SQ.line® easy to clean design

Comparison of reprocessing – SQ.line vs. traditional design

SQ.line

Traditional instrument design

Key Facts at a glance:

Comparing cleaning steps of double action instruments, the **SQ.line design** offers an **easy reprocessing** as follows:

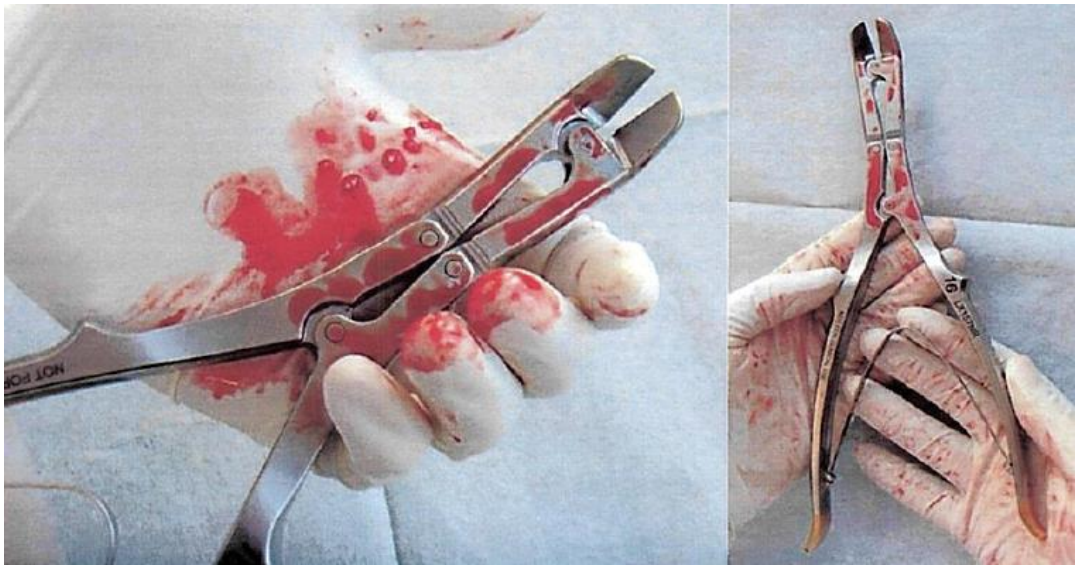
- **Manual pre-cleaning** steps can be **eliminated** with fully machine-cleanable instruments
- Resulting in **time savings up to 12 minutes** in handling time.

Executive Summary - Test performance:

Test object:
LX157NR

Test performance:

- Standard contamination with test soil based on sheep blood, containing radioactive marker
- The instruments were dried for 1h at room temperature



- Cleaning was performed according to "Aesculap Validated Reprocessing Procedures AVA-V6"
- Three runs were conducted

Cleaning Step	Description
Manual pre-cleaning	A manual pre-cleaning was not performed
Automated cleaning	The following program was used for automated cleaning: • 3 min pre-cleaning with cold tap water • Draining • 10 min cleaning with 55°C deionized water and 0.5% of Helimatic Cleaner alcaline (B.Braun) • Draining • 1 min rinsing with cold deionized water • Draining
Washer-disinfector	Miele Professional G 7836 CD SN:9230557
Rack	Two-level rack (Miele) E327

Arrangement of samples in washer-disinfector	
Additional load	Two metal sieve baskets were used as additional load

- After the cleaning process, the instruments were analyzed for
  1st step: Visible residues
  2nd step: Detection of invisible residues (protein, hemoglobin and radioactivity)

Test result:
Successful cleaning validation of the instrument without manual pre-cleaning!

Additional Information

Leaf Spring

Compared to traditional double action instruments the spring does not need to be opened for cleaning.
The opening of the spring often leads to corrosion and spring fracture. Therefore, the SQ.line double action instruments were designed with a new kind of spring which enables reprocessing without opening the spring - even without manual pre-cleaning!

Manual pre-cleaning - Calculation of time savings

	Best case process parameter	Worst case process parameter	Worst case process parameter & max. qty. of instruments
Qty. double action instrument per tray	1 pc.	1pc	3 pcs.
Time for ultra sonic* (Results of interviews with 31 CSSDs)	3.17 minutes	4.55 minutes	4.55 minutes
Time for manual pre-cleaning*	1.12 minutes	2.5 minutes	2.5 minutes
Result	**4.29 minutes**	**7.05 minutes**	**12.05 minutes**

* Results of interviews with 31 CSSDs in Germany