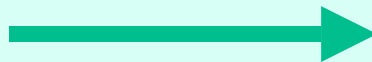




Evaluation of Cleaning Procedures

Reprocessing of surgical instruments

Operation



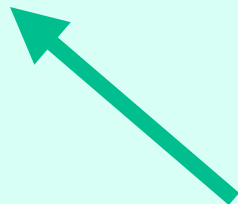
Cleaning



Disinfection



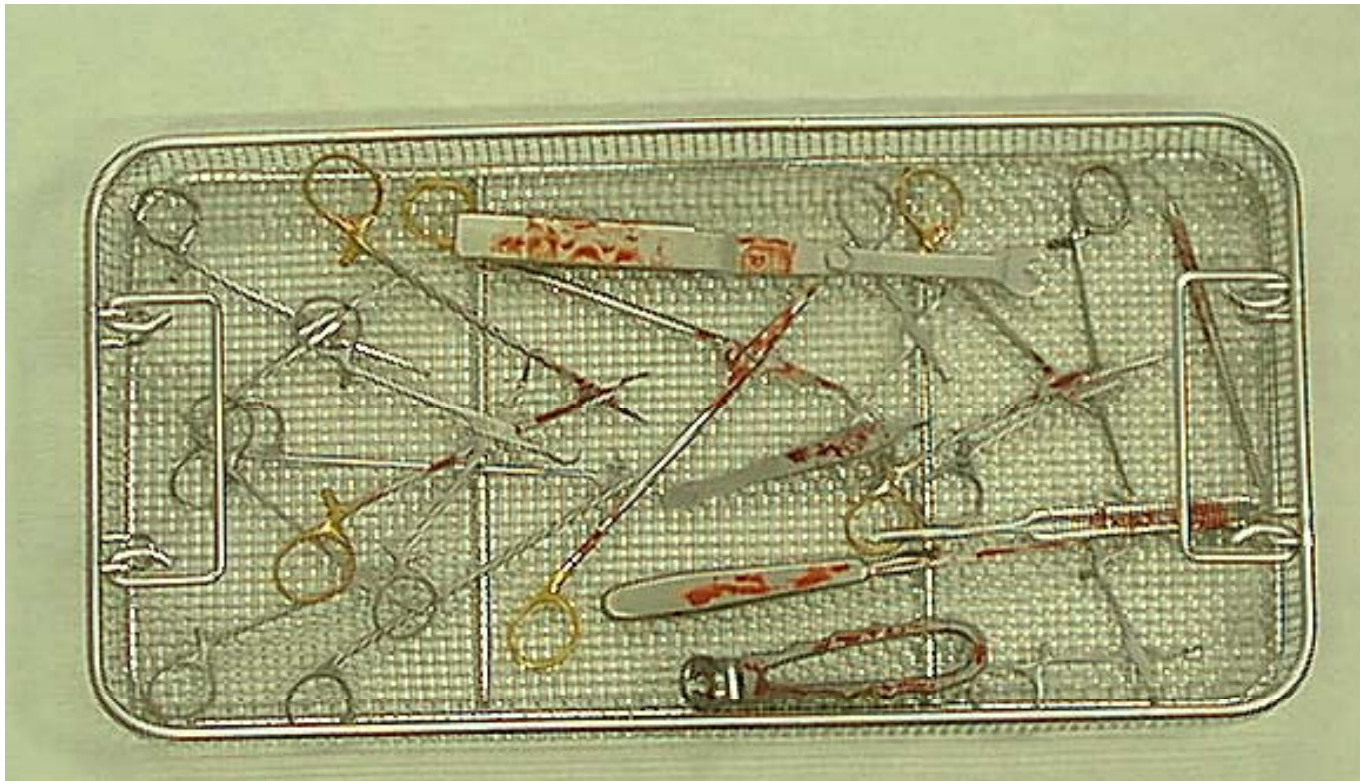
Sterilisation



Storage



Residues on surgical instruments



COMPOSITION OF BLOOD

Liquid blood



Coagulation

Partly solid blood / fibrin-fibres



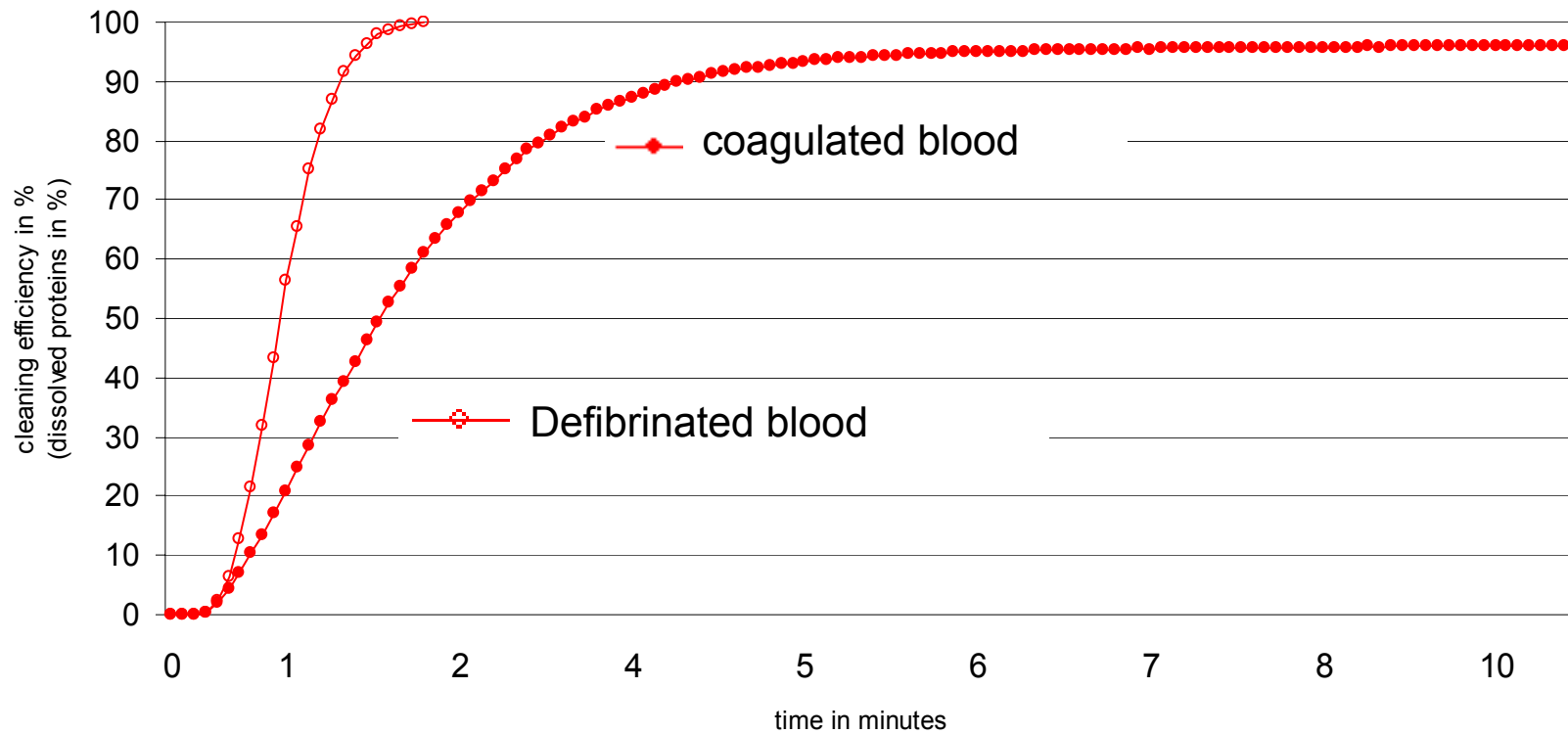
Drying

dry blood

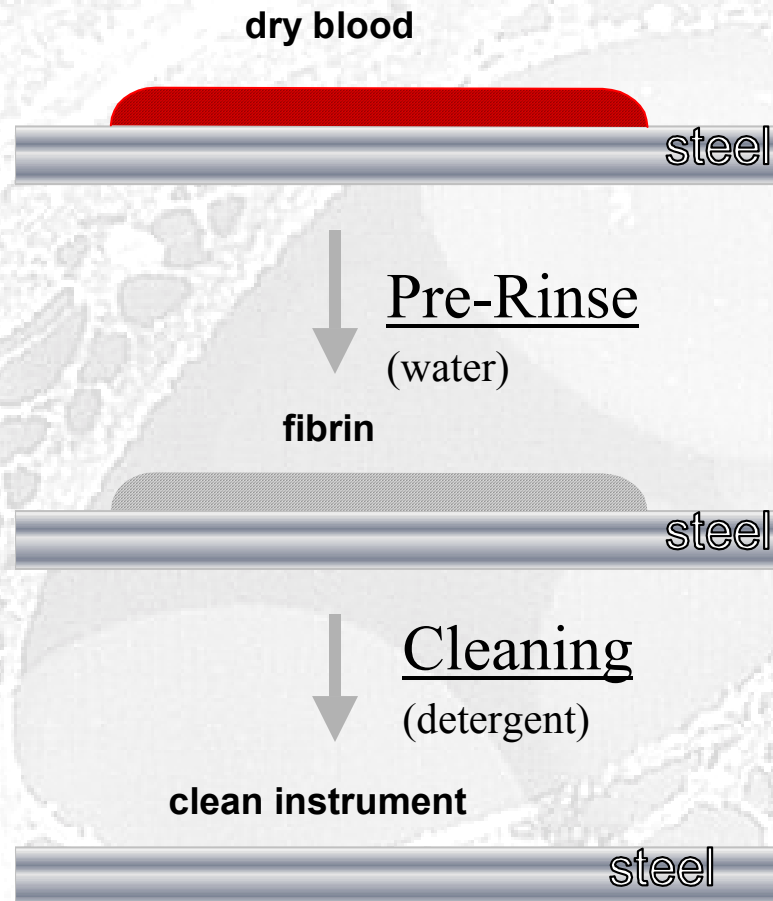


Effect of the blood coagulation on cleaning

Cleaning comparison
defibrinated blood / coagulated blood

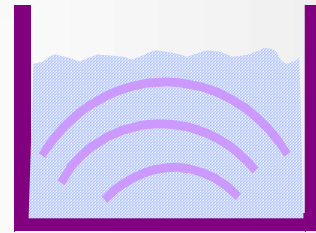
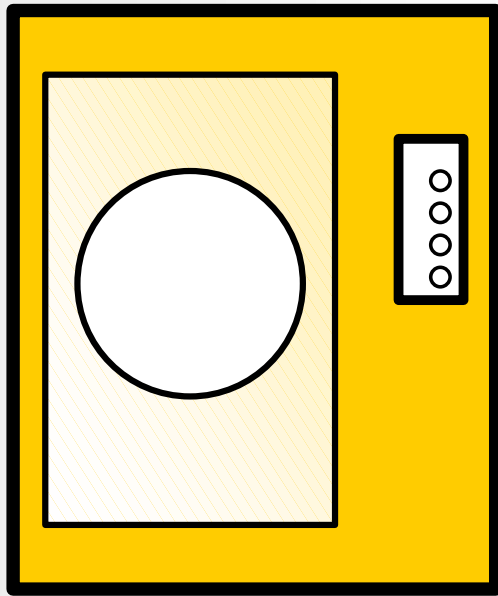


CLEANING BEHAVIOUR

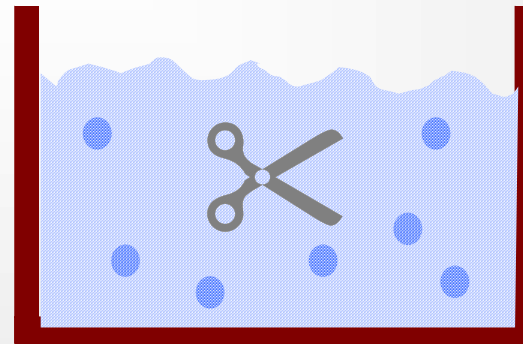


Different methods for cleaning of instruments

washer-disinfector



Ultrasonic cleaning equipment



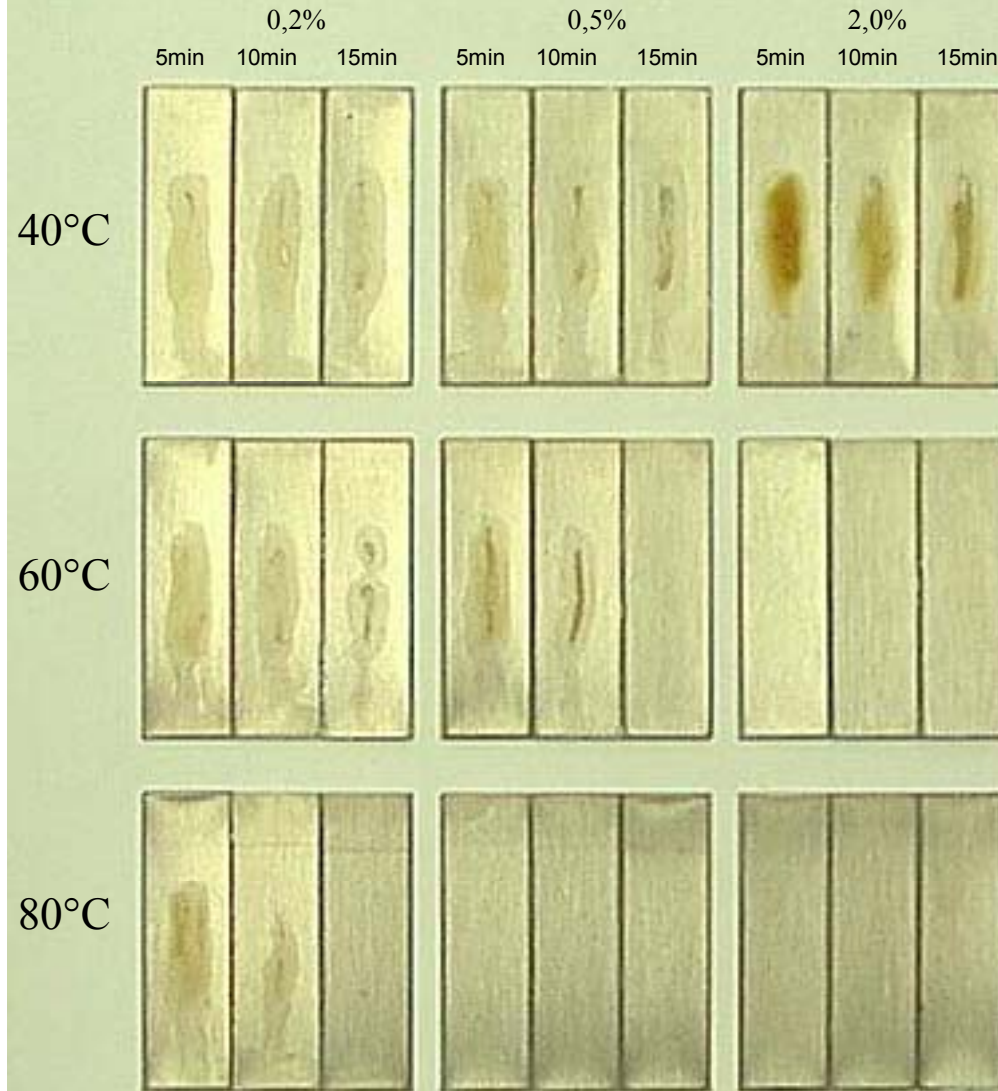
cleaning bath

Mechanical Parameters

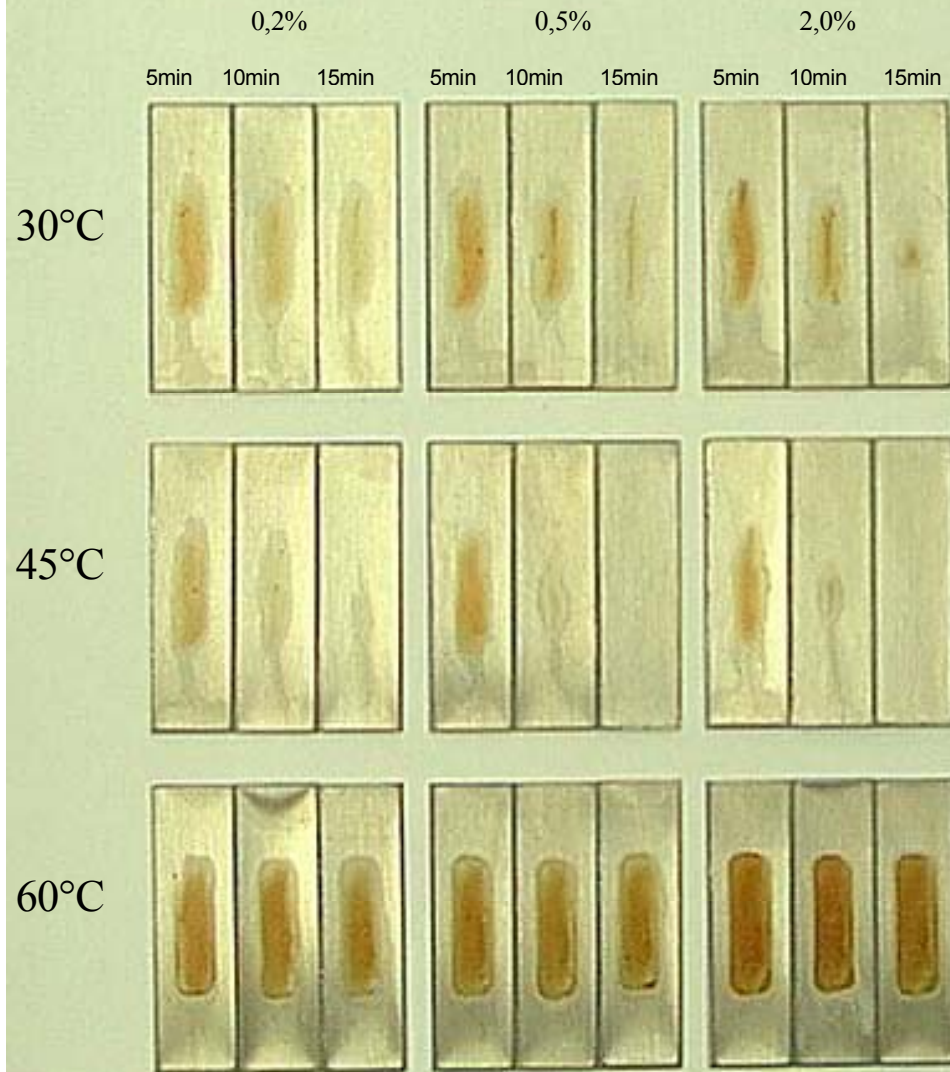


- ⇒ pump pressure
- ⇒ spray system
- ⇒ ultrasound
- ⇒ instrument-load in machine

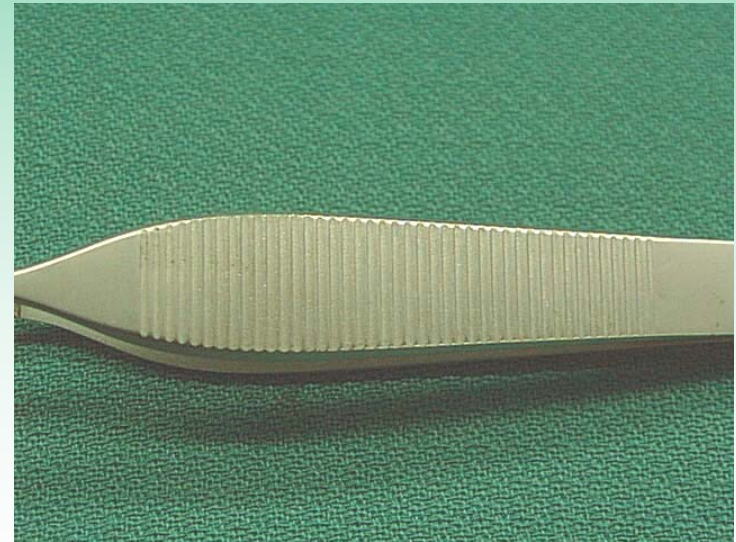
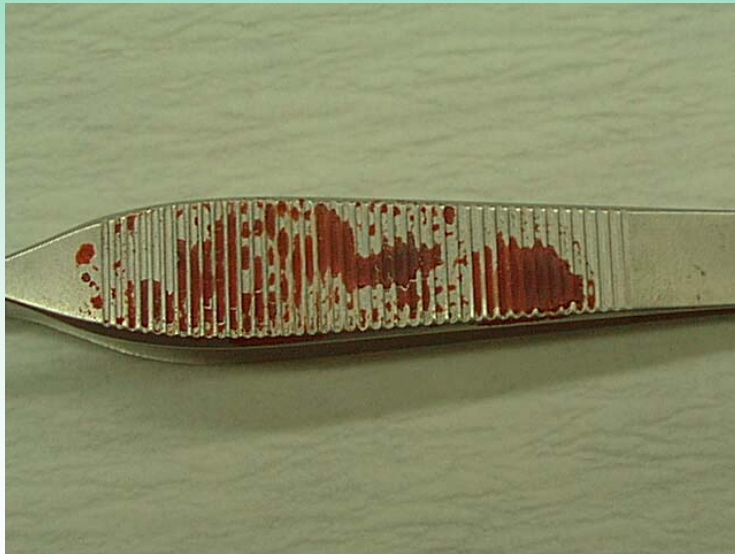
Alkaline detergent



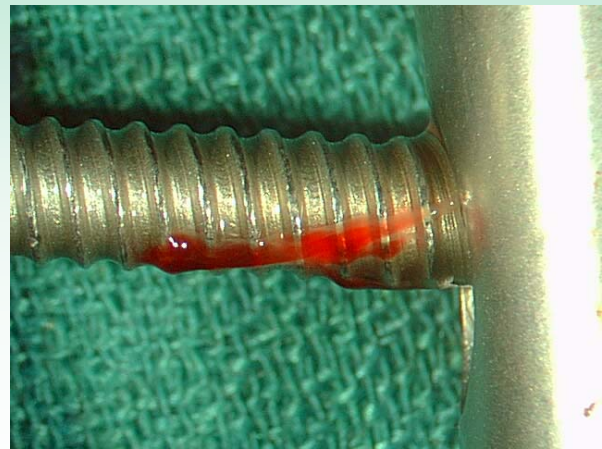
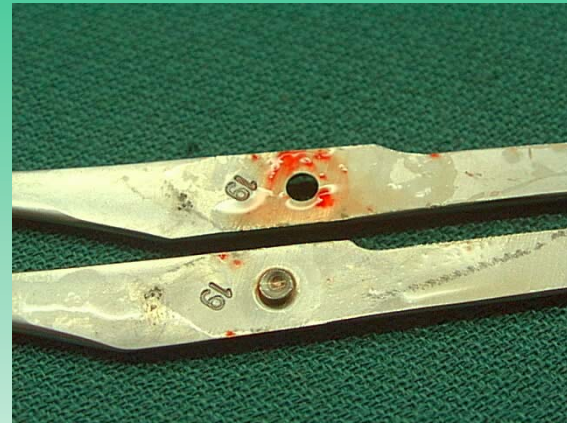
Enzymatic detergent



NORMAL SURFACES ARE NO CLEANING PROBLEMS



Cleaning problems

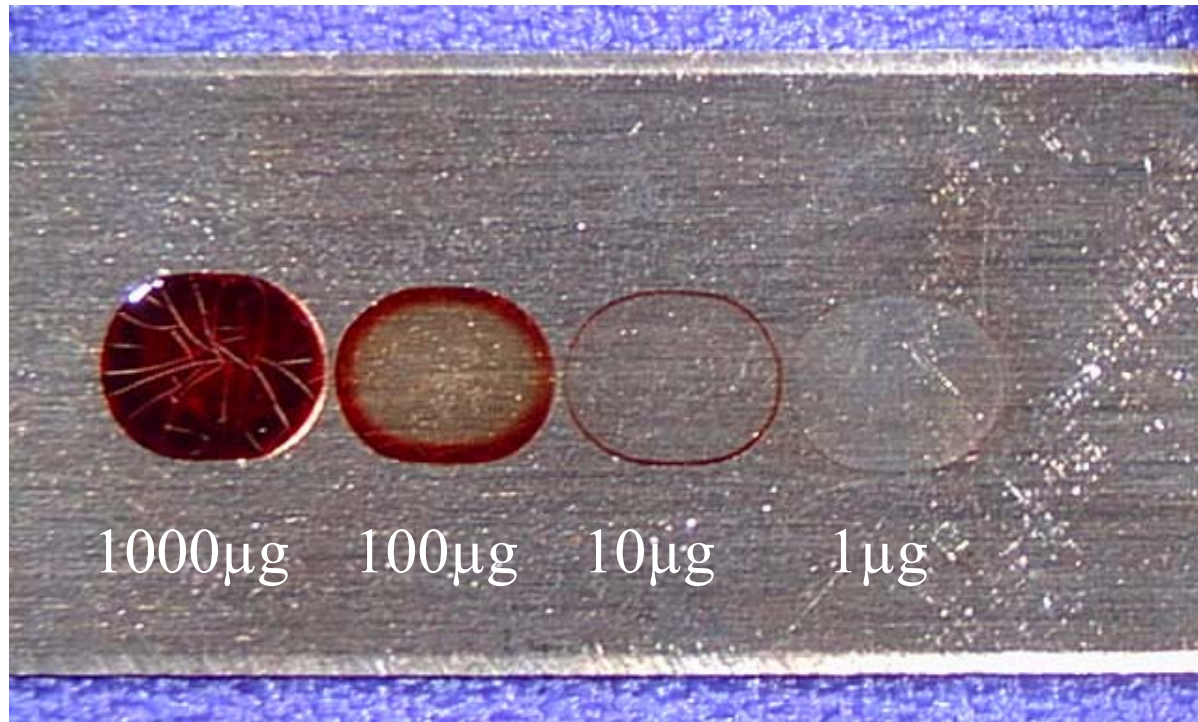


Testing of cleaning procedures

Clean or
not clean



Checking for residues

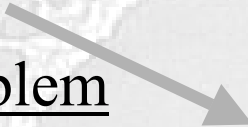


RESIDUES AFTER CLEANING

dry blood



Cleaning Problem

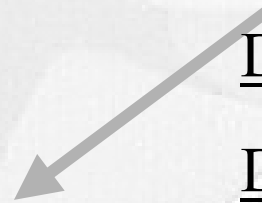


residues

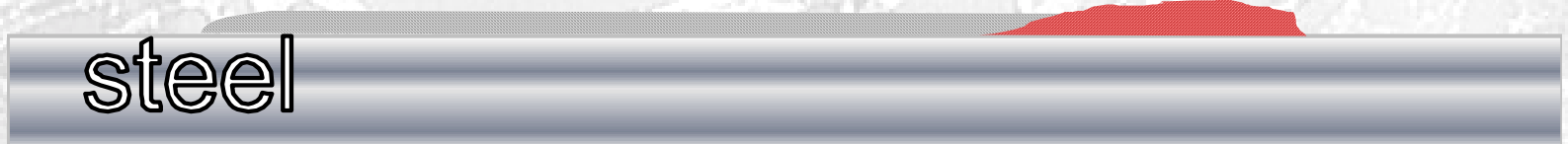


Disinfecting

Drying

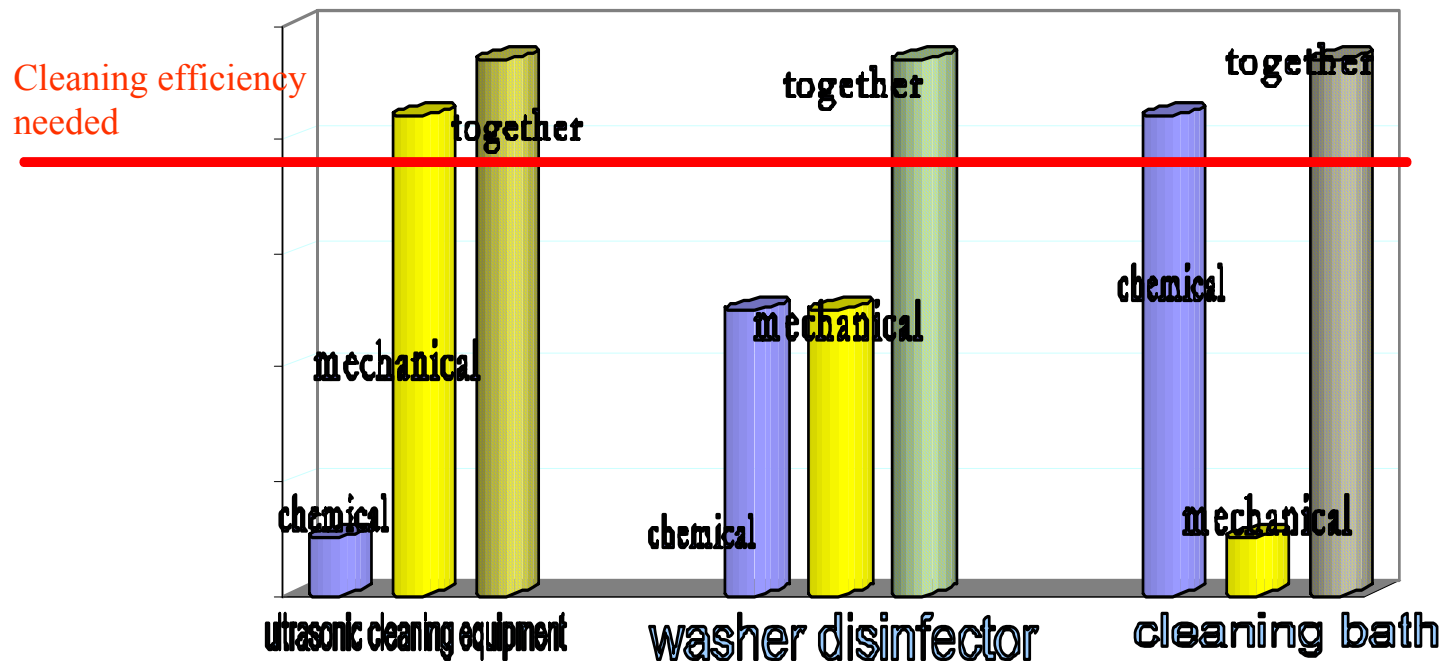


denatured protein-residues



Monitoring of the cleaning efficiency

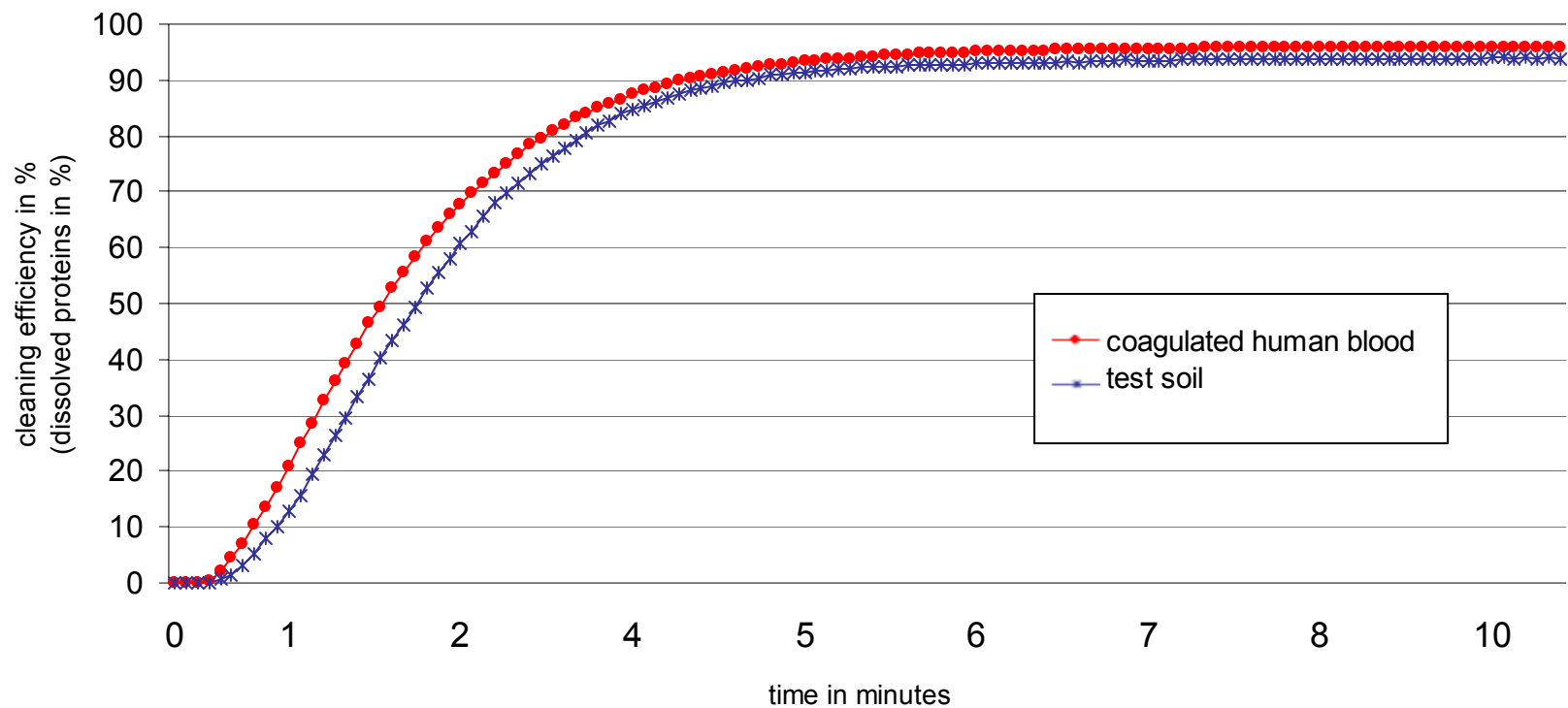
cleaning efficiency



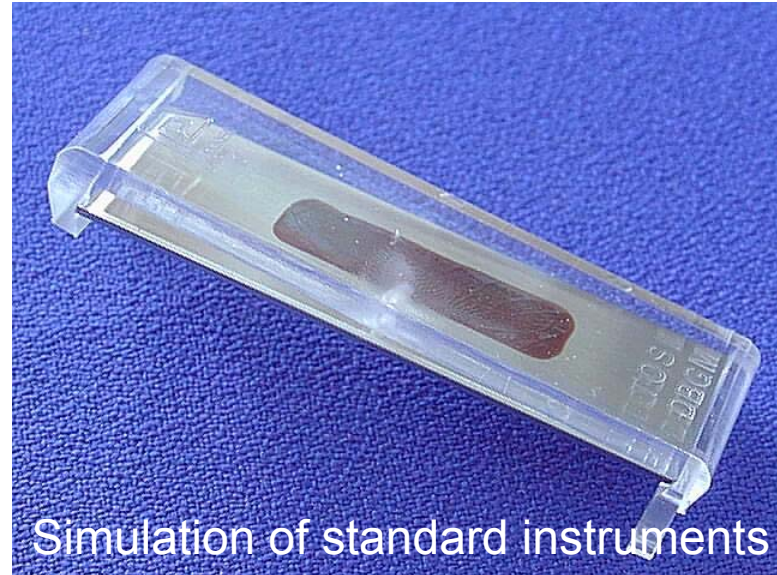
The TOSI[®]-system

for monitoring the cleaning efficiency
of washer disinfectors

Comparison blood / test soil

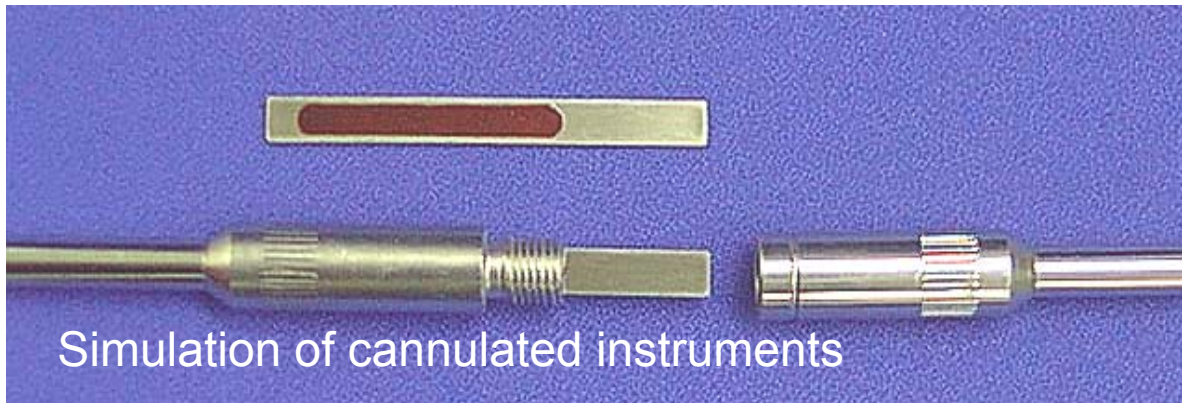


TOSI®



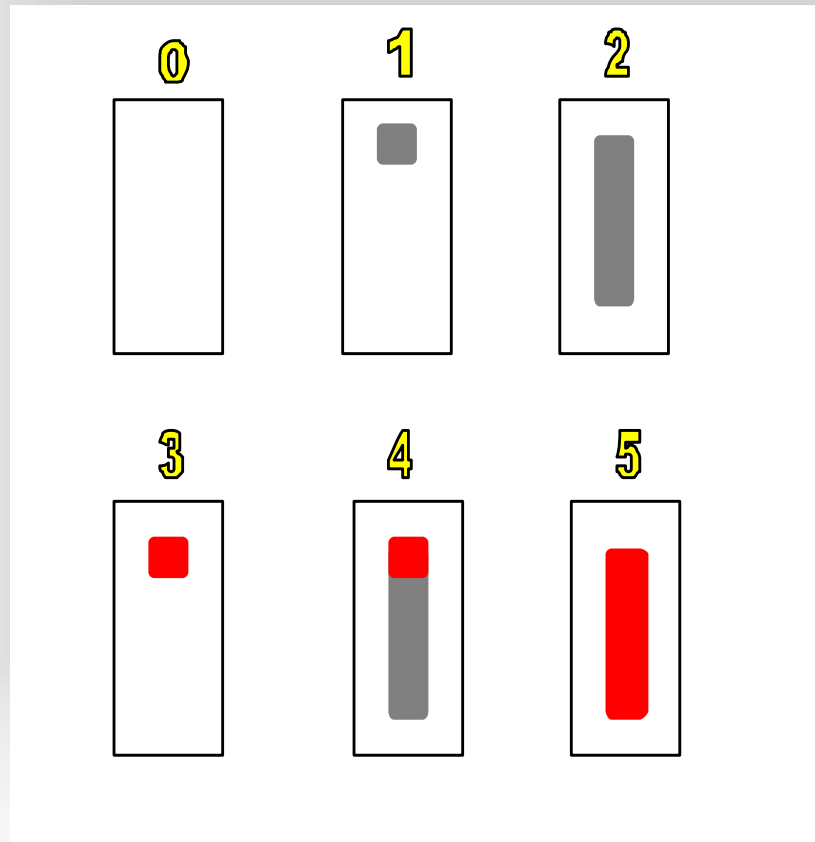
Simulation of standard instruments

LumCheck



Simulation of cannulated instruments

TOSI - evaluation



TOSI[®] - results

