

Garner US Enterprises

Stage I

In conventional systems, Stage I material is generally started in test tubes due to the high degree of contamination associated with new cultures. Test tubes are somewhat bulky and with the rack used for test tubes take up excess shelf space. Test tubes are either placed upright or on a slant. The slanted system is even less space efficient. If test tubes are stored upright, then a clear cap must be used to allow light to pass to the culture. Test tube caps are loose fitting and should be wrapped with tape or parafilm to reduce the risk of external contaminants. The high degree of contamination in Stage I cultures and the large number of units typically handled in Stage I creates an excessive amount of washing of glassware.

When using the Star*Pac™ system for Stage I cultures a 5 chamber bag is used. Each chamber is roughly equivalent to a 10 mm by 125 mm test tube. The 5-chamber configuration keeps individual cultures separate, which eliminates cross contamination or the spread of contamination from one unit to the other. The somewhat 2 dimensional nature of the Star*Pac™ allows for more units to be placed within a given space. A normal test tube rack configuration allows for approximately 80 to 100 test tubes per square foot.

The Star*Pac™ system accommodates 120 to 200 individual chambers per square foot. The transparent nature of the Star*Pac™ unit allows for light to reach the cultures readily. The contamination is isolated in the particular chamber where it occurs in the Star*Pac™ bag. The chamber can be cut apart and disposed of, or when the cultures are reworked, the clean chamber can be opened and the material transferred, and then the whole unit can be disposed of. This eliminates the need for glass washing equipment, personnel, and the space devoted to such a need.