

Okoliš

A key issue in the uptake of single-use disposable process technology is the possible environmental impact of disposing of used single-use disposable items. Used processing bags must be disposed of by either incineration or landfill, and will add to the amount of solid waste a facility produces. This additional solid waste is offset by reduced water and cleaning chemical requirements plus the associated liquid waste treatment.

An environmental impact assessment comparing single-use disposable equipment usage to stainless steel vessels has not yet been completed and so quantifying the environmental implications is not a simple task. The extent of any impact will depend upon where the facility is physically located and the national legislation.

However, the quantitative cost model does give an indication of the usages of the key components. The results indicated that per batch of product made:

Waste Produced		200Kg (100 bags + tubing)†
Fluid Savings	WFI	141 Tonnes
	Caustic Cleaning	100L (40%)
	Phosphoric Acid	5L (80%)
Equipment and building materials		Significantly reduced
		† Requires incineration / landfill Note, Liquid wastes may require treatment