



SE Shires

Implementing Aqueous Cleaning in Brass
Instrument Manufacturing

What we do; What our challenges have
been; What we're doing now and What
comes next



About SE Shires

- Eastman Brass Instruments, LLC, S.E. Shires Co.
- Manufacture of custom brass musical instruments



Discovery Channel clip on How to make Trombones

- 5 min video
- <https://www.youtube.com/watch?v=G5LqrMcq1QE>
- Example production activities that require cleaning
 - 3:18 – 3:45 = balling out a crook
 - 4:20 – 4:30 = buffing

Vapor Degreaser

- Used TCE and nPB until 2017
- But still a challenge to clean difficult parts and contaminants
- Worked with OTA





Difficult to
clean bell
engraving

1st stage cleaning of a trombone bell



- Ultrasonic tank – 2017 (in-house R&D)
 - Matchless 160L (formaldehyde-based cleaner)
 - Captures buffing dirt
- Worked with TURI Lab to identify safer option
 - Kyzen Metalnox M6345 cleaner (summer 2022)



Next Steps

Reduce the number of cleaners used

Setup additional ultrasonic cleaning tanks

Address rinse water quality issues