of the one or more bit legs, the rolling cutters having a plurality of cutting elements mounted thereon;

one or more blades that extend in an axial direction of the bit body, the one or more blades having a plurality of fixed cutting elements mounted thereon;

one or more slots in the bit body extending in a direction parallel to the longitudinal axis of the bit body for receiving each of the one or more bit legs; and

one or more shims between the one or more bit legs and the one or more slots fixing the one or more legs within the one or more slots to meet the finished product tolerance, the one or more shims having a thickness that adjusts a position of the one or more bit legs with respect to the one or more slots in a direction parallel to the longitudinal axis of the bit body, thereby adjusting the axial position of roller cone cutting elements associated with the one or more legs with respect to fixed cutting elements secured to the one or more blades, and wherein the plurality of fixed legs are correspondingly shaped with respect to the one or more slots.

12. The bit of claim 11, wherein the one or more legs and the one or more shims are welded into the bit body.

13. The bit of claim 11, wherein the one or more legs and the one or more shims are attached to the bit body with one or more bolts extending through both the one or more legs and at least one of the one or more shims.

14. The bit of claim 11, wherein the one or more shims adjust the axial and/or the radial position of the one or more legs with regard to the earth boring drill bit.

15. The bit of claim 11, wherein the one or more shims have a thickness that adjusts a circumferential position of the one or more legs with respect to the one or more slots.

16. The bit of claim 11, wherein the one or more legs do not fill the one or more slots.

17. The bit of claim 11, wherein opposing side walls that define the one or more slots are inclined at an angle of about 15 degrees and converge to define an included angle of about 30 degrees.

18. The bit of claim 11, further comprising a rectilinear recess formed within the third wall.