What is claimed is:

1. A drive and steering unit comprising:
   a) a wheel housing having a first axis that is aligned with a drive shaft of a wheel housed therein, and a second axis that is normal to the first axis along a center of the wheel;
   b) a steering assembly for steering the wheel and having a steering gear and a steering power system coupled to the steering gear for controlling and driving the steering gear;
   c) the steering gear being attached to the wheel housing, having a central axis aligned with the second axis, and being rotatable with the wheel housing about the second axis; and
   d) a drive assembly coupled to the wheel housing for driving the wheel, and a drive power system coupled to the drive assembly and movable with the wheel housing.

2. The drive and steering unit of claim 1, wherein the steering gear is a steering pulley attached to the wheel housing.

3. The drive and steering unit of claim 2, wherein the steering power system is spaced from the wheel housing and coupled to the steering pulley by a steering belt.

4. The drive and steering unit of claim 3, wherein the steering power system further comprises a steering motor pulley, the steering belt coupling the steering pulley to the steering motor pulley.

5. The drive and steering unit of claim 1, wherein the drive assembly is mounted to the wheel housing and rotatable therewith.

6. The drive and steering unit of claim 5, wherein the drive power system is attached to the wheel housing and coupled to the drive shaft by a driving belt.

7. The drive and steering unit of claim 6, wherein the drive power system further comprises a drive motor pulley, the driving belt coupling the drive motor pulley to the drive shaft.

8. The drive and steering unit of claim 7, further comprising a drive shaft pulley secured to the drive shaft that is coupled to the driving belt.

9. The drive and steering unit of claim 1, wherein the wheel housing is capable of up to or greater than 360° degrees of movement.

10. The drive and steering unit of claim 1, wherein the wheel housing is fixed to a support that defines a support plane and wherein the wheel housing is mounted above the support plane.

11. The drive and steering unit of claim 10, wherein the wheel housing is rotatable relative to the support by a bearing connected between the wheel housing and the support.

12. The drive and steering unit of claim 11, wherein the drive assembly is connected to the bearing.

13. The drive and steering unit of claim 1, wherein the steering assembly and the drive assembly are each adapted to operate independently or simultaneously.

14. An automated guided vehicle (AGV) comprising:

a) a load support; and

b) a plurality of drive and steering units for driving and steering the load support;

c) each drive and steering unit comprising a steering assembly including a steering gear attached to a wheel housing and engaged with the steering power system, the steering gear being rotatable about an axis in response to actuation of the steering assembly, a drive assembly connected to the steering gear, and a drive power system coupled to the wheel housing and movable with the steering gear.

15. The automated guided vehicle (AGV) of claim 14, wherein the steering gear is a steering pulley attached to the wheel housing.

16. The automated guided vehicle (AGV) of claim 15, wherein the steering power system is spaced from the wheel housing and coupled to the steering pulley by a steering belt.

17. The automated guided vehicle (AGV) of claim 16, wherein the steering power system further comprises a steering motor pulley, the steering belt coupling the steering pulley to the steering motor pulley.

18. The automated guided vehicle (AGV) of claim 14, wherein the drive assembly is mounted to the wheel housing and rotatable therewith.

19. The automated guided vehicle (AGV) of claim 18, wherein the drive power system is attached to the wheel housing and coupled thereto by a driving belt.

20. The automated guided vehicle (AGV) of claim 14, wherein the wheel housing is capable of up to or greater than 360° degrees of movement.

21. The automated guided vehicle (AGV) of claim 14, wherein the wheel housing is fixed to a support that defines a support plane and wherein the wheel housing is mounted above the support plane.

22. The automated guided vehicle (AGV) of claim 21, wherein the wheel housing is rotatable relative to the support by a bearing connected between the wheel housing and the support.

23. The automated guided vehicle (AGV) of claim 22, wherein the drive assembly is connected to the bearing.

24. The automated guided vehicle (AGV) of claim 14, wherein the steering assembly and the drive assembly are each adapted to operate independently or simultaneously.

25. The automated guided vehicle (AGV) of claim 14, further comprising four drive and steering units positioned along adjacent corners of the load support, the steering assemblies being fixed adjacent a periphery of the load support.

26. A drive and steering unit comprising:

a) a steering assembly for steering a wheel and having a steering gear and a steering power system coupled to the steering gear for controlling and driving the steering gear;

b) a slewing ring attached to the steering gear for rotating the wheel; and

c) a drive assembly coupled to the slewing ring for driving the wheel, and a drive power system coupled to the drive assembly and movable with the slewing ring and the wheel.

27. The drive and steering unit of claim 26, wherein the steering power system is spaced from the slewing ring by a steering belt.

28. The drive and steering unit of claim 27, wherein the steering power system further comprises a steering motor pulley, the steering belt coupling the steering pulley to the steering motor pulley.

29. The drive and steering unit of claim 26, wherein the drive assembly is mounted to the slewing ring and rotatable therewith.

30. The drive and steering unit of claim 29, wherein the drive power system is attached to the slewing ring and coupled to the wheel by a driving belt.

What is claimed is:

1. A drive and steering unit comprising:

a) a wheel housing having a first axis that is aligned with a drive shaft of a wheel housed therein, and a second axis that is normal to the first axis along a center of the wheel;

b) a steering assembly for steering the wheel and having a steering gear and a steering power system coupled to the steering gear for controlling and driving the steering gear;

c) the steering gear being attached to the wheel housing, having a central axis aligned with the second axis, and being rotatable with the wheel housing about the second axis; and

d) a drive assembly coupled to the wheel housing for driving the wheel, and a drive power system coupled to the drive assembly and movable with the wheel housing;

wherein the steering gear is a steering pulley attached to the wheel housing; and

wherein the steering power system is spaced from the wheel housing and coupled to the steering pulley by a steering belt;

wherein the wheel housing is fixed to a support at a point of fixation which defines a support plane and wherein the entire wheel housing and the entire steering power system are mounted above the support plane.

2. The drive and steering unit of claim 1, wherein the steering power system further comprises a steering motor pulley, the steering belt coupling the steering pulley to the steering motor pulley.

3. The drive and steering unit of claim 1, wherein the drive assembly is mounted to the wheel housing and rotatable therewith.

4. The drive and steering unit of claim 3, wherein the drive power system is attached to the wheel housing and coupled to the drive shaft by a driving belt.

5. The drive and steering unit of claim 4, wherein the drive power system further comprises a drive motor pulley, the driving belt coupling the drive motor pulley to the drive shaft.

6. The drive and steering unit of claim 5, further comprising a drive shaft pulley secured to the drive shaft that is coupled to the driving belt.

7. The drive and steering unit of claim 1, wherein the wheel housing is capable of up to or greater than 360° degrees of movement.

8. The drive and steering unit of claim 1, wherein the wheel housing is rotatable relative to the support by a bearing connected between the wheel housing and the support.

9. The drive and steering unit of claim 8, wherein the drive assembly is connected to the bearing.

10. The drive and steering unit of claim 1, wherein the steering assembly and the drive assembly are each adapted to operate independently or simultaneously.

11. An automated guided vehicle (AGV) comprising:

a) a load support; and

b) a plurality of drive and steering units for driving and steering the load support;

c) each drive and steering unit comprising a steering assembly including a steering gear attached to a wheel housing and engaged with a steering power system, the steering gear being rotatable about an axis in response to actuation of the steering assembly, a drive assembly connected to the steering gear, and a drive power system coupled to the wheel housing and movable with the steering gear;

wherein the steering gear is a steering pulley attached to the wheel housing; and

wherein the steering power system is spaced from the wheel housing and coupled to the steering pulley by a steering belt;

wherein the wheel housing is fixed to a support at a point of fixation which defines a support plane and wherein the entire wheel housing and the entire steering power system are mounted above the support plane.

12. The automated guided vehicle (AGV) of claim 11, wherein the steering power system further comprises a steering motor pulley, the steering belt coupling the steering pulley to the steering motor pulley.

13. The automated guided vehicle (AGV) of claim 11, wherein the drive assembly is mounted to the wheel housing and rotatable therewith.

14. The automated guided vehicle (AGV) of claim 13, wherein the drive power system is attached to the wheel housing and coupled thereto by a driving belt.

15. The automated guided vehicle (AGV) of claim 11, wherein the wheel housing is capable of up to or greater than 360° degrees of movement.

16. The automated guided vehicle (AGV) of claim 11, wherein the wheel housing is rotatable relative to the support by a bearing connected between the wheel housing and the support.

17. The automated guided vehicle (AGV) of claim 16, wherein the drive assembly is connected to the bearing.

18. The automated guided vehicle (AGV) of claim 11, wherein the steering assembly and the drive assembly are each adapted to operate independently or simultaneously.

19. The automated guided vehicle (ACV) of claim 11, further comprising four drive and steering units positioned along adjacent corners of the load support, the steering assemblies being fixed adjacent a periphery of the load support.

20. A drive and steering unit comprising:

a) a steering assembly for steering a wheel and having a steering gear and a steering power system coupled to the steering gear for controlling and driving the steering gear;

b) a slewing ring attached to the steering gear for rotating the wheel; and

c) a drive assembly coupled to the slewing ring for driving the wheel, and a drive power system coupled to the drive assembly and movable with the slewing ring and the wheel;

wherein the steering power system is spaced from the slewing ring by a steering belt;

wherein the slewing ring is fixed to a support at a point of fixation which defines a support plane and wherein the entire slewing ring and the entire steering power system are mounted above the support plane.

21. The drive and steering unit of claim 20, wherein the steering power system further comprises a steering motor pulley, the steering belt coupling a steering pulley to the steering motor pulley.

22. The drive and steering unit of claim 20, wherein the drive assembly is mounted to the stewing ring and rotatable therewith.

23. The drive and steering unit of claim 22, wherein the drive power system is attached to the stewing ring and coupled to the wheel by a driving belt.