

# SURGICAL ORIENTATION FOR HEALTHCARE ENGINEERS



Introduction to accessing and working in  
healthcare surgical suites



# Objectives



Understand the key compliance issues for maintenance in the surgical environment



Understand impact and requirements of Semi Restricted and Restricted access for facilities personnel. With an evaluation of the AORN Guidelines



Reinforce session with engaging, interactive, and immersive technology



# Mike Canales – HFL Program Director



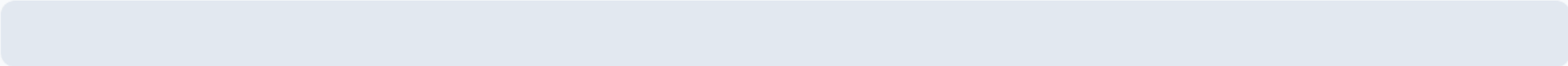
- 30+ year Healthcare Engineering Professional, who has worked as a Healthcare Facilities Director for 21 years.
- 12<sup>th</sup> year serving as the program director for the Healthcare Facilities Leadership degree and Facility Healthcare Technician program at Owensboro Community and Technical College.
- President/Founder of IHFEA (Institute for Healthcare Engineering Advancement), the organizations main credential is the CHFT – Certified Healthcare Facilities Technician.
- Earned CHFM certification in 2003.
- Founding member and past president of the Virginia Society of Healthcare Engineers (VSHE).
- Expertise in Clinical Engineering, Maintenance & Plant Operations, Security, Emergency Management, Project Management, Environmental Services, Infection Prevention, Telecommunications, public Water Works, Leadership Development and Education.
- Mike is passionate about the professional development and advancement of healthcare facilities personnel from entry level to the seasoned veteran.
- Mike holds a Masters in Personal Organizational Leadership from Western Kentucky University and Bachelor of Science in Electronic Engineering Technology from DeVry University. Mike received the 2022 ASHE Presidents Award for his work on the healthcare facilities developmental pathway. Mike is a contributing editor for Infection Prevention and Control Issues in the Environment of Care, 5<sup>th</sup> Edition, by Joint Commission Resources.

# ENTER THE SURGICAL AREA

After entering, you will tour the surgical area to answer the questions on the following slides.

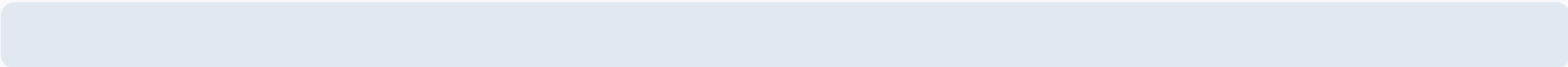
# How many more full tanks can be in the "full" cart for E Cylinder tanks.

Two



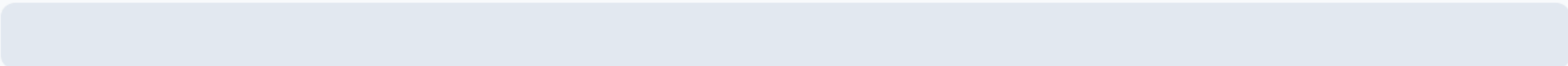
0%

Three



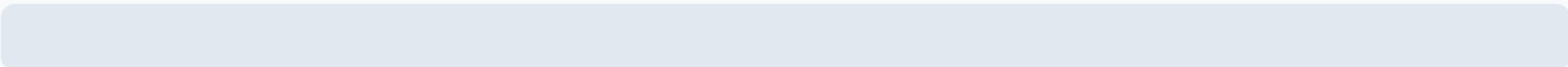
0%

Four



0%

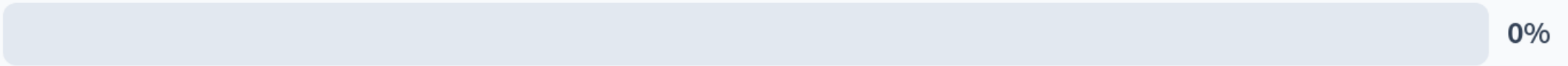
Five



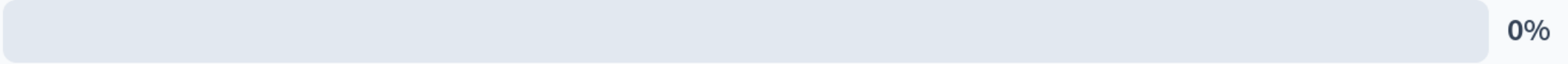
0%

## What is the Supply CFM for for the Surgical Suite?

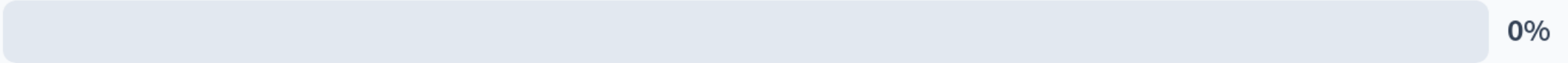
331



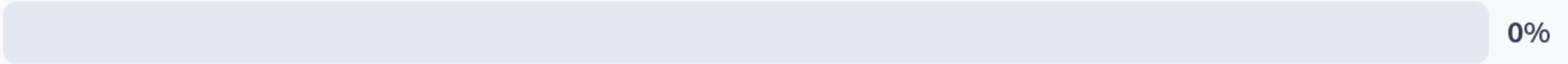
2,712



3,013



3,302



What is the due date for inspecting the surgical column medical gas flexible lines if you are following the NFPA 99 Recommendation?



October 2024

0%

April 2025

0%

Depends on organizational policy and risk assessment

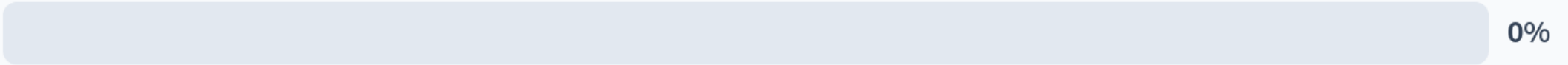
0%

None of the above

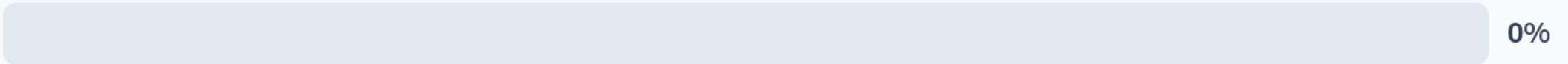
0%

## What is the leakage current for panel IPOR1C

1.08 ma



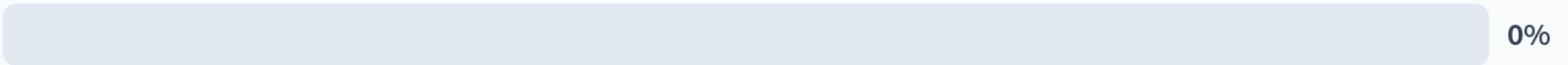
1.25 ma



1.34 ma



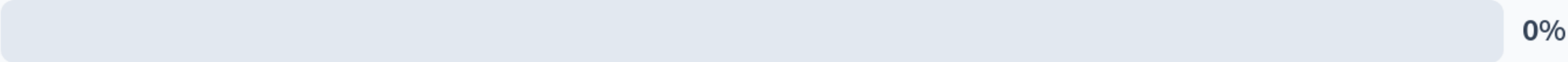
1.26 ma



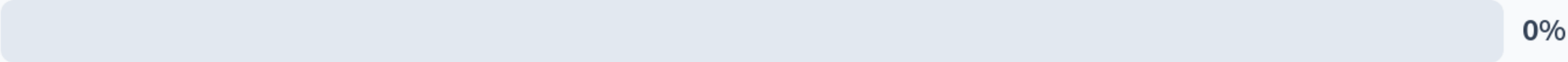


Is the humidity level (look at the label NOT the display) within ASHRAE 170 requirements.

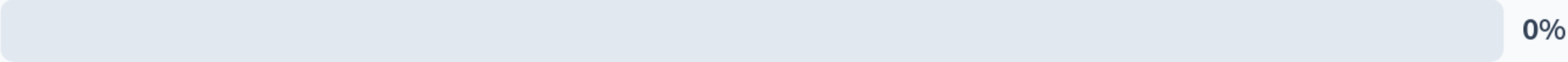
NO



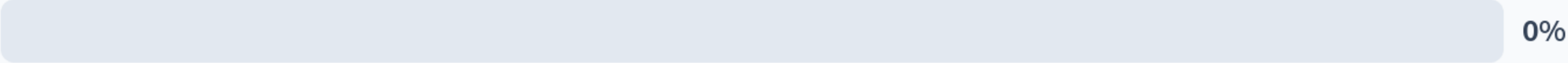
YES



Yes based on hospital policy for all operating rooms



Yes based on type of procedure and related policy.





Contact: Mike Canales,  
HFL Program Coordinator  
[mike.canales@kctcs.edu](mailto:mike.canales@kctcs.edu)  
(270) 852 - 8142