



IN YOUR HANDS, WE TRUST

Presented by: Sam Hardy





Sam Hardy

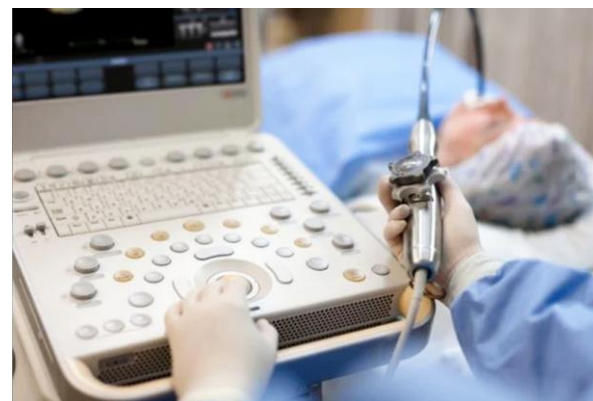
Senior Study Manager &
Microbiologist

Product Validation

HANDS AND REUSABLE MEDICAL DEVICES



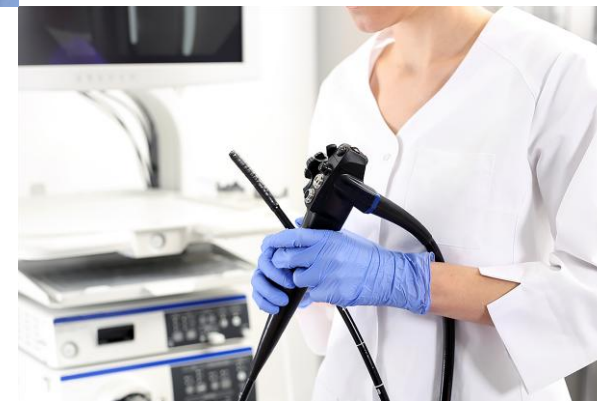
Cardiology



Ultrasound



Endoscopy



WHAT IS DECONTAMINATION?

*“the sequence of processes including cleaning and microbiocidal actions that make a reusable medical instrument **safe for reuse**. It is important to realise that this is a far wider process than merely, for example, which chemical agent is chosen”* (Bradley et al, 2018)

DECONTAMINATION = CLEANING + DISINFECTION

REPROCESSING

The combined effect of:

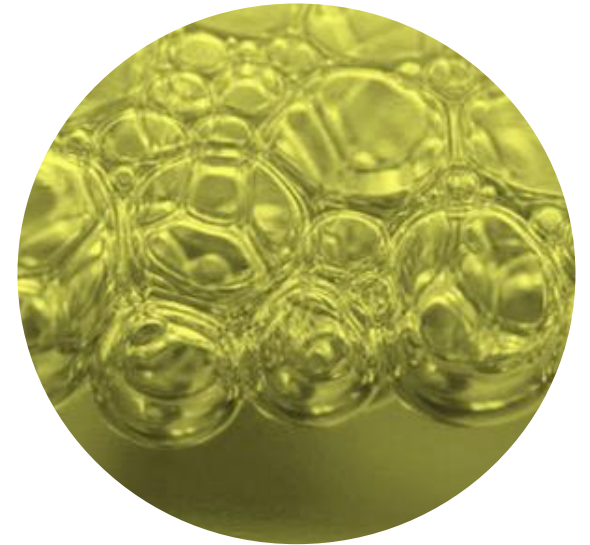
- 1 **Cleaning**
- 2 **High-level disinfection**
- 3 **Rinsing**
- 4 **Traceability**



WHAT IS CLEANING?

CLEANING = DETERGENT + MANUAL ACTION
FLUID + FRICTION

- The removal of contamination from an item to the extent necessary for further processing or for intended use.
- Cleaning is an essential prerequisite for all LLD and HLD processes.
- Applies across ultrasound, endoscopy, and all medical devices



REUSABLE MEDICAL DEVICES

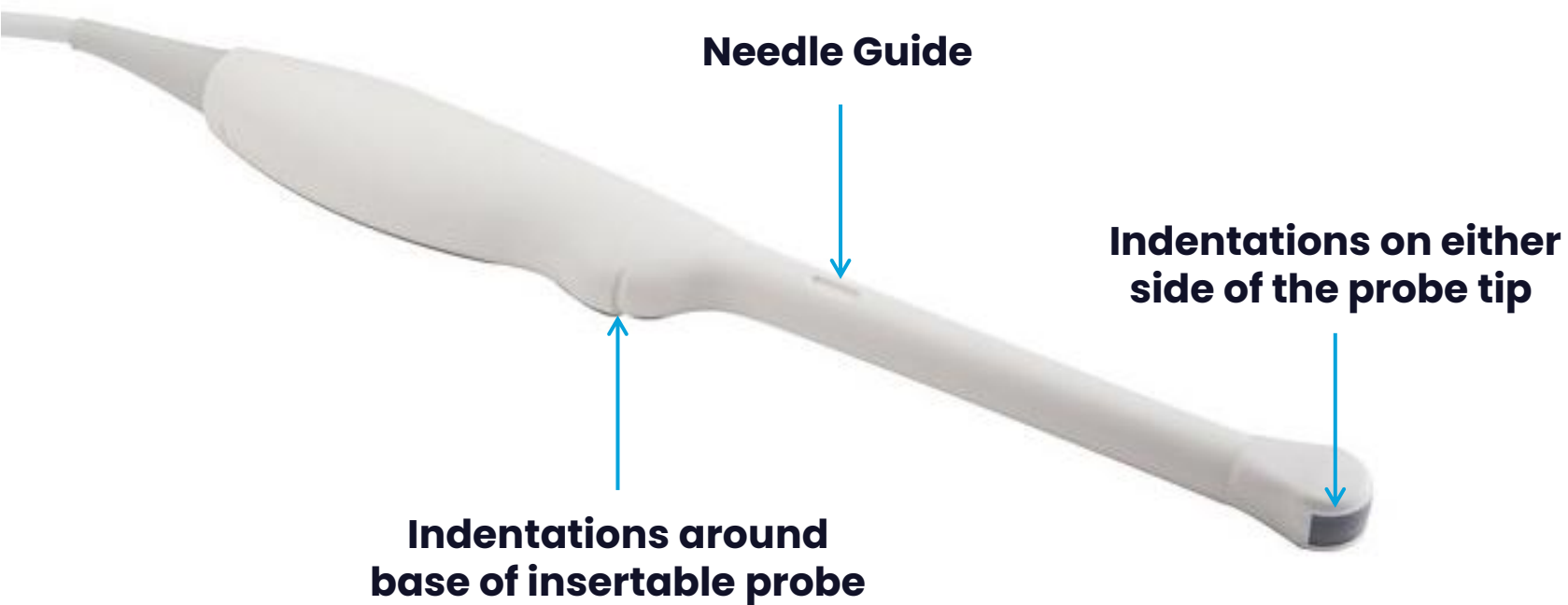


Ultrasound probes

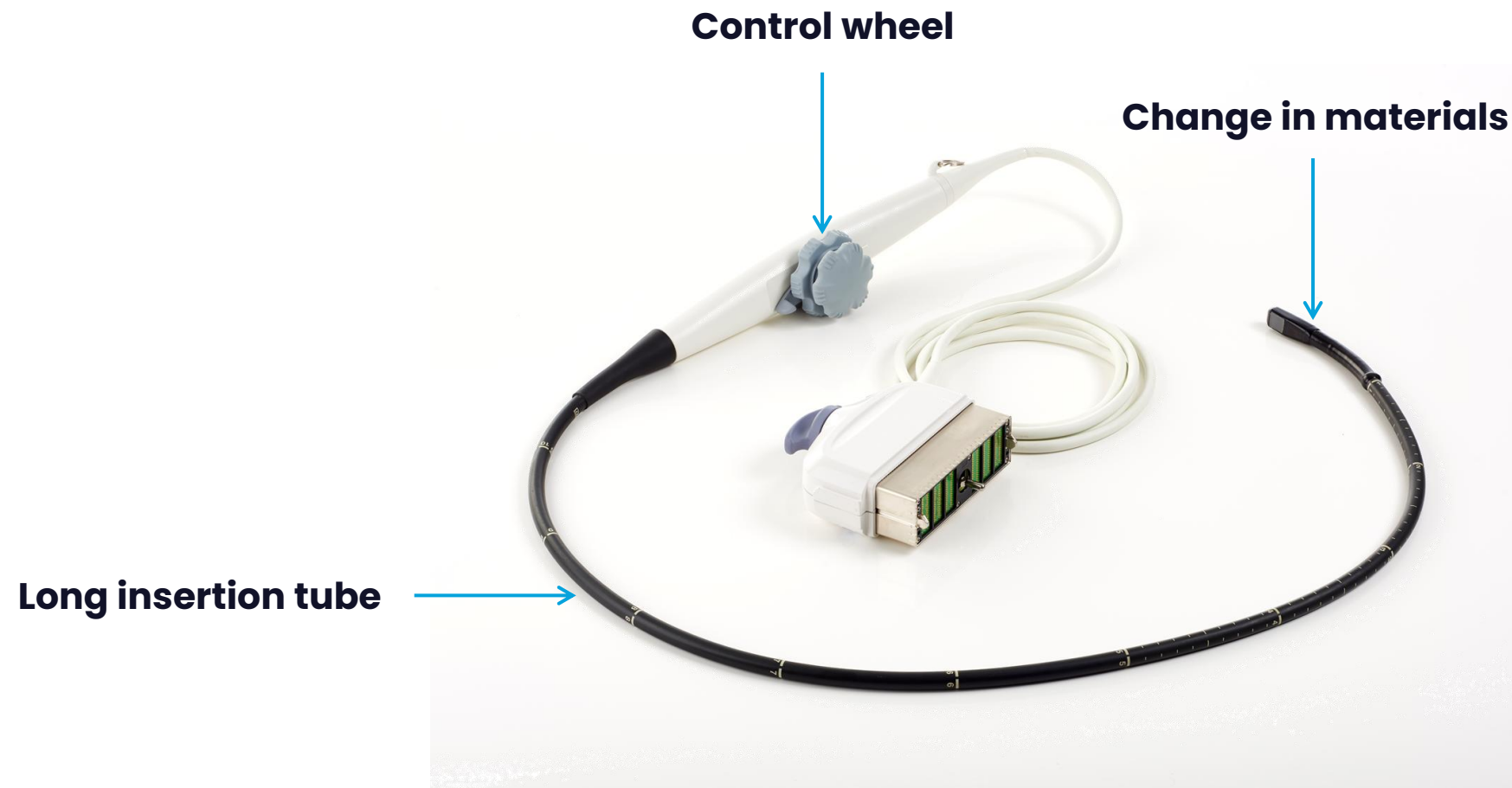


Non-lumened endoscopes

DEVICE COMPLEXITY



DEVICE COMPLEXITY

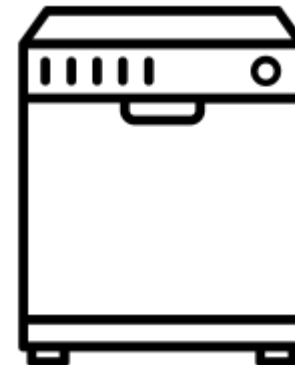
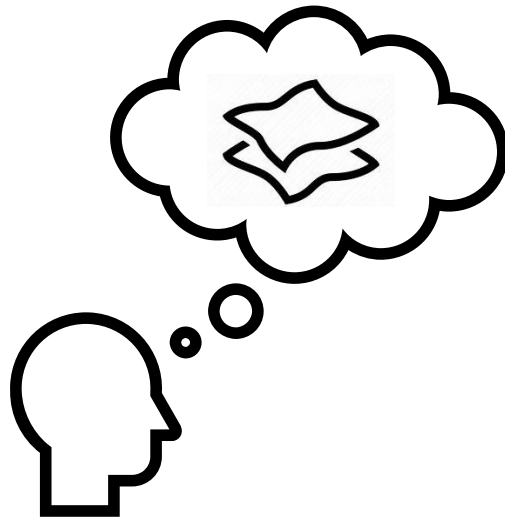


DISINFECTING TECHNOLOGY PROCESS STEPS

Cleaning?



**High-Level
Disinfection**



SHADOWING



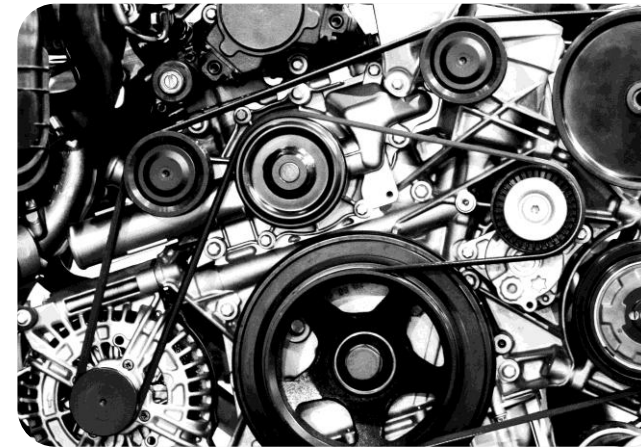
WHAT IS AUTOMATED?

“carried out by machines or computers without needing human control”

Cambridge Dictionary [Accessed April 2025]

Typically involves:

- Washer disinfecter e.g. peracetic acid
- Hydrogen peroxide vapour chamber
- Ultraviolet light (UV-C) chamber



WHAT IS MANUAL?

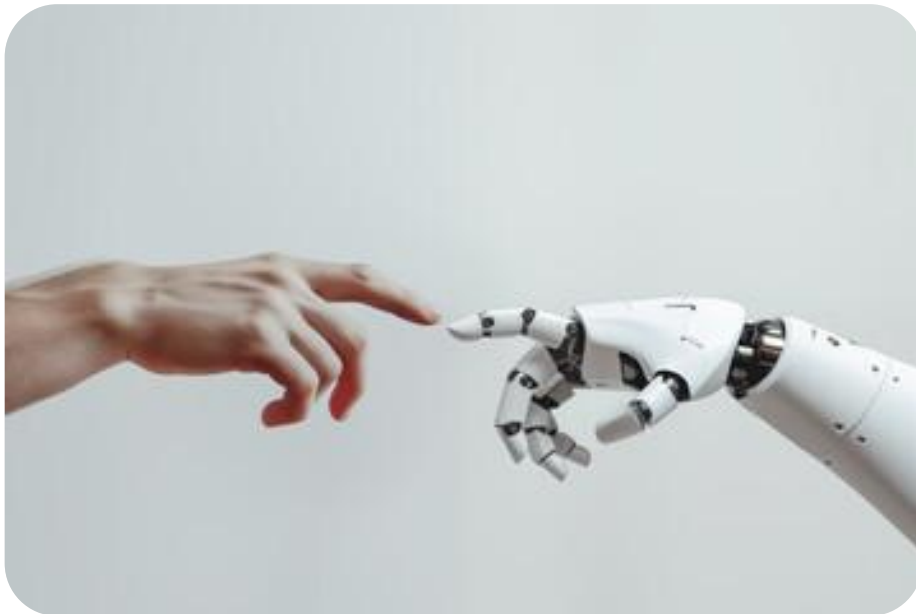
“done with the hands.”

Cambridge Dictionary [Accessed April 2025]

The combination of chemistry with manual action, delivered by a person.

Tristel manual products take the format of **wipes and foams**.

WHAT IS BEST PRACTICE?



Manual vs “Automated”... ***or is it?***

Best practice should be defined by the unique workflows and challenges within your environment, which will inform how to choose the most effective decontamination product.

CHOOSING A DISINFECTANT

- ✓ **Microbiocidal Efficacy**
- ✓ **Cleaning Ability**
- ✓ **Fast Acting**
- ✓ **Compatible**
- ✓ **Good Safety Profile**
- ✓ **Antimicrobial Resistance**
- ✓ **User Experience**



WHAT DOES GUIDANCE SAY?

AS/NZ 5369:2023 – Reprocessing of reusable medical devices and other devices in health and non-health related facilities

ULTRASOUND – AJUM –

Guidelines for Reprocessing Ultrasound Transducers: 2026

Nathan Peters^{1,2}  | Marija Juraja^{3,4} | Nicola Isles^{3,5} | Ellen Woodcock⁶ | Elissa Kennedy-Smith⁷ | Cartan Costello^{8,9} | Jo McCann¹⁰  | Karen Mizia^{11,12}

‘AUTOMATED SYSTEMS’

‘MANUAL SYSTEMS’

Must be approved for use on medical devices and are required to be listed on the ARTG as a class IIb medical device.

WHAT DOES GUIDANCE SAY?

ULTRASOUND – WFUMB –

Recommendations for the Cleaning of Endocavity Ultrasound Transducers Between Patients

Susan Campbell Westerway^{a,*}, Jocelyne M. Basseal^b, Jacques Abramowicz^c, Carmel Moran^d, on behalf of the WFUMB Safety Committee

‘AUTOMATED SYSTEMS’

- Ultraviolet Light
- Hydrogen Peroxide Vapor

‘MANUAL SYSTEMS’

- Manual Wipes
- Chemical Immersion

CHOOSING MANUAL – A HUMAN ADVANTAGE

- Visual inspection
- Targeted action
- Adaptive process
- **Proprioception**
 - Humans feel resistance and see contamination
 - Machines cannot replicate this



MANUAL WIPING

Simple, Intuitive, **Easy to Get Right**

When we assess human influence on wiping, we are considering the user's unique technique.



USER VARIABILITY



50+

Countries

150,000,000+

**Decontamination
procedures**

0

**Reports of
infection**

CHOOSING YOUR ULTRASOUND PROBE DECONTAMINATION PROCESS

Cleaning

High-Level
Disinfection



PHILIPS

SAMSUNG



SIEMENS



See the
product in
action at the
Tristel stand

Making the invisible,
visible



Thank you

