Claims:

1. A system for cleaning parts disposed in a liner with a cleaning fluid, comprising:

a portable cart;

a liquid particle counter (LPC) carried by the portable cart, the LPC configured for detachable coupling to a fluid outlet port formed through the liner, the LPC operable to sample rinsate solution exiting the liner; and

a pump carried by the portable cart and configured for fluid coupling to the liner in a detachable manner, the pump operable to recirculate rinsate solution through the liner.

2. The system of claim 1, further comprising:

a circulating fluid supply line carried by the portable cart and coupled to the pump, the circulating fluid supply line configured for detachable coupling with the liner; and

a filter carried by the portable cart and coupled with the circulate fluid supply line, the filter operable to remove particles from the rinsate solution passing through the circulating fluid supply line.

3. The system of claim 2, wherein the LPC is coupled to the circulating fluid supply line.

4. The system of claim 3, further comprising:

a dedicated fluid sampling line for removing a sample of rinsate solution from the liner having a first end coupled with the liner and a second end coupled with the circulating fluid supply line, wherein the LPC is fluidly coupled with the dedicated fluid sampling line.

5. The system of claim 4, further comprising:

a dedicated fluid sampling pump for pumping rinsate through the dedicated fluid sampling line.

6. The system of claim 5, further comprising:

a drain line carried by the portable cart fluidly coupling the filter with a drain for removing waste material from the filter.

7. The system of claim 1, further comprising:

a cleaning vessel having the liner disposed therein; and

a transducer positioned to agitate fluid within the liner.

8. The system of claim 7, wherein the liner comprises a material selected from the group of polypropylene (PP), polyethylene (PE), polyvinyl difluoride (PVDF), and combinations thereof.

9. A system for cleaning parts disposed in a liner with a cleaning fluid, comprising:

a portable cart;

a liner for holding parts to be cleaned during a cleaning process; and

a liquid particle counter (LPC) carried by the portable cart, the LPC configured for detachable coupling to a fluid outlet port formed through the liner, the LPC operable to sample cleaning fluid exiting the liner.

10. The system of claim 9, further comprising:

a cleaning vessel assembly having the liner disposed therein; and

a transducer positioned below the liner to agitate the cleaning fluid within.

11. The system of claim 10, further comprising:

a wet bench set-up comprising:

a frame which forms an overflow basin for holding the cleaning vessel assembly and capturing any fluids which may overflow from the cleaning vessel assembly during the cleaning process; and

a sink drain line for removing any fluids captured by the overflow basin during the cleaning process.

12. The system of claim 11, wherein the portable cleaning cart comprises:

a system controller for controlling the cleaning process; and

a cleaning fluid supply module for supplying and recycling cleaning fluid to the cleaning vessel assembly.

13. The system of claim 12, wherein the cleaning fluid supply module comprises:

an inert gas module for supplying an inert gas which may be used as a purge gas during the cleaning process;

a deionized (DI) water supply module for supplying deionized water during the cleaning process; and

a first cleaning fluid supply tank for supplying cleaning fluid during the cleaning process.

14. The system of claim 9, further comprising:

a pump carried by the portable cart and configured for fluid coupling to the liner in a detachable manner, the pump operable to recirculate cleaning fluids through the liner;

a circulating fluid supply line carried by the portable cart and coupled to the pump, the circulating fluid supply line configured for detachable coupling with the liner; and

a filter carried by the portable cart and coupled with the circulating fluid supply line, the filter operable to remove particles from the cleaning fluid passing through the circulating fluid supply line.

15. The system of claim 14, wherein the LPC is fluidly coupled to the circulating fluid supply line.

16. The system of claim 15, further comprising:

a dedicated fluid sampling line for removing a sample of cleaning fluid from the liner having a first end coupled with the liner and a second end coupled with the circulating fluid supply line, wherein the LPC is fluidly coupled with the dedicated fluid sampling line.

17. The system of claim 16, further comprising:

a dedicated fluid sampling pump for pumping rinsate through the dedicated fluid sampling line.

18. The system of claim 17, further comprising:

a drain line carried by the portable cart fluidly coupling the filter with a drain for removing waste material from the filter.

19. A method for cleaning parts disposed in a liner with a cleaning fluid, comprising:

providing a liner for holding parts to be cleaned during a cleaning process and a transducer positioned below the liner;

providing a portable cart with a liquid particle counter (LPC) carried by the portable cart, the LPC configured for detachable coupling to a fluid outlet port formed through the liner, the LPC operable to sample cleaning fluid exiting the liner;

positioning a part in the liner;

flowing a rinsate solution from a rinsate supply into the liner;

cycling the transducer on and off to agitate the rinsate solution and remove contaminant particles from the part; and

monitoring a count of contaminant particles in the rinsate solution using the LPC; and

ending the cleaning process when the count of contaminant particles drops below a previously determined level.

20. The method of claim 19, further comprising:

detaching the portable cart from the liner;

moving the portable cart to a second liner; and

fluidly coupling the portable cart to the liner.

CLAIMS

1. An invention not claimed in any divisional application.