In an aspect, there is provided a work station for use in a system for medical dose preparation management, the work station comprising: a base and a medication preparation staging region disposed relative thereto; an imaging device having an imaging field encompassing at least a portion of the medication preparation staging region, the imaging device being located at least partially within a housing, wherein the imaging field extends through an opening of the housing; a transparent shield disposed between the imaging device and the medication preparation staging region, wherein the transparent shield covers at least a portion of the imaging device corresponding to at least a lens of the imaging device, and wherein the imaging field extends through an opening of the housing; at least one light source disposed in the housing, wherein the at least one light source is operable to emit light from the housing in a direction toward the medication preparation staging region; and a support member extending between the base and the housing for supportably disposing the imaging device relative to the base.

In another aspect, there is provided a work station for use in a system for medical dose preparation management, the work station comprising: a medication preparation staging region operable to supportably engage a medication receptacle; an imaging device having an imaging field encompassing at least a portion of the medication preparation staging region, the imaging device being located at least partially within a housing, wherein the imaging device has at least one fixed optical setting; at least one light source disposed in the housing, wherein the at least one light source is operable to emit light from the housing in a direction toward the medication preparation staging region; and a transparent shield disposed between the imaging device and the medication preparation staging region, wherein the transparent shield covers at least a portion of the imaging device corresponding to at least a lens of the imaging device.

In another aspect, there is provided a work station for use in a system for medical dose preparation management, the work station comprising: a medication preparation staging region operable to supportably engage a medication receptacle; an imaging device having an imaging field encompassing at least a portion of the medication preparation staging region, the imaging device being located at least partially within a housing; at least one light source disposed in the housing, wherein the at least one light source is operable to emit light from the housing in a direction toward the medication preparation staging region; a first polarization filter disposed between the imaging device and the medication preparation staging region; and a second polarization filter disposed between the at least one light source and the medication preparation staging region.

In another aspect, there is provided a work station for use in a system for medical dose preparation management, the work station comprising: a base having a length and a width; a medication preparation staging region disposed relative to the base; an imaging device disposed in a housing and having an imaging field encompassing at least a portion of the medication preparation staging region; and a support member extending between the base and the housing to supportably dispose the imaging device relative to the base, wherein the support member is selectively positionable in at least a first position relative to the medication preparation staging region and a second position relative to the medication preparation staging region, and wherein the imaging field of the supportably disposed imaging device encompasses at least a portion of the medication preparation staging region in each of the first position and second position of the support member.

In another aspect, there is provided a work station for use in a system for medical dose preparation management, the work station comprising: a base; a support platform removably disposable relative to the base, the support platform defining a medication preparation staging region; a support surface of the support platform defining a plurality of medication receptacle engagement features, wherein the plurality of medication receptacle engagement features comprise at least one channel extending in a first direction corresponding to a length of the support platform and at least one groove extending in a second direction corresponding to a width of the support platform; and an imaging device supportably disposed relative to the base and having an imaging field encompassing at least a portion of the medication preparation staging region.

In another aspect, there is provided a work station for use in a system for medical dose preparation management, the work station comprising: a base; a medication preparation staging region disposed relative to the base and operable to supportively engage at least one medication receptacle; an imaging device having an imaging field encompassing at least a portion of the medication preparation staging region, wherein the imaging device is operable to output a video data stream of the imaging field; a processor in operative communication with the imaging device to receive the video data stream of the imaging field; a user control device in operative communication with the processor to initiate a capture of a medical dose preparation image from the video data stream in response to a user input received at the user control device; a scale in operative communication with the processor and operable to output a weight corresponding to a medication receptacle that is supportably disposed in the medication preparation staging region; a memory in operative communication with the processor; wherein upon receipt of the user input, the weight is recorded by the processor from the scale at substantially the same time as the capture of the

medical dose preparation image and wherein the weight and the medical dose preparation image are associatively stored in the memory.

In another aspect, there is provided a work station for use in a system for medical dose preparation management, comprising: a base; a support surface disposed relative to the base and defining a reference plane; a medication preparation staging region disposed relative to the support surface and at least encompassing a portion of the reference plane; an imaging device supportably engageable relative to the base and having an imaging field encompassing at least a portion of the medication preparation staging region; and at least one groove defined in the support surface and extending from the reference plane a first depth; at least one channel defined in the support surface and extending from the reference plane a second depth; wherein the groove and the channel are operable to engage a medication receptacle disposed in the medication preparation staging region.

In another aspect, there is provided a work station for use in a system for medical dose preparation management, the work station comprising: a base having a length and a width; a medication preparation station region disposed relative to the base; an imaging device disposed in a housing and having an imaging field encompassing at least a portion of the medication preparation staging region; and a support member extending between the base and the imaging device for supportably disposing the imaging device relative to the base, wherein the image device is supportably engaged with the support member at a gimbal to adjustably position the image device relative to the medication preparation staging region.

CLAIMS

What is claimed is:

1. A work station (40) for use in a system (10) for medical dose preparation management, the work station (40) comprising:

a base (90) and a medication preparation staging region (86) disposed relative thereto;

an imaging device (80) having an imaging field (84) encompassing at least a portion of the medication preparation staging region (86), the imaging device (80) being located at least partially within a housing (210), wherein the imaging field (84) extends through an opening (214) of the housing (210);

a transparent shield (216) disposed between the imaging device (80) and the medication preparation staging region (86), wherein the transparent shield (216) covers at least a portion of the imaging device (80) corresponding to at least a lens (226) of the imaging device (80), and wherein the imaging field (84) extends through an opening (214) of the housing (210);

at least one light source (230) disposed in the housing (210), wherein the at least one light source (230) is operable to emit light from the housing (210) in a direction toward the medication preparation staging region (86); and

a support member (92) extending between the base (90) and the housing (210) for supportably disposing the imaging device (80) relative to the base (90).

2. A work station (40) according to Claim 1, wherein the imaging field (84) extends through an opening (214) of the housing (210) and the transparent shield (216) covers at least a portion of the opening (214).

3. A work station (40) according to Claim 2, wherein the transparent shield (216) and the housing (210) define an enclosed volume (218).

4. A work station (40) according to Claim 3, wherein the transparent shield (216) and the housing (210) define a continuous outer surface disposed about the enclosed volume (218).

5. A work station (40) according to Claim 1, further comprising:

a first polarization filter (222) disposed between the imaging device (80) and the medication preparation staging region (86).

6. A work station (40) according to Claim 5, further comprising:

a second polarization (224) filter disposed between the light source (230) and the medication preparation staging region (86).

7. A work station (40) according to Claim 6, wherein the first polarization filter (222) and the second polarization (224) filter are disposed in non-overlapping relation.

8. A work station (40) according to Claim 6 or Claim 7, wherein the first polarization filter (222) and the second polarization filter (224) have perpendicular polarization orientations.

9. A work station (40) according to any one of Claims 6-8, wherein at least a portion of the transparent shield (216) comprises at least one of the first or second polarization filters (222, 224).

10. A work station (40) according to Claim 1, wherein the imaging device (80) is disposed in a central region of the housing opening (214) and a peripheral region extends about the central region, and wherein a plurality of light sources (230) are disposed in the peripheral region.

11. A work station (40) according to Claim 10, wherein the medication preparation staging region (86) is at least partially defined by the base (90), the base (90) having a length and a width, and wherein the peripheral region extends in at least a first direction corresponding to the length of the base (90).

12. A work station (40) according to Claim 10 or Claim 11, wherein the peripheral region extends in at least a second direction corresponding to one of the width of the base (90) or a height of the medical dose preparation staging region (86) extending from the base (90).

13. A work station (40) according to Claim 1, further comprising:

a user control device (130) for receiving a user input to initiate capture of a medical dose preparation image from a video data stream output by the imaging device (80);

wherein an intensity of the at least one light source (230) is automatically modified from a default intensity of light emitted to a modified intensity of light emitted at a first predetermined period after the capture of the medical dose preparation image.

14. A work station (40) according to Claim 13, wherein the at least one light source (230) is automatically returned from the modified intensity of light to the default intensity of light at a second predetermined period after the first predetermined period.

15. A work station (40) according to Claim 1, wherein the imaging device (80) has at least one fixed optical setting, and wherein the at least one fixed optical setting is preset.

16. A work station (40) according to Claim 15, wherein the preset fixed optical setting corresponds to a depth of field encompassing substantially the entire medical dose preparation staging region (86).

17. A work station (40) according to Claim 1, wherein the support member (92) is selectively positionable in at least a first position and a second position relative to the medication preparation staging region (86).

18. A work station (40) according to Claim 17, wherein the support member (92) is moveable between the first position and the second position.

19. A work station (40) according to Claim 17 or Claim 18, wherein the support member (92) is selectively positionable in a plurality of different positions relative to the medication preparation staging region (86).

20. A work station (40) according to Claim 17, wherein the support member (92) comprises a first portion (234) attached to the base (90) and a second portion (236) attached to the housing (210), and wherein the second portion (236) is moveable relative to the first portion (234) between the first position and the second position.

21. A work station (40) according to Claim 20, wherein the first portion (234) is hingedly connected to the second portion (236).

22. A work station (40) according to Claim 20, wherein the first portion (234) and the second portion (236) are pivotally disposable between the first position and the second position.

23. A work station (40) according to any one of Claims 17-22, wherein when the support member (92) is in the first position the imaging field (84) extends between the imaging device (80) and the base (90) to encompass at least a portion of the medical dose preparation staging region (86) and when the support member (92) is in the second position the imaging field (84) extends in a direction parallel to the support surface of the base (90) to encompass at least a portion of the medical dose preparation staging region (86).

24. A work station (40) according to any one of Claims 17-22, wherein movement of the support member (92) between the first position and the second position is dampened.

25. A work station (40) according to Claim 1, further comprising:

an umbilical (268) at least partially disposed within the support member (92), wherein the umbilical (268) includes at least one of a signal communication path and a power communication path.

26. A work station (40) according to Claim 25, wherein the umbilical (268) is in operative communication with a processor.

27. A work station (40) according to Claim 1, wherein the base (90) has a length and a width, and wherein the support member (92) extends from the base (90) adjacent to an edge of the base (90) extending along the width.

28. A work station (40) according to Claim 27, wherein the work station (40) is disposed in a laminar flow hood, wherein a flow of air is parallel to a direction corresponding to the width of the base (90).

29. A work station (40) according to Claim 1, further comprising:

a support platform (256) removably disposable relative to the base (90), the support platform (256) defining the medication preparation staging region (86), wherein a support surface (262) of the support platform (256) defines a plurality of medication receptacle engagement features.

30. A work station (40) according to Claim 29, wherein the plurality of medication receptacle engagement features comprise at least one channel (266) extending in a first direction corresponding to a length of the support platform (256).

31. A work station (40) according to Claim 30, wherein the at least one channel (266) extends along substantially the entire length of the support surface (262) of the support platform (256), wherein the plurality of medication receptacle engagement features comprise at least one groove (264) extending in a second direction corresponding to a width of the support platform (256), and wherein the at least one groove (264) extends along substantially the entire width of the support surface (262) of the support platform (256).

32. A work station (40) according to any one of Claims 29-31, wherein the support platform (256) is made of a UV resistant material.

33. A work station (40) according to Claim 1, and wherein the imaging device (80) is operable to output a video data stream of the imaging field (84);

a processor in operative communication with the imaging device (80) to receive the video data stream of the imaging field (84);

a user control device (130) in operative communication with the processor to initiate a capture of a medical dose preparation image from the video data stream in response to a user input received at the user control device (130);

a scale in operative communication with the processor and operable to output a weight corresponding to a medication receptacle (100) that is supportably disposed in the medication preparation staging region (86);

wherein upon receipt of the user input, the weight is recorded by the processor from the scale at substantially the same time as the capture of the medical dose preparation image.

34. A work station (40) according to Claim 33, further comprising:

a memory in operative communication with the processor;

wherein the weight and the medical dose preparation image are stored in the memory.

35. A work station (40) according to Claim 34, wherein the processor is operable to compare the weight to an anticipated weight of the medication receptacle (100), wherein the processor is operable to calculate a deviation of the weight to the anticipated weight, and wherein the deviation is associatively stored in the memory with the weight and the medical dose preparation image.

36. A work station (40) according to Claim 35, wherein the deviation is compared to a threshold deviation, and wherein when the deviation exceeds a threshold deviation, an alert is provided to a user.

37. A work station (40) according to any one of Claims 33-36, wherein the base (90), the imaging device (80), and the scale are interconnected for movement as a single unit.

38. A work station (40) according to Claim 1, further comprising:

a support surface (262) disposed relative to the base (90) and defining a reference plane;

at least one groove (264) defined in the support surface (262) and extending from the reference plane a first depth;

at least one channel (266) defined in the support surface (262) and extending from the reference plane a second depth;

wherein the groove (264) and the channel (266) are operable to engage a medication receptacle (100) disposed in the medication preparation staging region (86).

39. A work station (40) according to Claim 38, wherein the first depth is less than the second depth, and wherein the groove (264) comprises a first concave surface extending from the reference plane to the first depth.

40. A work station (40) according to Claim 39, wherein the channel (266) comprises a second concave surface extending from the reference plane to the second depth.

41. A work station (40) according to Claim 40, wherein the first concave surface has a first radius of curvature greater than a second radius of curvature of the second concave surface.

42. A work station (40) according to Claim 40, wherein at least one of said plurality of grooves (264) is disposed perpendicular to at least one of the channels (266).

43. A work station (40) according to any one of Claims 38-42, wherein at least one of the plurality of grooves (264) extends across substantially all of the support surface (262) in a first direction corresponding to a width of the support surface (262), and wherein at least one of the plurality of channels (266) extends across substantially all of the support surface (262) in a second direction corresponding to a length of the support surface (262).

44. A work station (40) according to Claim 1, wherein the image device is supportably engaged with the support member (92) at a gimbal (320) to adjustably position the image device relative to the medication preparation staging region (86).

45. A work station (40) according to Claim 44, wherein the gimbal (320) is mounted to a mounting structure (310) secured to the support member (92).

46. A work station (40) according to Claim 45, wherein the mounting structure (310) at least partially comprises a member fabricated from sheet material.

47. A work station (40) according to Claim 45, wherein at least one of the support member (92) or the mounting structure (310) includes a toleranced connection, and wherein the toleranced connection includes a connection tolerance greater than an imaging tolerance regarding the alignment of the image device relative to the mounting structure (310).

48. A work station (40) according to any one of Claims 44-47, wherein the gimbal (320) is adjustable through a range of motion corresponding at least to the difference between the connection tolerance and the image tolerance.

49. A work station (40) for use in a system (10) for medical dose preparation management, the work station (40) comprising:

a medication preparation staging region (86) operable to supportably engage a medication receptacle (100);

an imaging device (80) having an imaging field (84) encompassing at least a portion of the medication preparation staging region (86), the imaging device (80) being located at least partially within a housing (210), wherein the imaging device (80) has at least one fixed optical setting;

at least one light source (230) disposed in the housing (210), wherein the at least one light source (230) is operable to emit light from the housing (210) in a direction toward the medication preparation staging region (86); and

a transparent shield (216) disposed between the imaging device (80) and the medication preparation staging region (86), wherein the transparent shield (216) covers at least a portion of the imaging device (80) corresponding to at least a lens (226) of the imaging device (80).

50. A work station (40) according to Claim 49, wherein the imaging field (84) extends through an opening (214) of the housing (210).

51. A work station (40) according to Claim 50, wherein the transparent shield (216) covers at least a portion of the opening (214).

52. A work station (40) according to Claim 51, wherein the transparent shield (216) covers substantially all of the opening (214).

53. A work station (40) according to any one of Claims 49-52, wherein the transparent shield (216) and the housing (210) define an enclosed volume (218).

54. A work station (40) according to Claim 53, wherein the transparent shield (216) and the housing (210) define a continuous outer surface disposed about the enclosed volume (218).

55. A work station (40) according to Claim 49, further comprising:

a first polarization filter (222) disposed between the imaging device (80) and the medication preparation staging region (86).

56. A work station (40) according to Claim 55, further comprising:

a second polarization filter (224) disposed between the light source (230) and the medication preparation staging region (86).

57. A work station (40) according to Claim 56, wherein the first polarization filter (222) and the second polarization filter (224) are disposed in non-overlapping relation.

58. A work station (40) according to Claim 56, wherein the first polarization filter (222) and the second polarization filter (224) have perpendicular polarization orientations.

59. A work station (40) according to any one of Claims 55-58, wherein at least a portion of the transparent shield (216) comprises at least one of the first or second polarization filters (222, 224).

60. A work station (40) according to Claim 49, wherein the imaging device (80) is disposed in a central region of the housing opening (214) and a peripheral region extends about the central region, and wherein a plurality of light sources (230) are disposed in the peripheral region.

61. A work station (40) according to Claim 60, wherein the medication preparation staging region (86) is at least partially defined by a base (90) having a length and a width.

62. A work station (40) according to Claim 61, wherein the peripheral region extends in at least a first direction corresponding to the length of the base (90).

63. A work station (40) according to Claim 62, wherein the peripheral region extends in at least a second direction corresponding to one of the width of the base (90) or a height of the medical dose preparation staging region (86) extending from the base (90).

64. A work station (40) according to Claim 49, further comprising:

a user control device (130) for receiving a user input to initiate capture of a medical dose preparation image from a video data stream output by the imaging device (80);

wherein an intensity of the at least one light source (230) is automatically modified from a default intensity of light emitted to a modified intensity of light emitted at a first predetermined period after the capture of the medical dose preparation image.

65. A work station (40) according to Claim 64, wherein the at least one light source (230) is automatically returned from the modified intensity of light to the default intensity of light at a second predetermined period after the first predetermined period.

66. A work station (40) according to Claim 64, wherein the at least one fixed optical setting is preset.

67. A work station (40) according to Claim 66, wherein the preset fixed optical setting corresponds to a depth of field encompassing substantially the entire medical dose preparation staging region (86).

68. A work station (40) according to Claim 66 or Claim 67, wherein the at least one fixed optical setting comprises at least one of an aperture setting and a focus setting.

69. A work station (40) for use in a system (10) for medical dose preparation management, the work station (40) comprising:

a medication preparation staging region (86) operable to supportably engage a medication receptacle (100);

an imaging device (80) having an imaging field (84) encompassing at least a portion of the medication preparation staging region (86), the imaging device (80) being located at least partially within a housing (210);

at least one light source (230) disposed in the housing (210), wherein the at least one light source (230) is operable to emit light from the housing (210) in a direction toward the medication preparation staging region (86);

a first polarization filter (222) disposed between the imaging device (80) and the medication preparation staging region (86); and

a second polarization filter (224) disposed between the at least one light source (230) and the medication preparation staging region (86).

70. A work station (40) according to Claim 69, wherein the imaging field (84) extends through an opening (214) of the housing (210).

71. A work station (40) according to Claim 70, wherein the first polarization filter (222) and the second polarization filter (224) are disposed in non-overlapping relation.

72. A work station (40) according to Claim 70, wherein the first polarization filter (222) and the second polarization filter (224) cover at least a portion of the opening (214) of the housing (210).

73. A work station (40) according to Claim 69, wherein the first polarization filter (222) and the second polarization filter (224) have perpendicular polarization orientations.

74. A work station (40) according to any one of Claims 70-73, wherein the imaging device (80) is disposed in a central region of the housing opening (214) and a peripheral region extends about the central region, and wherein a plurality of light sources (230) are disposed in the peripheral region.

75. A work station (40) according to Claim 74, wherein the medication preparation staging region (86) is at least partially defined by a base (90) having a length and a width.

76. A work station (40) according to Claim 75, wherein the peripheral region extends in at least a first direction corresponding to the width of the base (90).

77. A work station (40) according to Claim 76, wherein the peripheral region extends in at least a second direction corresponding to one of the length of the base (90) or a height of the medical dose preparation staging region (86) extending from the base (90).

78. A work station (40) according to any one of Claims 69-73, wherein the imaging device (80) has at least one fixed optical setting.

79. A work station (40) for use in a system (10) for medical dose preparation management, the work station (40) comprising:

a base (90) having a length and a width;

a medication preparation staging region (086) disposed relative to the base (90);

an imaging device (80) disposed in a housing (210) and having an imaging field (84) encompassing at least a portion of the medication preparation staging region (86); and

a support member (92) extending between the base (90) and the housing (210) to supportably dispose the imaging device (80) relative to the base (90), wherein the support member (92) is selectively positionable in at least a first position relative to the medication preparation staging region (86) and a second position relative to the medication preparation staging region (86), and wherein the imaging field (84) of the supportably disposed imaging device (80) encompasses at least a portion of the medication preparation staging region (80) in each of the first position and second position of the support member (92).

80. A work station (40) according to Claim 79, wherein the support member (92) is moveable between the first position and the second position.

81. A work station (40) according to Claim 79, wherein the support member (92) is selectively positionable in a plurality of different positions relative to the medication preparation staging region (86).

82. A work station (40) according to Claim 79, wherein the support member (92) comprises a first portion (234) attached to the base (90) and a second portion (236) attached to the housing (210), wherein the second portion (236) is moveable relative to the first portion (234) between the first position and the second position.

83. A work station (40) according to Claim 82, wherein the first portion (234) is hingedly connected to the second portion (236).

84. A work station (40) according to Claim 82, wherein the first portion (234) and the second portion (236) are pivotally disposable between the first position and the second position.

85. A work station (40) according to Claim 79, wherein the base (90) comprises a support surface (262) extending along the length and the width.

86. A work station (40) according to Claim 85, wherein when the support member (92) is in the first position the imaging field (84) extends between the imaging device (80) and the base (90) to encompass at least a portion of the medical dose preparation staging region (86) and when the support member (92) is in the second position the imaging field (84) extends in a direction parallel to the support surface (262) of the base (90) to encompass at least a portion of the medical dose preparation staging region (86).

87. A work station (40) according to any one of Claims 79-86, wherein the movement between the first position and the second position is dampened.

88. A work station (40) according to Claim 79, further comprising:

an umbilical (268) at least partially disposed within the support member (92).

89. A work station (40) according to Claim 88, wherein the umbilical (268) includes at least one of a signal communication path and a power communication path.

90. A work station (40) according to Claim 88 or Claim 89, wherein the umbilical (268) is in operative communication with a processor.

91. A work station (40) according to Claim 79, wherein the support member (92) extends from the base (90) adjacent to an edge of the base (90) extending along the width.

92. A work station (40) according to Claim 79 or Claim 91, wherein the work station (40) is disposed in a laminar flow hood, wherein a flow of air is parallel to a direction corresponding to the width of the base (90).

93. A work station (40) for use in a system (10) for medical dose preparation management, the work station (40) comprising:

a base (90);

a support platform (256) removably disposable relative to the base (90), the support platform (256) defining a medication preparation staging region (86);

a support surface (262) of the support platform (256) defining a plurality of medication receptacle engagement features, wherein the plurality of medication receptacle engagement features comprise at least one channel (266) extending in a first direction corresponding to a length of the support platform (256) and at least one groove (264) extending in a second direction corresponding to a width of the support platform (256); and

an imaging device (80) supportably disposed relative to the base (90) and having an imaging field (84) encompassing at least a portion of the medication preparation staging region (86).

94. A work station (40) according to Claim 93, wherein the at least one channel (266) extends along substantially the entire length of the support surface (262) of the support platform (256).

95. A work station (40) according to Claim 93, wherein the at least one groove (264) extends along substantially the entire width of the support surface (262) of the support platform (256).

96. A work station (40) according to any one of Claims 93, 94, or 95, wherein the support platform (256) is made of a UV resistant material.

97. A work station (40) for use in a system (10) for medical dose preparation management, the work station (40) comprising:

a base (90);

a medication preparation staging region (86) disposed relative to the base (90) and operable to supportively engage at least one medication receptacle (100);

an imaging device (80) having an imaging field (84) encompassing at least a portion of the medication preparation staging region (86), wherein the imaging device (80) is operable to output a video data stream of the imaging field (84);

a processor in operative communication with the imaging device (80) to receive the video data stream of the imaging field (84);

a user control device (130) in operative communication with the processor to initiate a capture of a medical dose preparation image from the video data stream in response to a user input received at the user control device (130);

a scale in operative communication with the processor and operable to output a weight corresponding to a medication receptacle (100) that is supportably disposed in the medication preparation staging region (86);

a memory in operative communication with the processor;

wherein upon receipt of the user input, the weight is recorded by the processor from the scale at substantially the same time as the capture of the medical dose preparation image and wherein the weight and the medical dose preparation image are associatively stored in the memory.

98. A work station (40) according to Claim 97, wherein the processor is operable to compare the weight to an anticipated weight of the medication receptacle (100).

99. A work station (40) according to Claim 98, wherein the processor is operable to calculate a deviation of the weight to the anticipated weight.

100. A work station (40) according to Claim 99, wherein the deviation is associatively stored in the memory with the weight and the medical dose preparation image.

101. A work station (40) according to Claim 99, wherein the deviation is compared to a threshold deviation, and wherein when the deviation exceeds a threshold deviation, an alert is provided to a user.

102. A work station (40) according to any one of Claims 97, 98-101, wherein the base (90), the imaging device (80), and the scale are interconnected for movement as a single unit.

103. A work station (40) for use in a system (10) for medical dose preparation management, comprising:

a base (90);

a support surface (262) disposed relative to the base (90) and defining a reference plane;

a medication preparation staging region (86) disposed relative to the support surface (262) and at least encompassing a portion of the reference plane;

an imaging device (80) supportably engageable relative to the base (90) and having an imaging field (84) encompassing at least a portion of the medication preparation staging region (86); and

at least one groove (264) defined in the support surface (262) and extending from the reference plane a first depth;

at least one channel (266) defined in the support surface (262) and extending from the reference plane a second depth;

wherein the groove (264) and the channel (266) are operable to engage a medication receptacle (100) disposed in the medication preparation staging region (86).

104. A work station (40) according to Claim 103, wherein the first depth is less than the second depth.

105. A work station (40) according to Claim 104, wherein the groove (264) comprises a first concave surface extending from the reference plane to the first depth.

106. A work station (40) according to Claim 105, wherein the channel (266) comprises a second concave surface extending from the reference plane to the second depth.

107. A work station (40) according to Claim 106, wherein the first concave surface has a first radius of curvature greater than a second radius of curvature of the second concave surface.

108. A work station (40) according to any one of Claims 103-107, further comprising:

a plurality of grooves (264); and

a plurality of channels (266).

109. A work station (40) according to Claim 108, wherein at least one of said plurality of grooves (264) is disposed perpendicular to at least one of the channels (266).

110. A work station (40) according to Claim 109, wherein at least one of the plurality of grooves (264) extends across substantially all of the support surface (262) in a first direction corresponding to a width of the support surface (262).

111. A work station (40) according to Claim 110, wherein at least one of the plurality of channels (266) extends across substantially all of the support surface (262) in a second direction corresponding to a length of the support surface (262).

112. A work station (40) for use in a system (10) for medical dose preparation management, the work station (40) comprising:

a base (90) having a length and a width;

a medication preparation station region disposed relative to the base (90);

an imaging device (80) disposed in a housing (210) and having an imaging field (84) encompassing at least a portion of the medication preparation staging region (86); and

a support member (92) extending between the base (90) and the imaging device (80) for supportably disposing the imaging device (80) relative to the base (90), wherein the image device is supportably engaged with the support member (92) at a gimbal (320) to adjustably position the image device relative to the medication preparation staging region (86).

113. A work station (40) according to Claim 112, wherein the gimbal (320) is mounted to a mounting structure (310) secured to the support member (92).

114. A work station (40) according to Claim 113, wherein the mounting structure (310) at least partially comprises a member fabricated from sheet material.

115. A work station (40) according to Claim 113 or Claim 114, wherein at least one of the support member (92) or the mounting structure (310) includes a toleranced connection, and wherein the toleranced connection includes a connection tolerance greater than an imaging tolerance regarding the alignment of the image device relative to the mounting structure (310).

116. A work station (40) according to Claim 115, wherein the gimbal (320) is adjustable through a range of motion corresponding at least to the difference between the connection tolerance and the image tolerance.