

Figure 1 Schematic of the experimental setup for (a) the Modulith SLX F2, (b) the Piezolith 3000 and (c) the Sonolith i-sys. Experiments were conducted within custom made Perspex tanks filled with filtered, deionised and degassed water. Coupling was ach

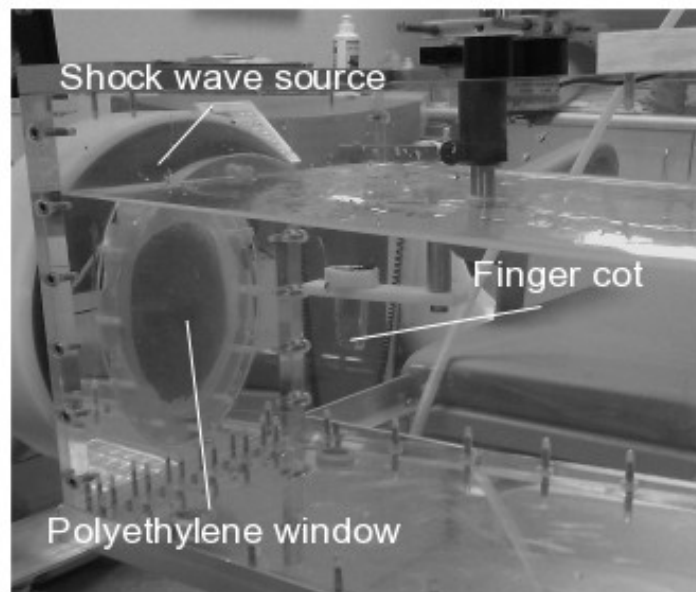


Figure 2 Photograph of the experimental setup for the Piezolith 3000 lithotripter (Figure 1(b)). Stones were placed in 4mL of filtered deionised and degassed water within a finger cot tied using 4.0 vicryl sutures and suspended within a plastic tube in

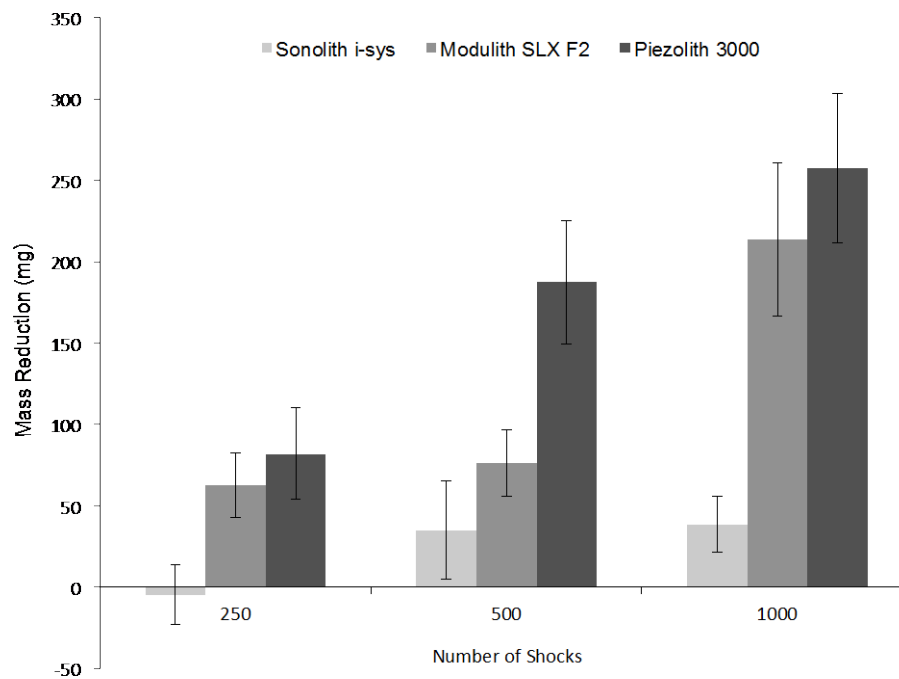


Figure 3 Mass reduction of synthetic stones for 250, 500 and 1000 shock treatments. Error bars indicate 95% confidence intervals. For all lithotripters, the mass reduction increased with increasing shock numbers. At 250 shocks, the Sonolith i-sys prod

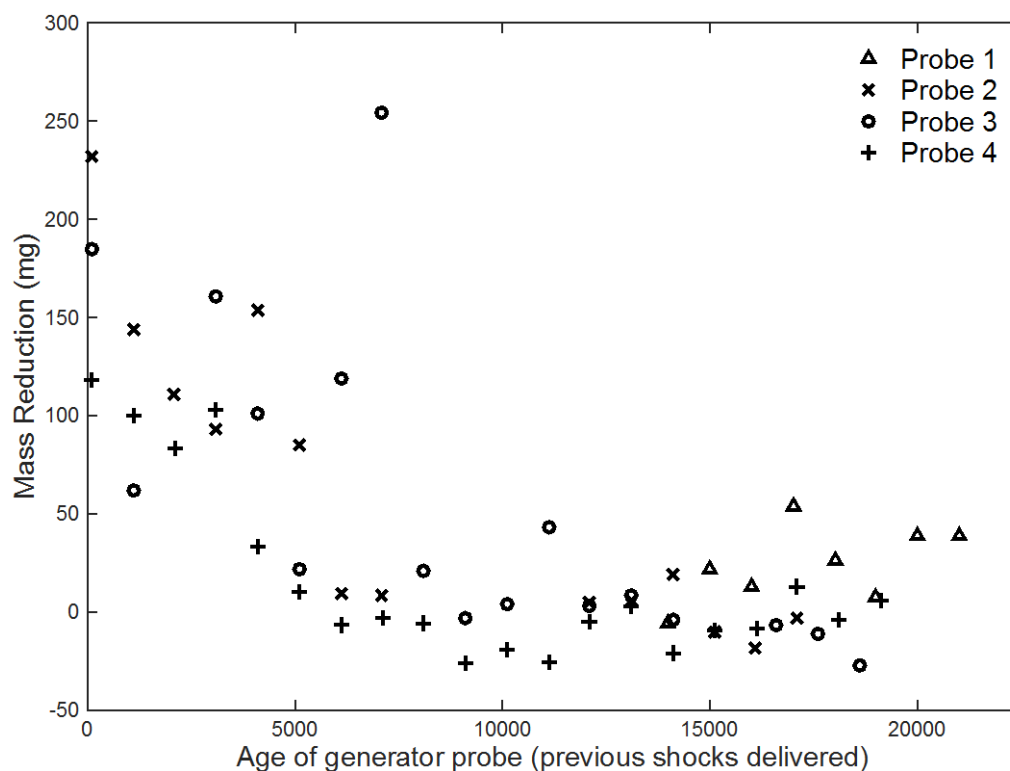


Figure 4 Mass reduction of synthetic stones for 1000 shock treatments with increasing age of four different Sonolith i-sys generator electrodes. There is a clear age-related decrease in performance of the Sonolith i-sys, with a threshold of around 6000

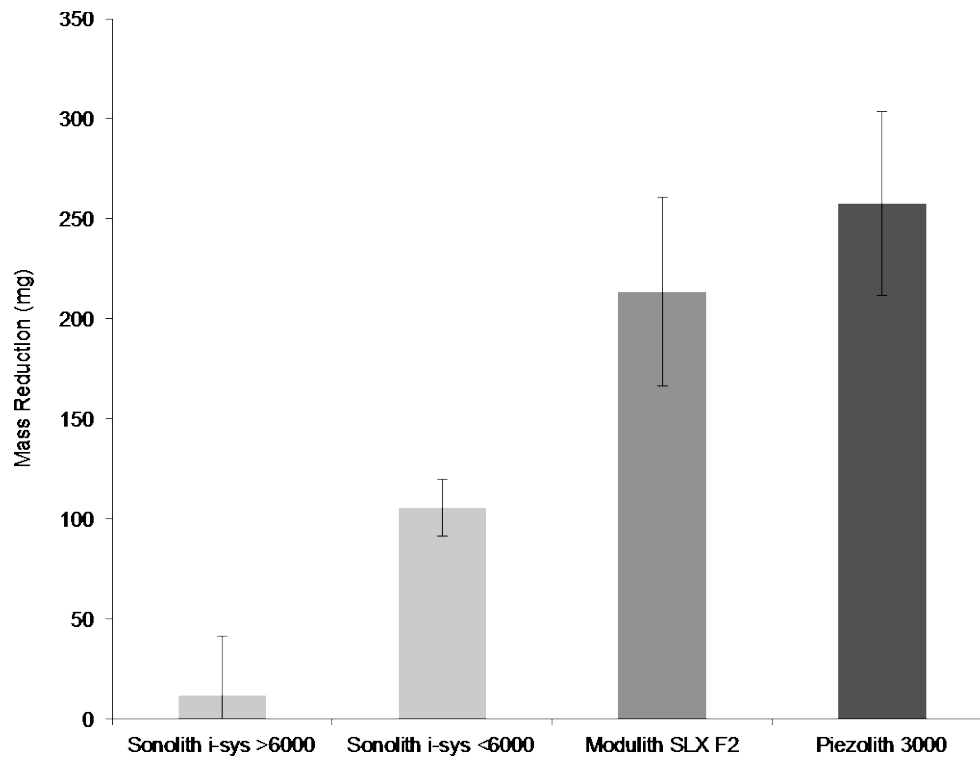


Figure 5 Mass reduction of synthetic stones for 1000 shock waves using the Sonolith i-sys, Modulith SLX F2 and Piezolith 3000. Error bars indicate 95% confidence intervals. A statistically significant difference in fragmentation efficiency was observed