CLAIMS

1. A system including a conveyor and a cable adapted to travel along an endless path to extend or retract a first adjustable guiderail for guiding one or more articles when being conveyed along the conveyor, comprising:

a cable actuator adapted to move the cable along an endless path, the cable actuator comprising:

a capstan adapted to receive at least a portion of the cable and rotate to cause the cable to move along the endless path; and

a tensioner adapted to tension the cable.

2. The system of claim 1, wherein the cable actuator further comprises a driver for driving the capstan.

3. The system of claim 2, wherein the driver comprises a worm gear.

4. The system of claim 3, wherein the worm gear is driven by a hand wheel.

5. The system of claim 3, wherein the worm gear is driven by a motor.

6. The system of claim 1, further including a limit switch to stop the capstan upon rotation of the rotatable driver by a first predetermined amount in a first direction corresponding to extension of the first adjustable guiderail.

7. The system of claim 6, wherein the limit switch is adapted to stop the capstan upon rotation of the rotatable driver a second predetermined amount in a second direction opposite the first direction corresponding to retraction of the first adjustable guiderail.

8. The system of claim 1, wherein the tensioner comprises a first pulley and a second pulley, the cable is adapted to extend around the first pulley and the second pulley, and the cable actuator is adapted to change a distance between the first and second pulleys.

9. The system of claim 8, further including a tensioning sled to which the second pulley is attached.

10. The system of claim 7, wherein the tensioning sled is adapted to travel along one or more rods.

11. The system of claim 8, wherein the first pulley is located closer to one end of the conveyor and the second pulley is located closer to an opposite end of the conveyor.

12. The system of claim 8, further including an indicator adapted to indicate a change in cable tension.

13. The system of claim 12, wherein the indicator comprises an indicator plate connected to the tensioning sled, and wherein alignment of the indicator plate with a predetermined location on the cable actuator corresponds to a predetermined tension in the cable.

14. The system of claim 1, further including a rotational stop adapted to limit a rotational distance traveled by the capstan.

15. The system of claim 14, wherein the rotational stop comprises at least one extension adapted to engage a stationary stop to limit rotation of the capstan.

16. The system of claim 15, wherein the stationary stop comprises a limit switch for halting movement of the capstan.

17. The system of claim 16, wherein the rotational stop comprises a plurality of stop plates, each of the stop plates including at least one extension, wherein the plurality of stop plates are adapted to be adjustable in a plurality of relative angular positions in order to offset a respective first extension on a first of the plurality of stop plates from a respective second extension on a second of the plurality of stop plates.

18. The system of claim 17, wherein at least one of the plurality of stop plates includes at least one adjustment aperture, and further including a connector adapted to pass through the at least one adjustment aperture for fixing relative angular positions of the plurality of stop plates.

19. The system of claim 15, wherein the rotational stop and the capstan are commonly mounted on a central shaft.

20. The system of claim 1, further comprising:

a second cable adapted to travel along a second continuous path for extending and retracting a second adjustable guiderail; and

a second cable actuator adapted to move the second cable along the second continuous path;

wherein the first adjustable guiderail and the second adjustable guiderail are in opposition along the conveyor, and extension and retraction of the first adjustable guiderail and the second adjustable guiderail changing a width of a conveying path therebetween.

21. The system of claim 20, further comprising a controller adapted to coordinate control of the first cable actuator and the second cable actuator.

22. The system of claim 21, wherein the controller comprises a plurality of preset conditions for the first and second adjustable guiderails, each of the preset conditions corresponding to a width of a different article to be conveyed.