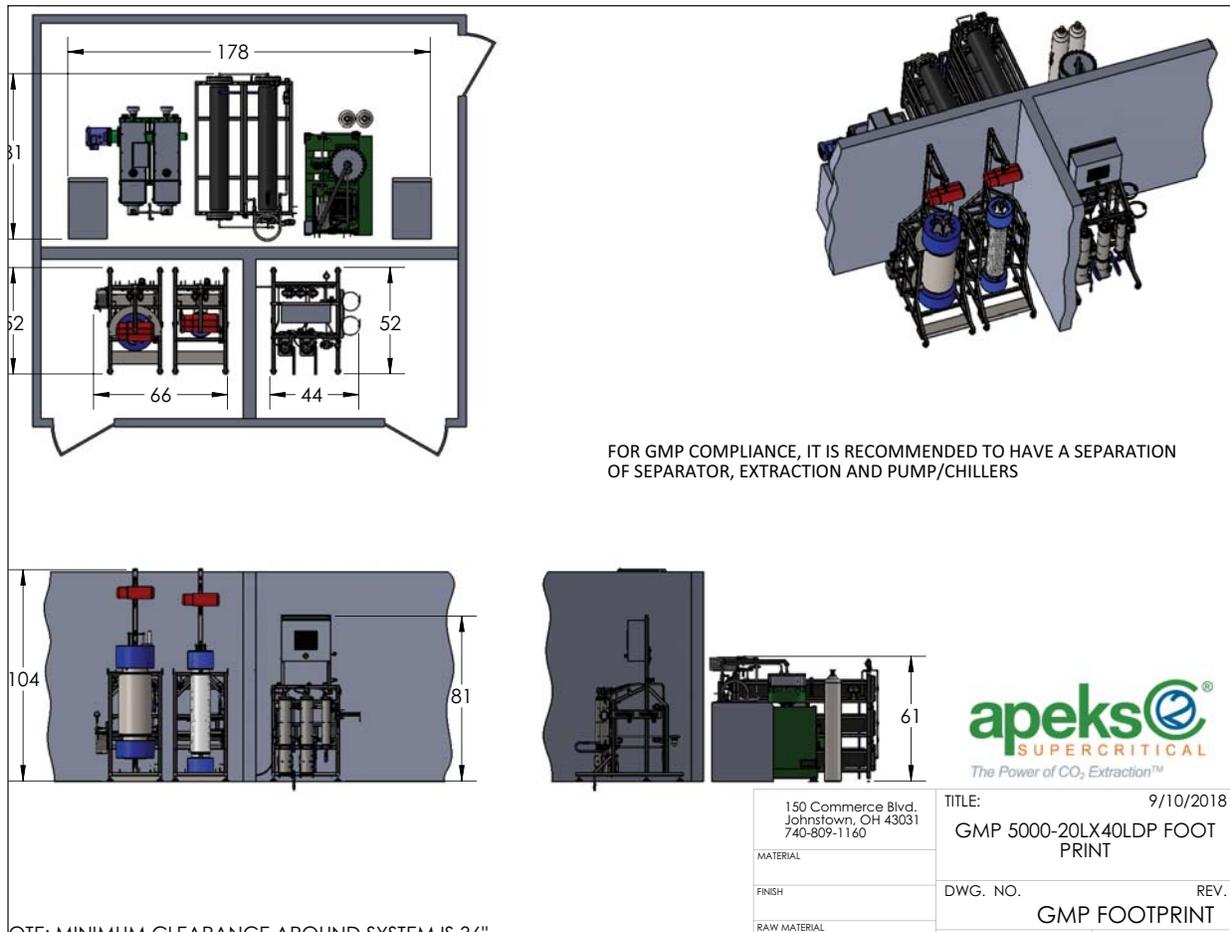


Current Good Manufacturing Processes (CGMP):

Features and Benefits of CGMPs in Apeks systems

Current Good Manufacturing Processes (CGMPs) are a code set by the FDA for pharmaceutical manufacturing. The codes ensure that anyone producing food grade products adhere to a certain list of standards, which result in a contaminant-free drug for the consumer. Apeks Supercritical systems are CGMP friendly, helping customers achieve CGMP standards! Contamination is most likely to occur between the extraction vessels and the separation vessels because the operator may kick up dust, making a mess while loading the plant material into the extractor. By separating the stand to allow the extractor vessels to be in a different room, we're making it easier (more friendly) for the operators to follow CGMPs. Our systems can be customized so that each component is in a separate room, thereby eliminating contamination between the separators, the chiller, and the compressor. In addition, each component can be separated by as much as 10 feet, so the rooms can be built with room to move.



Features and Benefits:

1. Operators can clean our vessels thoroughly from top or bottom, making it easier to properly maintain the equipment in good condition through processes that are reliable and reproducible.
2. All our vessels are made of stainless steel.
3. Our vessels have a full penetration weld, that are subsequently ground and polished on the interior to produce a smooth, continuous surface. The Code of Federal Regulations, specifically CFR 21 – §110, Subpart C – Equipment, §110 .40, Equipment and Utensils, states: "...seams on food contact surfaces must be smoothly bonded or maintained so as to minimize accumulation of food particles, dirt, and organic matter and thus minimize the opportunity for growth of microorganisms."
4. We recommend ethanol for cleaning.
5. Our filters are made of porous metal which means they are washable between runs and do not degrade.
6. The filters are easy to remove for cleaning between each run.
7. Each section of the system (extraction section, separation section, pumping/chiller section) can be separated by as much as 10 feet.
8. Our systems recover 95% of the CO₂ used per run.
9. Our systems are designed to work with food grade (or better) CO₂.
10. The main controller is type 12 as shipped, which means it is splash resistant.

CGMPs are vital to all consumers because contamination may not be detectable by smell, taste, or sight. Testing end products may indicate contamination, but testing is typically done on a small portion of a batch. Ensuring the product is created to CGMP standards means that consumers are guaranteed that the entire batch is food safe and is not contaminated. The FDA states: "Facilities that are in good condition, equipment that is properly maintained and calibrated, employees who are qualified and fully trained, and processes that are reliable and reproducible, are a few examples of how CGMP requirements help to assure the safety and efficacy of drug products."

