

Used Tank checklist

1. Your brewery's physical space and access restrictions:
 - a. Height limitations: _____
 - b. Width Limitations: _____
 - c. Are there specific size requirements to match or fit the existing system?
_____.
 - d. Footprint requirements. _____
2. Do local regulations require ASME certification?
3. Do the tank's electrical requirements correspond with what you have available?
4. Confirm that the tank can be removed without having to demolish the building or unacceptably cut the equipment apart.
5. Will tank require retrofitting to make it useable?
 - a. Do ports need to be moved?
 - b. Are the legs adjustable?
 - c. Will it need paint?
 - d. What are the costs associated with these required changes?
6. How good was the equipment to start?
 - a. Was it well engineered for safe operation?
 - b. Is manufacturer still in business?
 - c. What was/is the manufacturer's reputation for quality and customer service?
7. What is the tanks history (performance, repairs, what they used it for and how difficult has it been to get spare parts.)
8. Are the Pressure Relief Valves correctly placed, adequate, and working?
9. Is the electrical service box wash-down tight?
10. Heated tanks – What grade of stainless steel was used? Grade 304 or 316? 2205 is the knowledgeable standard in the U.S.; there may be other grades in use in Europe. The wrong grade in a heated vessel could result in an eventual problem with Stress Corrosion Cracking. Resulting in catastrophic failure of the vessel and usually requiring complete replacement. Hot Water Tanks, Kettles, Heated Mash Tuns and CIP tanks are prime suspects and must be examined with this in mind.
 - a. Avoid using tanks with outward opening manways in pressurized applications.
11. Cooled tanks- Look for poor insulation and shoddy cladding. Unsealed insulation attracts and condenses water. Water-laden insulation provides no insulating ability and is a growth spot for mold and microbes. Check to see if the cladding has gaps that may allow unacceptable water or vapor infiltration.

12. Assume that all soft parts will need to be replaced.
 - a. Find out where and if you can get the replacements for these and factor that into the cost of the vessel.
 - b. Ask for all spare parts associated with tank, new and old, seller has on hand with purchase.
13. Grundy's – the consensus seems to be: Grundy's are old, hard to get parts for, and make a brewer's life difficult...their most attractive attribute is they are cheap. There are actually a number of different models made by different manufactures out there that, due to appearance, fall into the Grundy category, all with different spares and replacement parts.
14. If at all possible, go and inspect the equipment before you purchase it. Crawl all over it, and look for:
 - a. Fit and finish
 - b. Physically measure the equipment to make sure it will fit in your space.
 - c. Improper cleaning that may have damaged the internal finish
 - d. Manways with interior shadows as they are harder to clean and source of possible contamination. Shadowless manways provide a smooth surface that's easier to clean.
 - e. Past repairs that signal it was a lemon to start with
15. When buying tank remotely:
 - a. Ask for pictures from all angles including top of tank (to verify tank has never been imploded.)
 - b. Documented proof tank pressure was tested and tank is sound.
 - c. Documented proof tank relief valve operation tested and works.
 - d. One option you may want to consider is to have consultant outside the deal go and look at it and give you an assessment and appraisal. For larger acquisitions it is generally money well spent.
16. What will removal, rigging, packing and shipping charges will be?
 - a. Always take or have photos taken of the tank before it moves and determine that all parties have insurance to cover any possible damage to your goods.

Finally here are a few things you should always do once you've made your purchase:

- Completely disassemble the unit.
- Clean, clean, clean everything
- Inspect Nuts and Bolts for rounded heads and over-torque damage. Replace before reassembly.
- Inspect flange faces for gashes, cracks, or old gasket material that could prevent correct sealing.
- Replace all soft parts
- Find a good stainless fabricator and make him your friend, you'll need him sooner or later.