

Less is More

Customers are demanding less
from solvent distillation systems

Less is More

- Stills have traditionally been
 - Hard to maintain
 - Time consuming to operate
 - Expensive to operate
 - Inefficient in recovery
- You are asking for less of all of this!

Less is More

Rapid changes in distillation
technology give you less

Less Maintenance

- Heating oil performance extended by sophisticated expansion/cooling system
 - Our number one maintenance issue – customers neglecting oil changes
 - Service is seen as an unnecessary expense
 - Repair from neglect is very, very hard and expensive
- Heating oil volume reduced by 50%
 - Cost of service calls reduced dramatically

Less Maintenance

- ◉ Mixer/Scraper eliminates need for periodic pot maintenance
 - Our previous recommendation was to scrape the pot at least once every four weeks, more often if possible
 - Customers neglected this because of time and pain associated with the task

Less Expense

- Mixer/Scraper reduces run times
 - Consistent run times - performance does not degrade due to lack of pot maintenance
 - Shorter cycles overall due to better thermal transfer
 - Savings of over \$2500/year for our largest still at \$0.11/kWh

Less Expense

- Operation at a lower temperature requires less energy
 - 8% is the estimated average savings from previous generation IHSolve stills
 - At \$0.11/kWh of over \$5000/year for our largest still

Less Waste

- ◉ Solvent reclaim rates can be pushed as high as 99% of reclaimable solvent
 - Waste becomes a non-hazardous, class 3 solid unless specifically called out by law
 - Non-regulated and easier to dispose of than a combustible liquid
 - One current customer reclaims 345 gallons clean from 363 gallons of dirty. Assuming 5% solids this is a 100% recovery rate! - VOC emissions reduced by 40%!

Less Operational Impact

- As “touchless” of an operation as possible
 - Only waste drum and surrogate drum changes required
 - Still automatically senses solvent usage and runs cycles at appropriate times.
 - Soon, still will understand your shift schedule to further fine-tune operation

Less Operational Impact

- Automatic balancing of multi-component solvents
 - Developed with the help of an attendee
 - Trial implementation this month
 - Requires technology so new that IHSolve is the first to deploy
 - Talk to you solvent vendor first if you have interest because they are an important partner in this process

Less Worry

- ◎ **Never run out of solvent!**
 - Largest stills are capable of producing about 2000 gallons of clean solvent per day at acceptable reclamation rates
 - Autonomous operation minimizes human error

Less Worry

- Recent experiences, especially in the tightly regulated California environment, have highlighted required technological changes to please even the strictest building and fire inspectors

Less Worry

- Separate emergency and normal vents
- Integrated solvent spill containment, both diked and double-walled
- Residue spill containment
- Stills designed to operate within with high efficiency within the strictest 330/660 gallon NFPA limits
- Expanded monitoring options for utilities including building air, cooling, exhaust, and fire-alarm systems
- Monitoring points have more than doubled in the last year alone

What is the future?

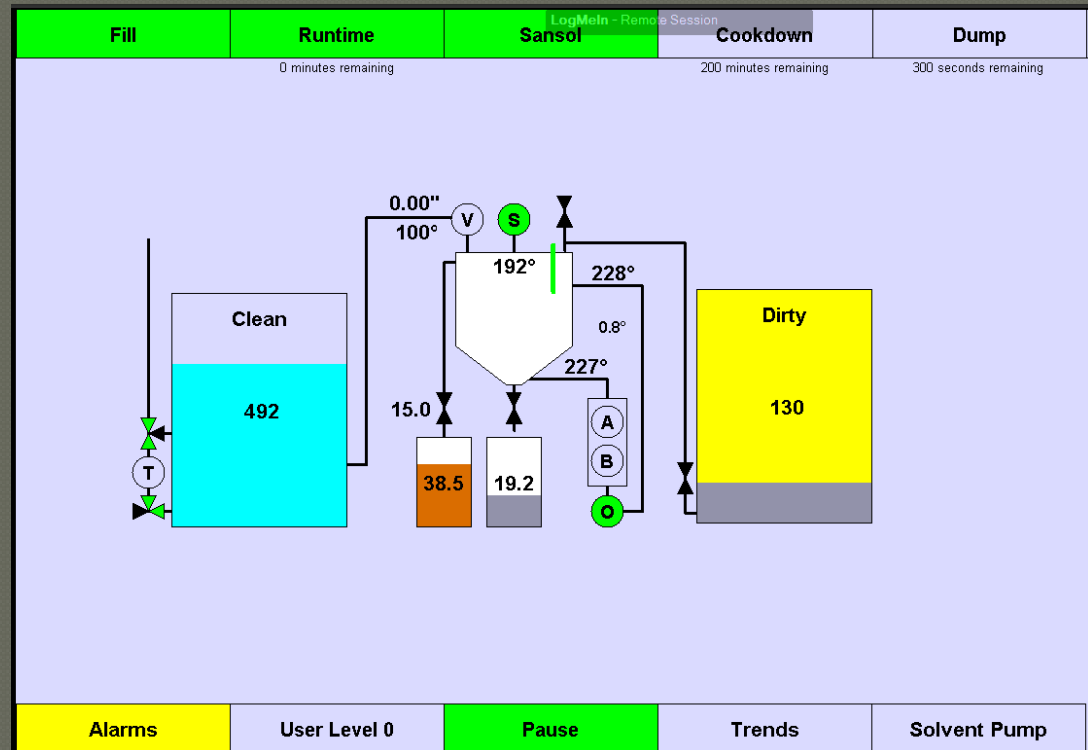
- ◉ In our opinion, the future of solvent based platemaking is bright
- ◉ Why?
- ◉ Because less is more....

Less Worry

- Huge increase in onboard diagnostics
 - When something goes wrong no guessing is required
- Remote diagnostic capability should be standard

Less Worry

- Simple to use interface
- Available across the company via web browser
- Available via the Internet if desired



What is the future?

- ◉ Solvent still can and do meet the demands of today's market
 - Environmental
 - Regulatory
 - Cost
- ◉ Less is more!
- ◉ IHSolve – Solves your solvent recovery problems