

Evaluation of Cleaning Procedures

Reprocessing of surgical instruments

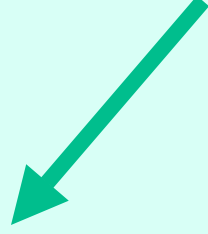
Cleaning

Operation



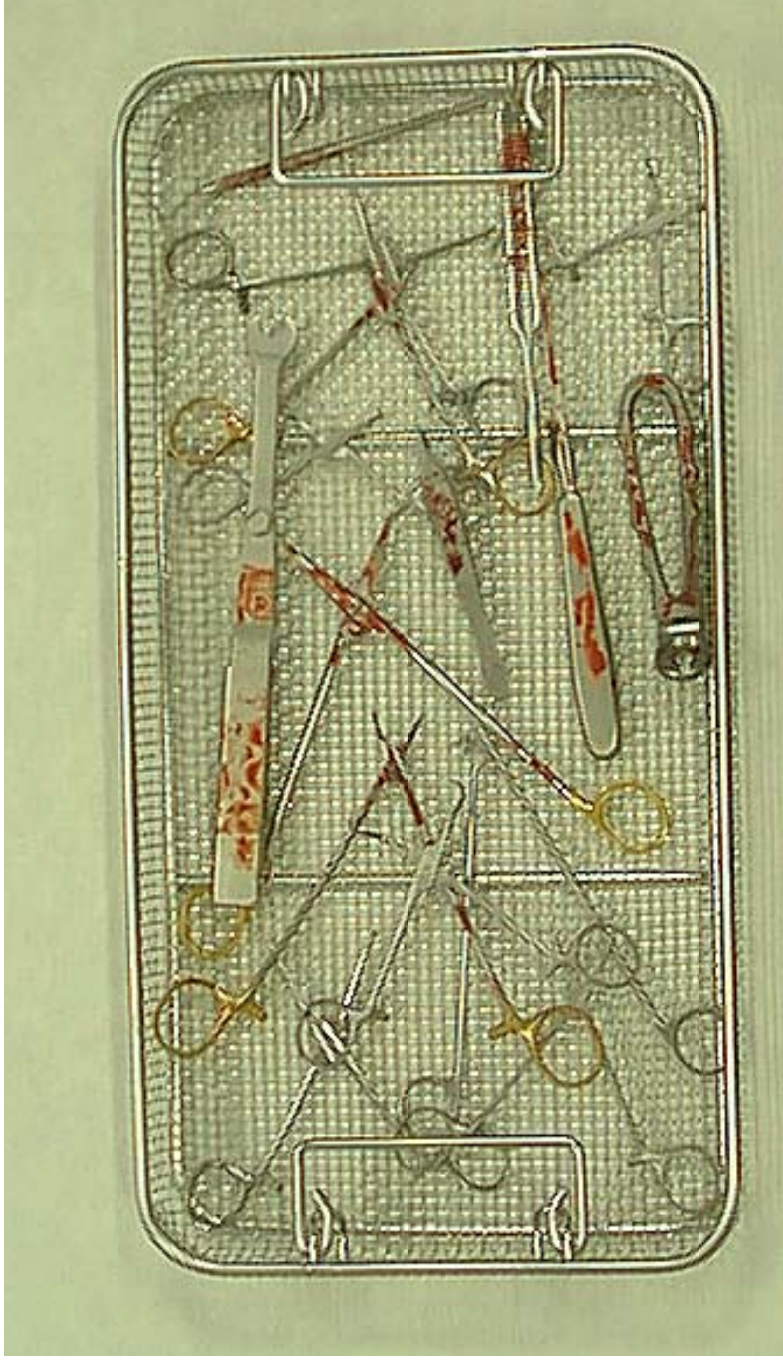
Storage

Disinfection

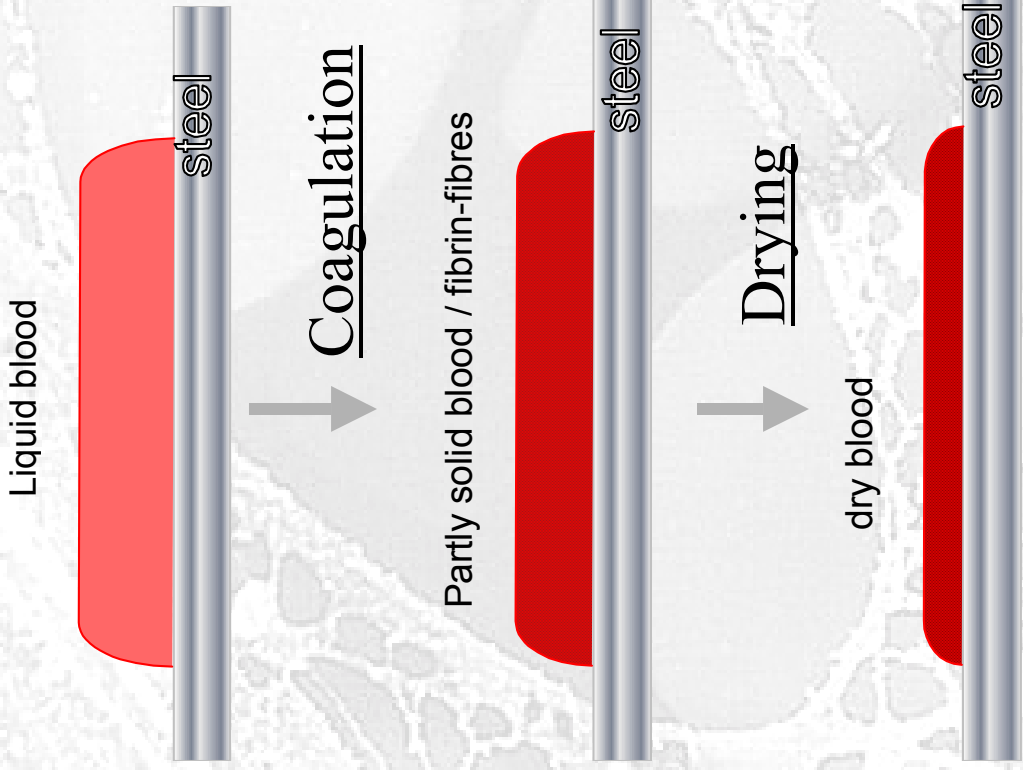


Sterilisation

Residues on surgical instruments

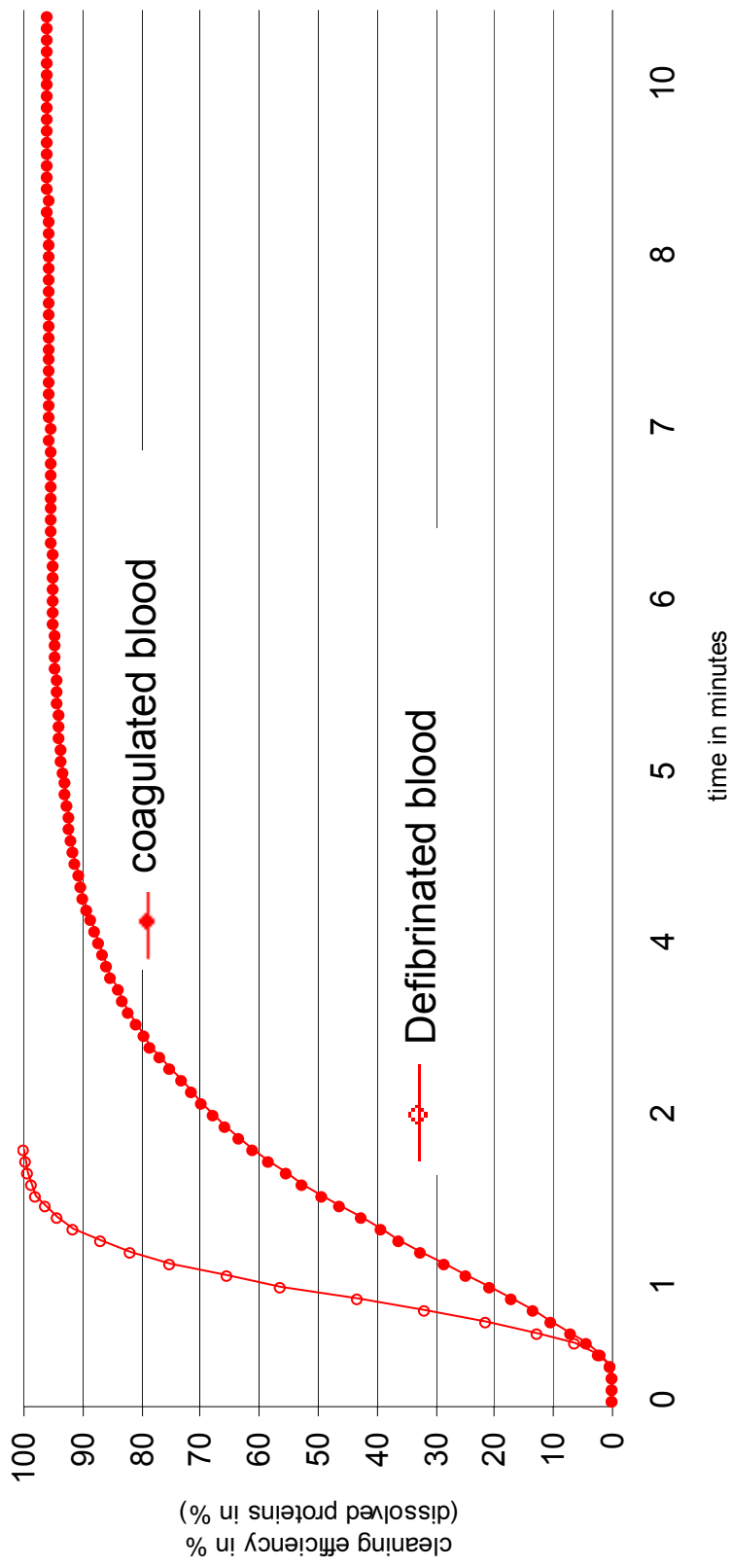


COMPOSITION OF BLOOD



Effect of the blood coagulation on cleaning

Cleaning comparison
defibrinated blood / coagulated blood

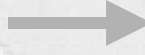


CLEANING BEHAVIOUR

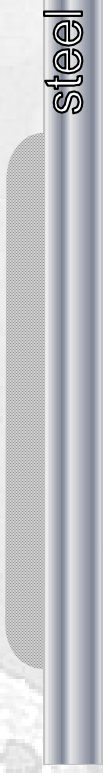
dry blood



Pre-Rinse
(water)



fibrin



Cleaning
(detergent)

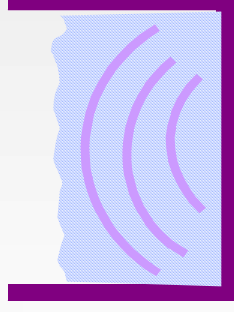
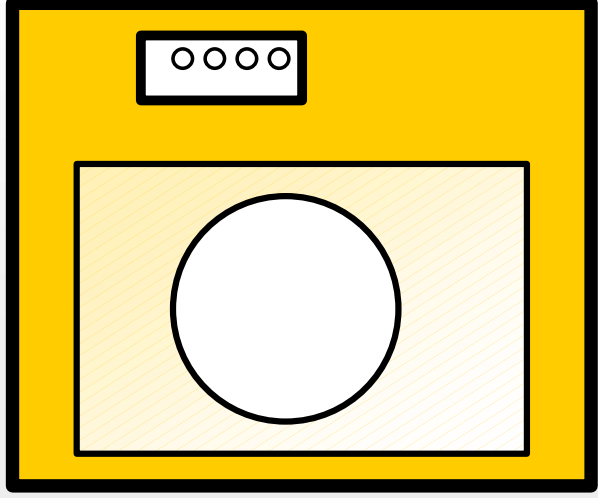


clean instrument

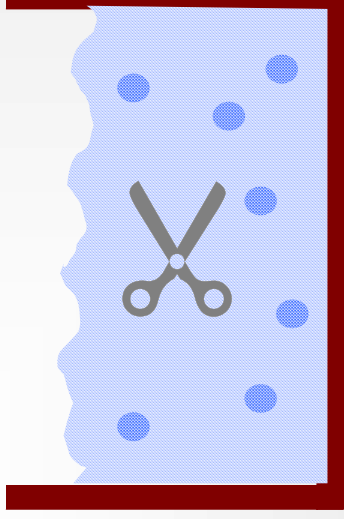


Different methods for cleaning of instruments

washer-disinfector



Ultrasonic cleaning equipment



cleaning bath

Mechanical Parameters



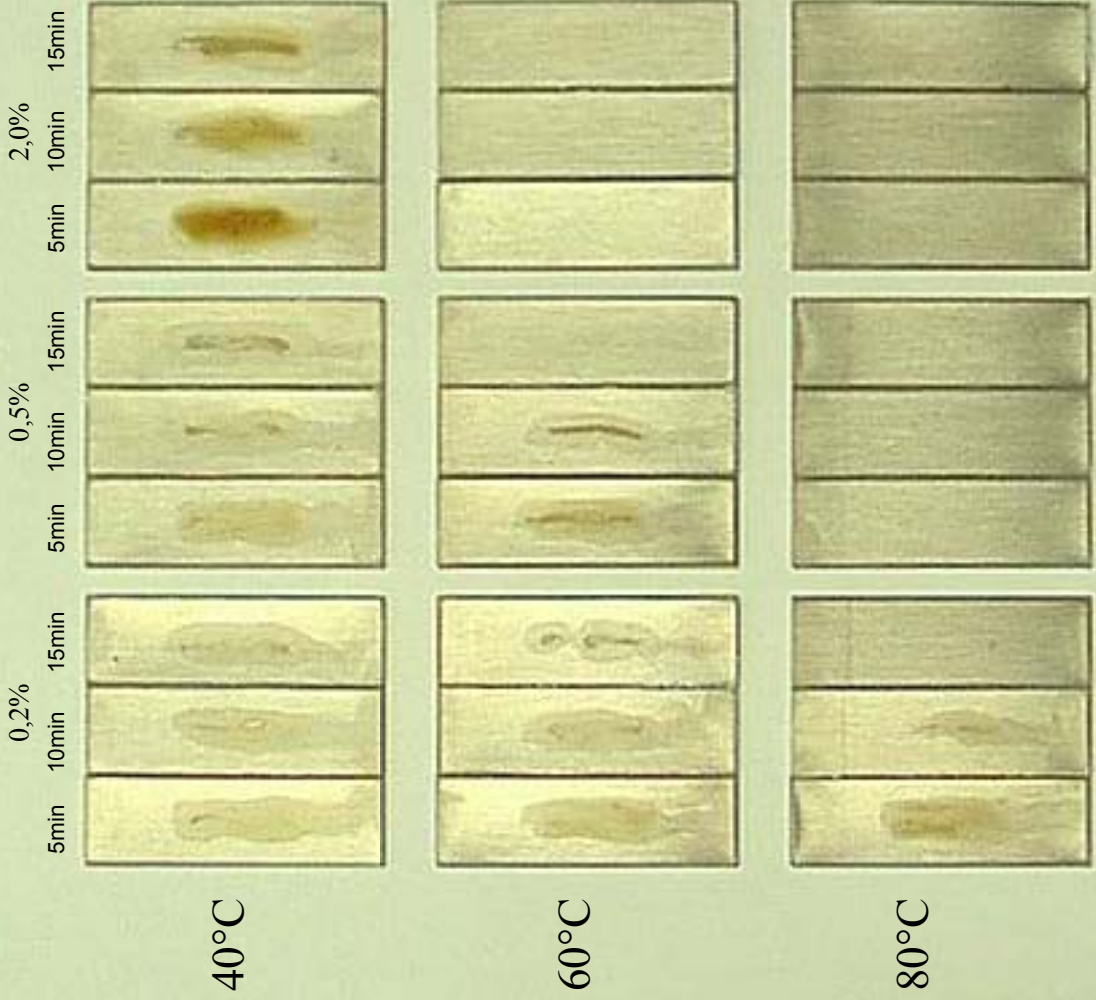
⇨ pump pressure

⇨ spray system

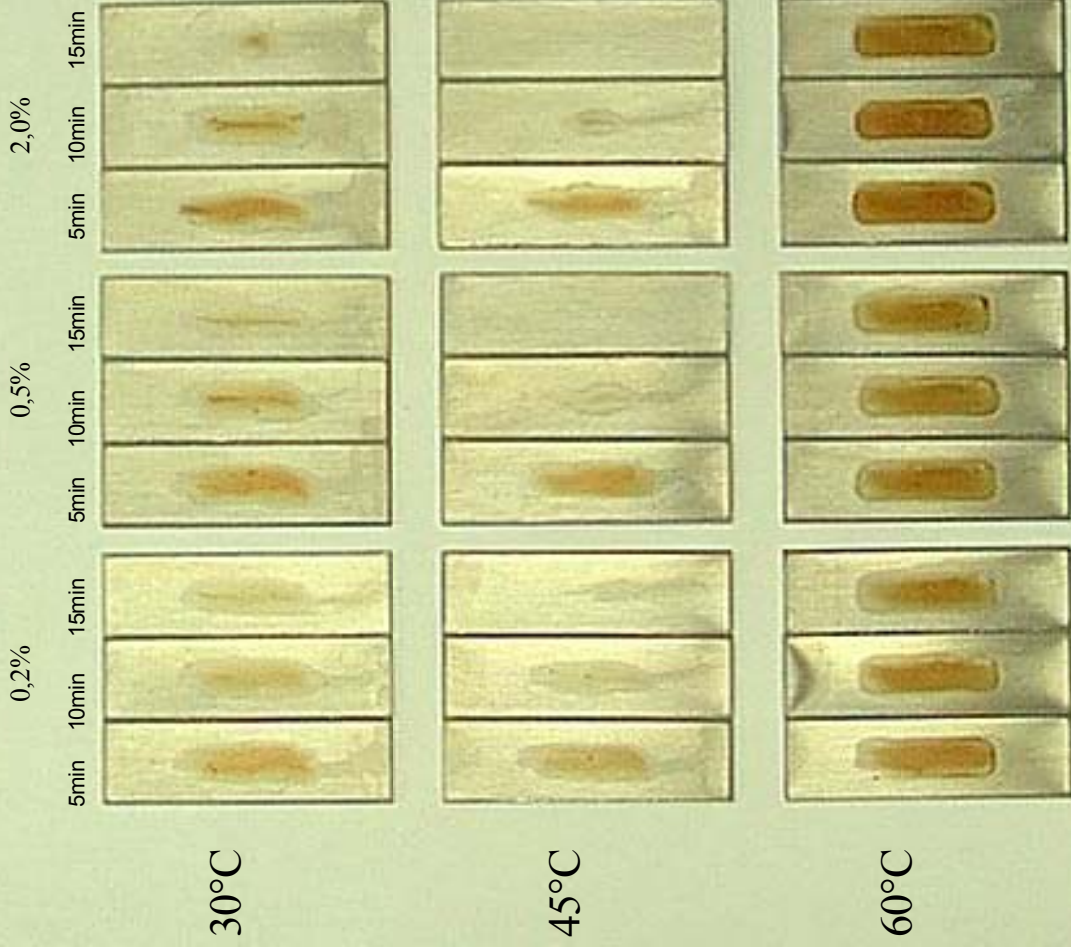
⇨ ultrasound

⇨ instrument-load in machine

Alkaline detergent



Enzymatic detergent

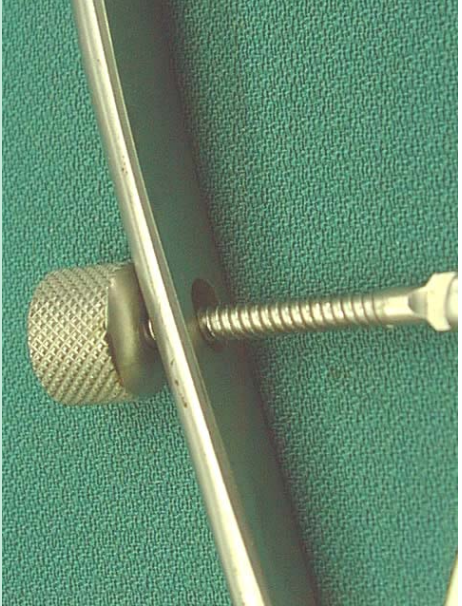
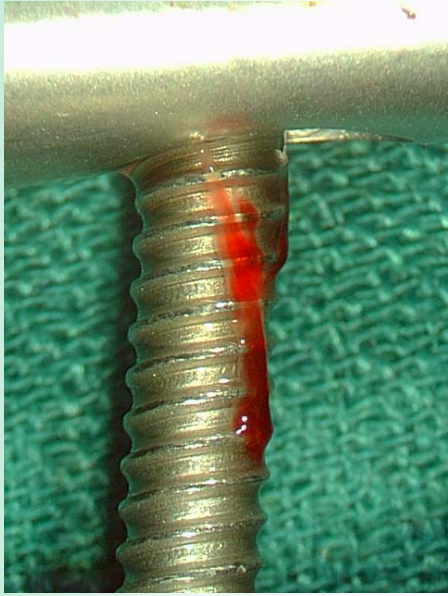
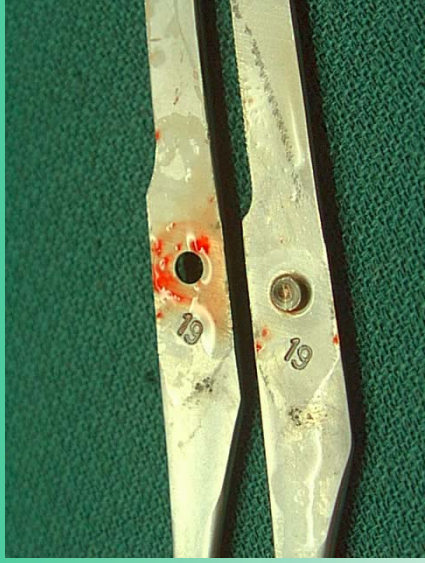


NORMAL SURFACES ARE NO

CLEANING PROBLEMS



Cleaning problems

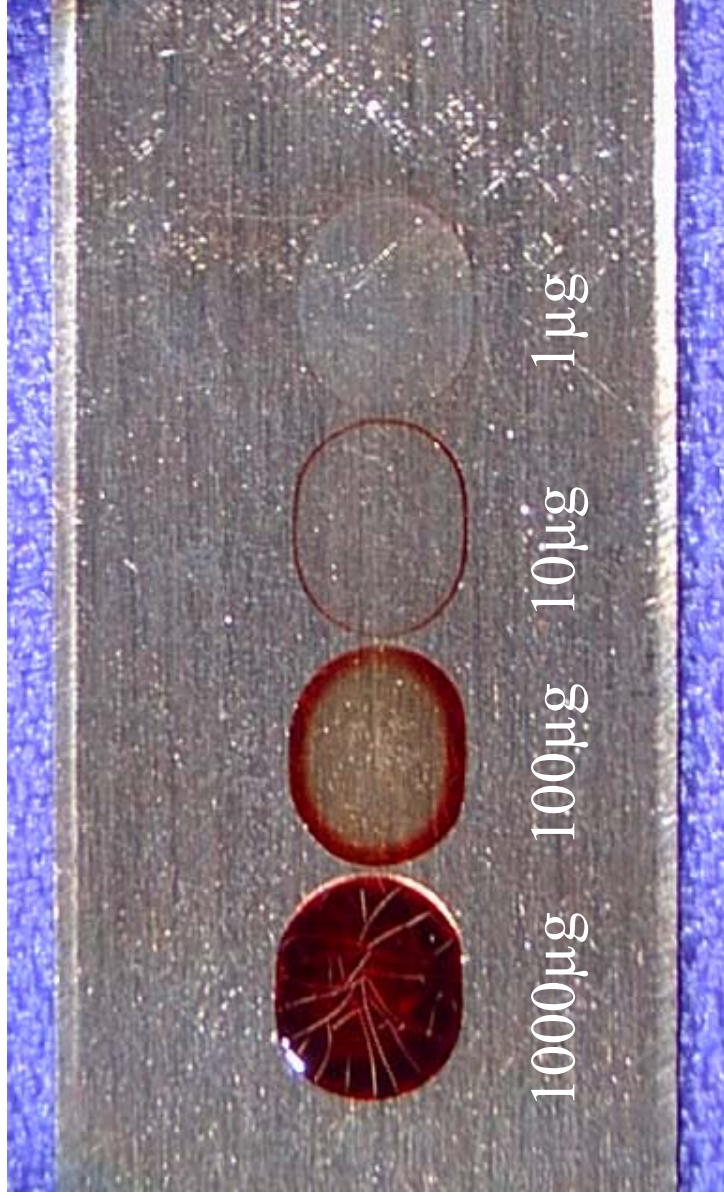


Testing of cleaning procedures

Clean or
not clean



Checking for residues



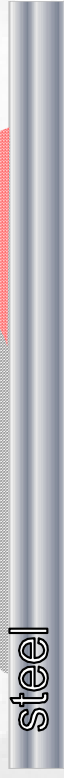
RESIDUES AFTER CLEANING

dry blood



residues

Cleaning Problem

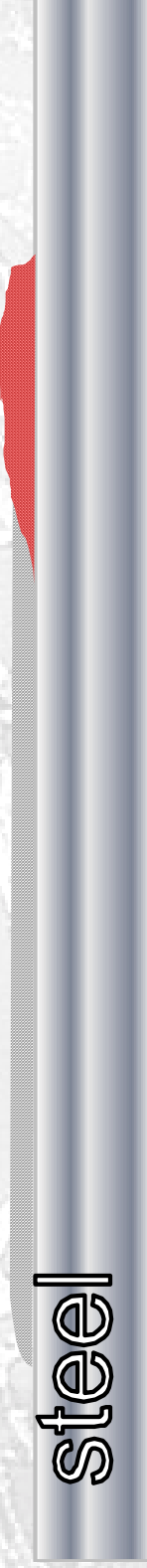


Disinfecting

Drying

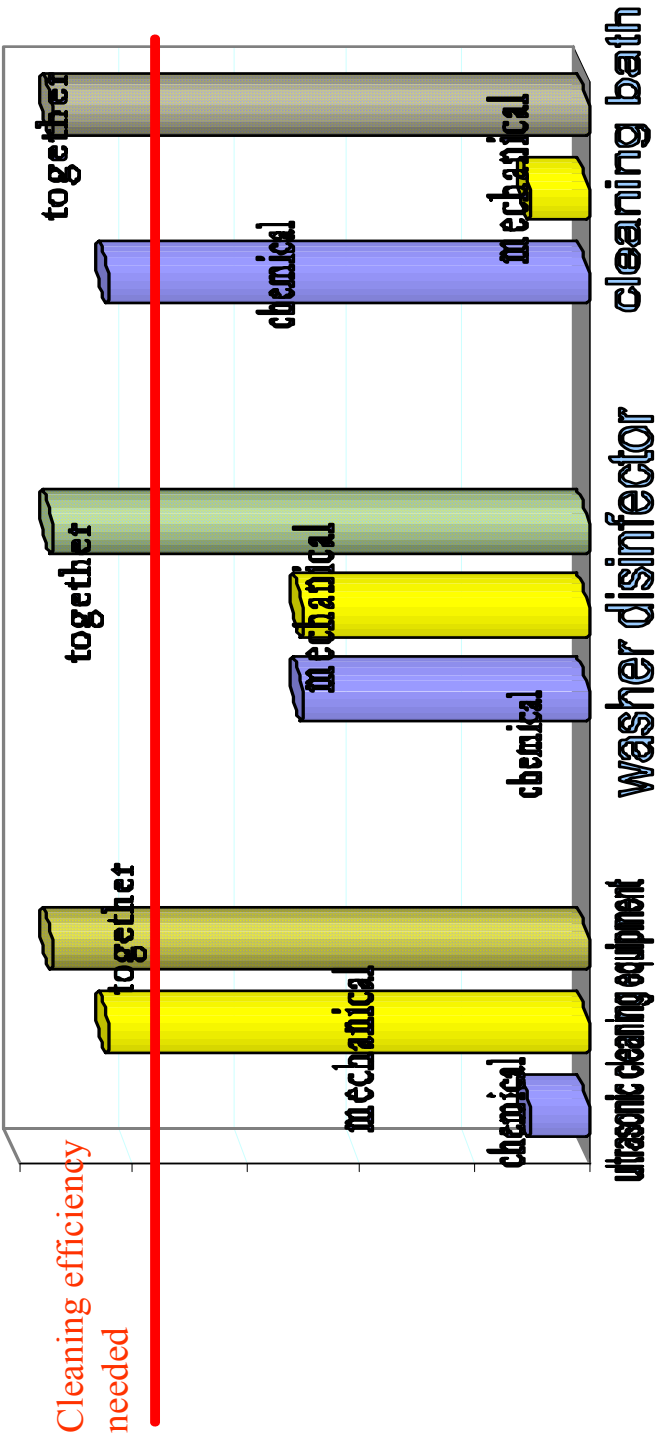
denaturated protein-residues

steel



Monitoring of the cleaning efficiency

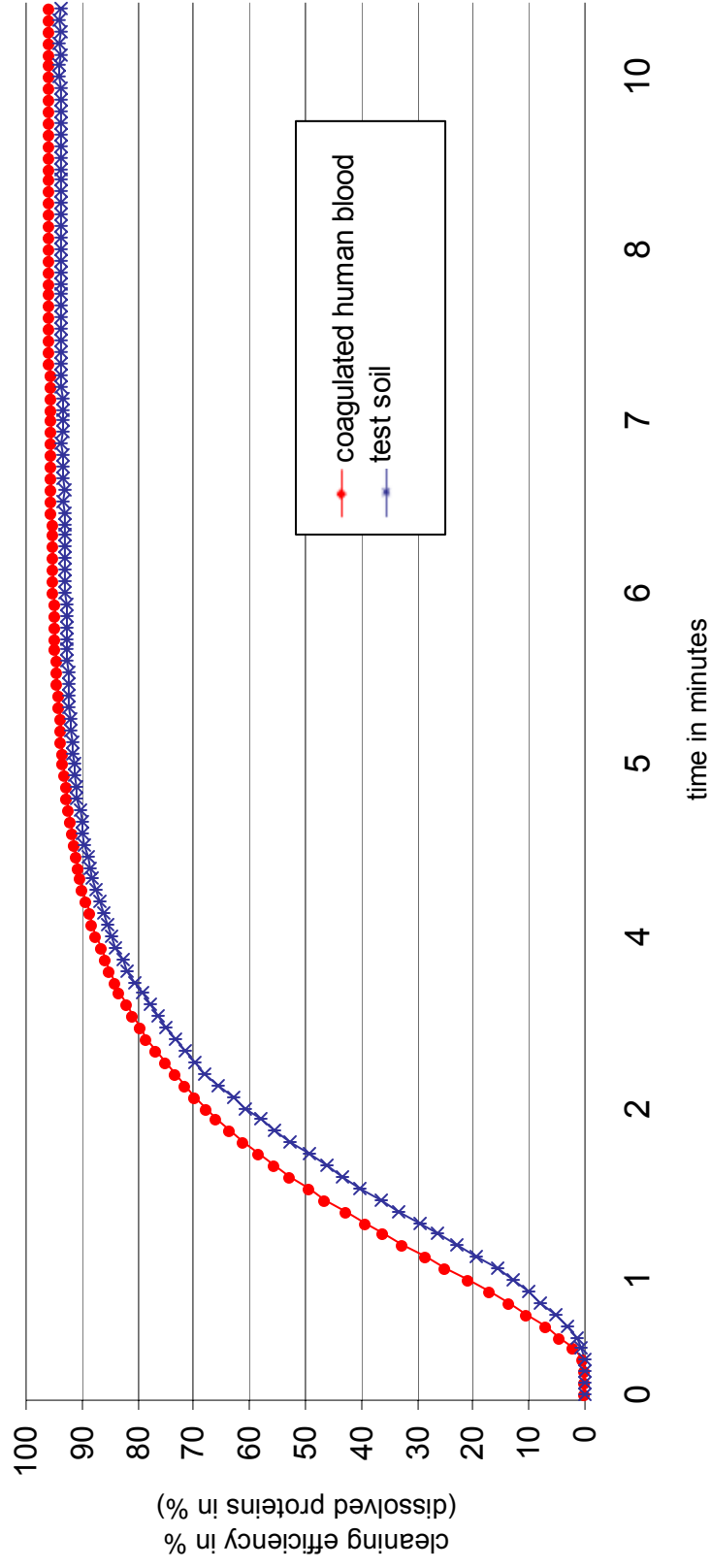
cleaning efficiency



The TOSI[®] -system

for monitoring the cleaning efficiency
of washer disinfectors

Comparison blood / test soil

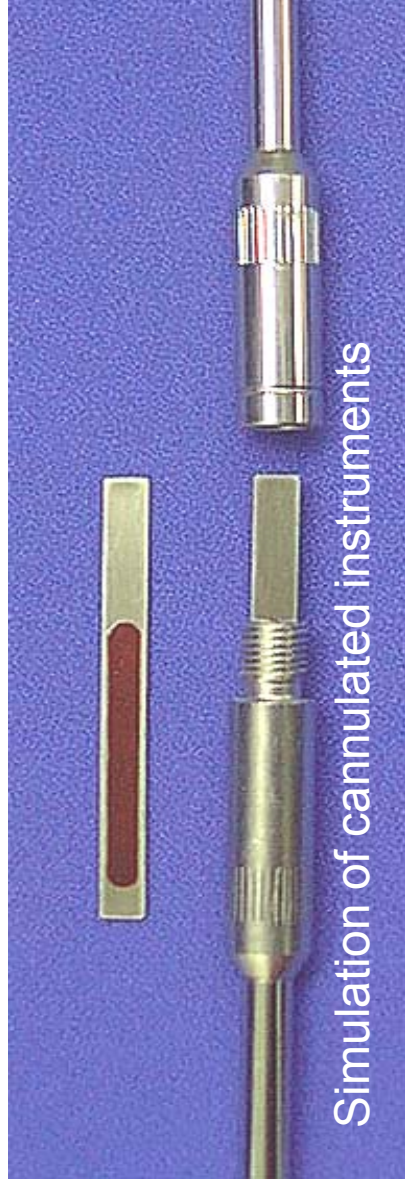


TOSI®



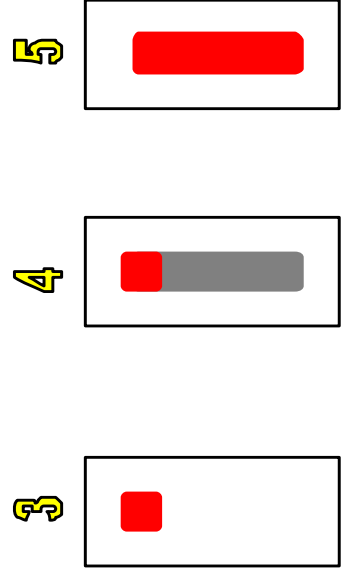
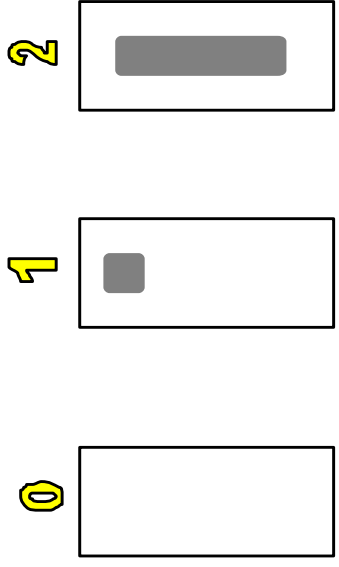
Simulation of standard instruments

LumCheck



Simulation of cannulated instruments

TOSI - evaluation



TOSI[®]- results

