

POLTI SANI SYSTEM ON "FRECCIAROSSA"*

*(RED ARROW) HIGH SPEED TRAINS.

Polti Sani System is an electro-medical device for sanitising surfaces with a risk of biological contamination.

The system delivers dry saturated overheated steam at high temperature (up to 180°C) in combination with the sanitising solution HPMed (hydro-alcoholic solution containing sodium metasilicate and sodium carbonate). The system enables the bacterial, fungal and viral load to be lowered on the surfaces and fabrics to which it is applied in only a few seconds. This enables the risk of cross-infections to be reduced rapidly.

Its unique feature produces steam at a higher temperature in an expansion chamber (world-wide patent) in order to atomize it. Effectively, steam quickly evaporates from the treated surfaces without leaving any residual moisture behind. **Polti Sani System**, patented world-wide by Polti S.p.A., has been

subjected to numerous laboratory tests and clinical studies. Results have shown the safe use and effectiveness of Polti Sani System in reducing microbial contamination of surfaces. Unlike traditional sanitification methods, Polti Sani System plays a physical action and uses the high temperature of steam instead of a chemical compound to make surfaces safe, with no risk of infections. The mixture of steam and HPMed can be released in the presence of people and was subjected to skin tests; moreover it does not cause any damage to nor does it alter the surfaces or fabrics treated. Steaming for 30 seconds per square meter is sufficient to eliminate the microbiological contamination from surfaces. The dry atomized steam evaporates within 30 to 45 seconds without leaving any residual behind. Thus, eliminating the waiting and ap-

plication times required by traditional chemical disinfectants.

POLTI SANI SYSTEM ON TRAINS

Numerous tests were conducted in 2008 to verify the adaptability of the system to sanitising train carriages.

The results obtained were very positive and resolved problems connected to the hygiene of the areas and comfort of the travellers.

Below are reported the results obtained during the tests conducted on the ETR500 train at Milan Central Station in March 2008. These results were confirmed by additional tests conducted on trains in various areas of the traveller's compartments.

The reduction of bacteria was verified by means of sterile swaps for the microbiological tests and by means of bioluminometers, which allows for an immediate measurement.

SINK		
	before	after
SWAB (ufc/cm ²)	1.1 x 10 ⁴	1
BIOLUMINOMETER (ulr)	4563	56

TABLE		
	before	after
SWAB (ufc/cm ²)	1.2 x 10 ³	3
BIOLUMINOMETER (ulr)	649	79

ufc/cm² = unit-forming colony per square centimetre.
ulr = residual luminescence unit.



Polti Sani System on the ETR 500 "FRECCIAROSSA" High Speed Train (December 2008).

As part of the new "FRECCIAROSSA" high speed program, on 14 December 2008 Trenitalia assigned the Serfer Company with the task of carrying out, at the Roma Termini train station, a new rapid cleaning and sanitising operation

aimed at restoring the best environmental and hygienic conditions on all "FRECCIAROSSA" high speed trains. Trenitalia and Serfer have found **Polti Sani System** to be the perfect equipment for effectively and safely sanitising

the toilet facilities on these trains. After the first few weeks of activity, both Serfer and Trenitalia have declared to be completely satisfied with the performance, reliability and ease-of-use of **Polti Sani System**.