Washer-Disinfectors EN 15883 and the rôle of the operator

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Current status of EN 15883

Part 1 General

Part 2 Surgical Instrument

Part 3 Human waste container

Part 4 Endoscope

Further parts?

Safety requirements IEC 61010-2-045



Introduction

- Use only for loads specified by WD manufacturer
- Validation and periodic testing

Scope

- Specifies general performance requirements
- Cleaning and disinfection of RMDs
- Excludes Laundry, catering and 'washer-sterilizers'



Definitions

- $-A_{o}$
- Cleaning
- Disinfection
- Validation
 - |Q
 - OQ
 - PQ



Equivalent time in seconds at 80°C, delivered by the disinfection process

Cleaning

Removal of contamination to the extent necessary for its further processing and intended use

Disinfection

Reduction of the number of microorganisms to a level specified as appropriate for handling or use

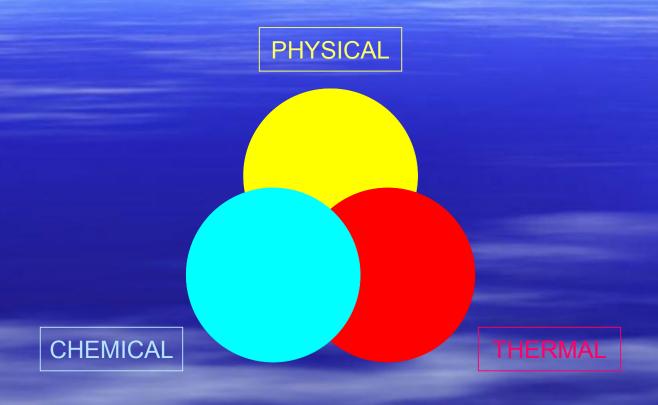


Validation

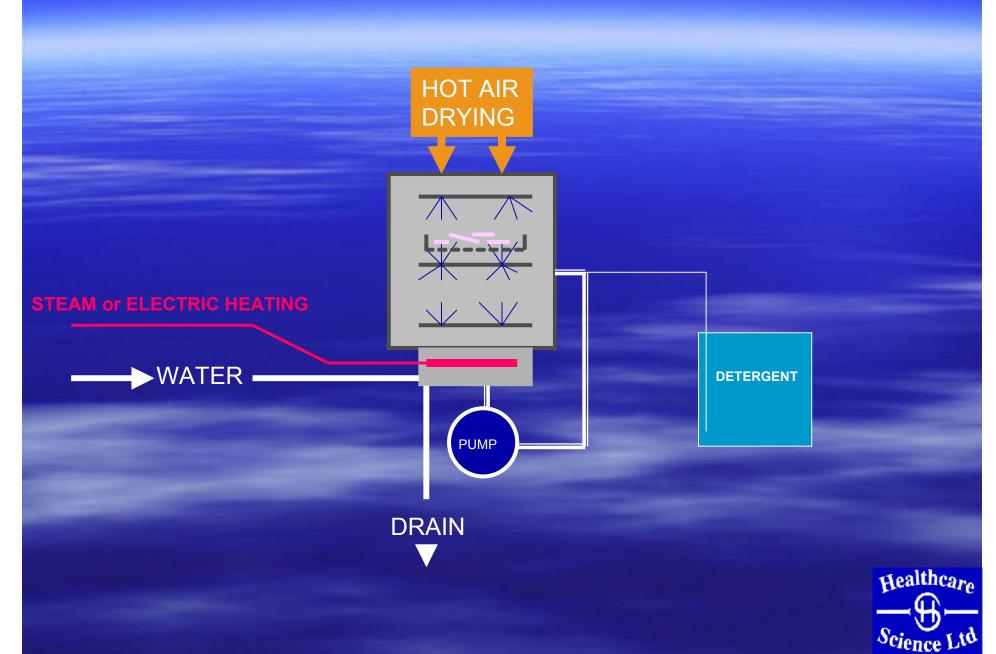
 Documented procedure for obtaining, recording and interpreting data required to show that a process will comply consistently with pre-determined specifications

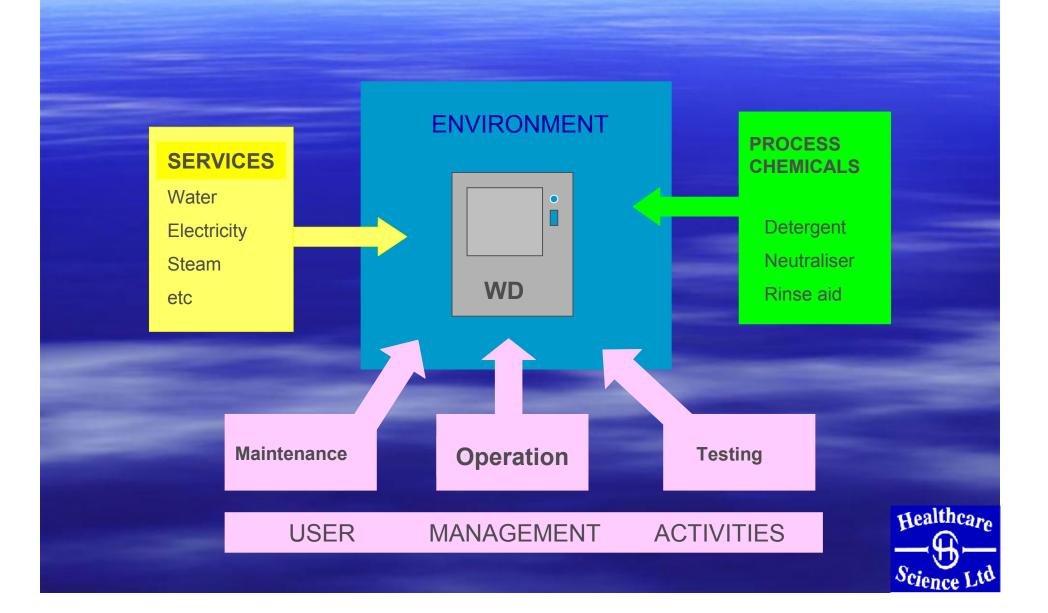


EN 15883 and the rôle of the operator CLEANING IS AN ENERGETIC PROCESS









- Performance requirements
 - Any item which has been processed shall have been cleaned, disinfected, rinsed and, when appropriate, dried.
- Cleaning and disinfection is also required for chamber walls and load carriers
- Automatic process control
- Independent monitoring



- Mechanical and process requirements
 - Leak tight chamber
 - Materials that will not corrode in use
 - Longevity 10,000 cycles
 - Standard entry port for temperature sensors
 - Control of doors safety interlocks



- Mechanical and process requirements
- Spray systems
- Dosing system
 - Reproducibility
 - Low level interlock
- Temperature control



- Process verification
 - Risk analysis to EN ISO 15971
 - Nature and extent proportionate to risk
- A) Operator verification
- B) Independent Process Record
 - Thermal disinfection time and temperature record
- C) Independent Process Record
 - Process variables critical to cleaning and disinfection



Testing for conformity

- Type test
- Works test
- Validation
 - Installation qualification
 - Operational qualification
 - Performance qualification
- Routine tests



Cleaning efficacy

- Chamber
- Load carrier
- Load



Cleaning

- Removal of test soil
- Visual examination
- Residual protein test

Test soils

- Existing national methods
- Need for standard method



Thermal Disinfection

- Chamber walls
- Load carriers
- Final rinse water tank
- Load

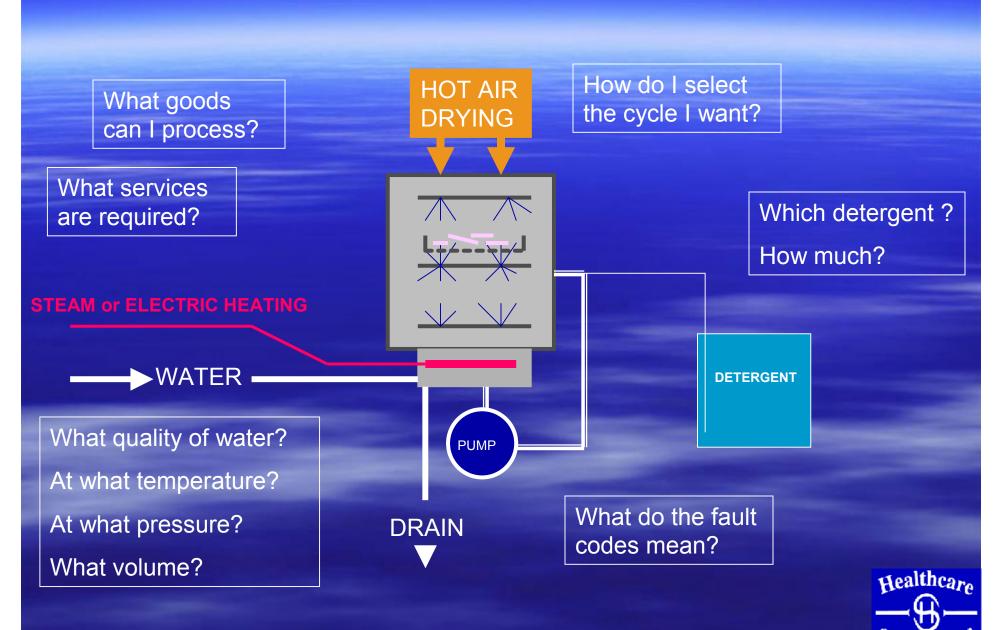
Temperature control

- Process stages
- Over-temperature cut-out



- Disinfection
 - Thermal preferred to chemical
- Physical monitoring
 - Time & temperature
 - A_o > 600 at temperatures > 65°C





- Information to be supplied by WD manufacturer
 - Installation instruction
 - Process chemicals
 - Instructions for use
 - Maintenance manual
- Information to be requested from purchaser
 - Water regulations
 - Type of goods to be processed
 - Accessories required
 - Services available
 - Test soil to be used in testing
- See also ISO 17664
 - Information to be provided by device manufacturers



The standard

- Combines equipment requirements and test programmes
- Is a Major step in worldwide harmonisation
- Has already triggered many changes
- Is only the START of an evolutionary process



- The WDs specified in the standard provide the operator with
 - Fully automated cycles
 - Assurance of product quality
 - Protection from infection hazards
 - Safe operation
 - An improved working environment



- BUT,
 - Even the most sophisticated equipment is only effective when used by
 - Trained operators who
 - Follow the manufacturers instructions
 - WD manufacturer
 - Process chemical manufacturer
 - Re-usable medical device manufacturer



Nothing in the foreseeable future will replace the need for the skilled vigilance of the technically competent operator.

