



Industrial Water Systems **Virtual INPLT Training & Assessment**

Session 6b

Wednesday – June 25th, 2024

330 pm – 430 pm

Agenda – Session 6b

Today's Content:

- Findings and Group Meeting



Better Buildings is an initiative of the U.S. Department of Energy

Treasure Hunt – Summary



1. Walkthrough the facility and observe operations

2. Identify opportunities

3. Collect relevant data

4. Quantify Savings

5. Document Opportunity



Leverage available
Resources

Treasure Hunt - Group Meeting

Meeting Goal: Review opportunities from walkthrough and identify projects to pursue further

List of all opportunities identified and separate them in two categories

1. Most promising opportunities identified
 - What additional data is needed to quantify savings
 - Cost and payback of each measure.
 - Make a slide for management presentation
2. Additional opportunities that may require large capital expenditures, or opportunities that require more analysis and should be completed later.

Presenting Opportunities - Examples

Reduce Number of Spray Nozzles per Position

It was observed that majority of nozzles spraying water at the end of positions lack contact with the glass

Opportunity:

40 MGY used in forming tunnels (from sub metering)

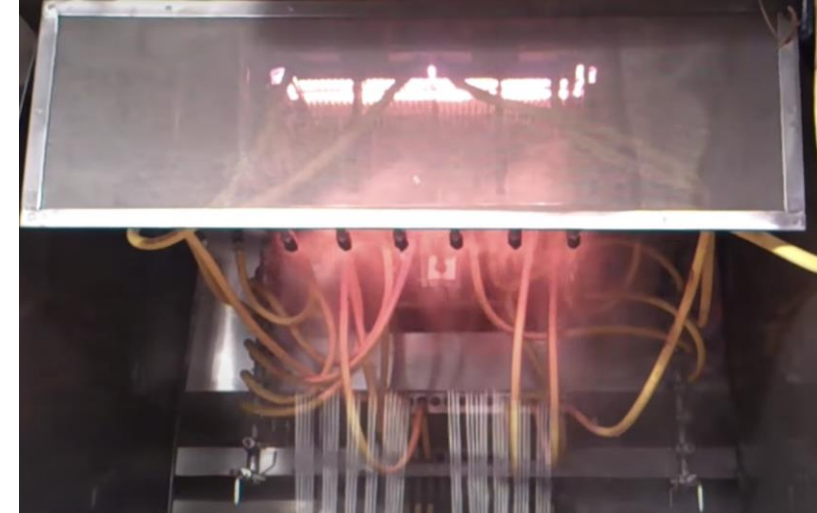
90% of water used in forming is from nozzle spraying (from water balance)

Water used in nozzles = 36 MGY (90% of 40 MGY)

20% reduction of nozzles can be reduced (1 per position) – by comparing it to industry standards

True cost of water = \$3.5 /kgal

Potential Cost Savings = \$27,527



Automated water nozzles



Low Flow Nozzles for Wash Bay

- The wash bay uses warm pressurized water for cleaning
- The flow through the nozzle is determined to be 3GPM
- Using Low flow nozzles this can be cut down by half

Reduction in Water = 1.06 MGY
Estimated Cost savings = \$12,000
Implementation Cost = \$100
Payback = Immediate



Thank You all for attending today's webinar.

**See you all on Wednesday or Friday – July 21st or 23rd
– 4 pm ET**

**If you have specific questions, please stay online and
we will try and answer them.**

**Alternately, you can email questions to me at
thirumarank@ornl.gov**