

Figure legends for supplementary information

Fig. S 1

In vivo testing for blank contamination. The different devices (new ECoScreen, old ECoScreen, and ECoScreen2) were exposed to ultra pure water (10 mL). The concentration of elements Cr, Ni and Fe were below the respective LOD (dotted line) using ECoScreen2. Results of three experiments are shown. Open symbols indicate the new ECoScreen device and filled symbols the old one. Incubation times were 1 min (circles) or 10 min (square), respectively.

Fig. S 2

Comparison of pH in EBC sampled with ECoScreen2 in 36 welders from three companies. Company A (n=12; MS/SS), company B (n=12; MS), and company C (n = 12, MS/SS). The pH was measured using a pH-meter with a glass-electrode (Mettler Toledo, Giessen, Germany) after gas standardisation (de-aeration) which was performed with argon at 2 bar for 10 min. The range was 0.00 to 14.00 and the accuracy in the order of 0.01 +/- 0.02. pH values recorded were: A: 6.54 (6.42-6.70); B: 7.03 (6.91-7.22); C: 6.76 (6.17-7.12).

We recently determined pH in EBC of 24 healthy volunteers (18). In EBC sampled with ECoScreen2 pH values after deaeration were significantly lower among smokers compared with the non-smokers (7.14 (5.70-7.43) vs. 7.59 (7.28-7.73), $P < 0.01$).

Figure S 1

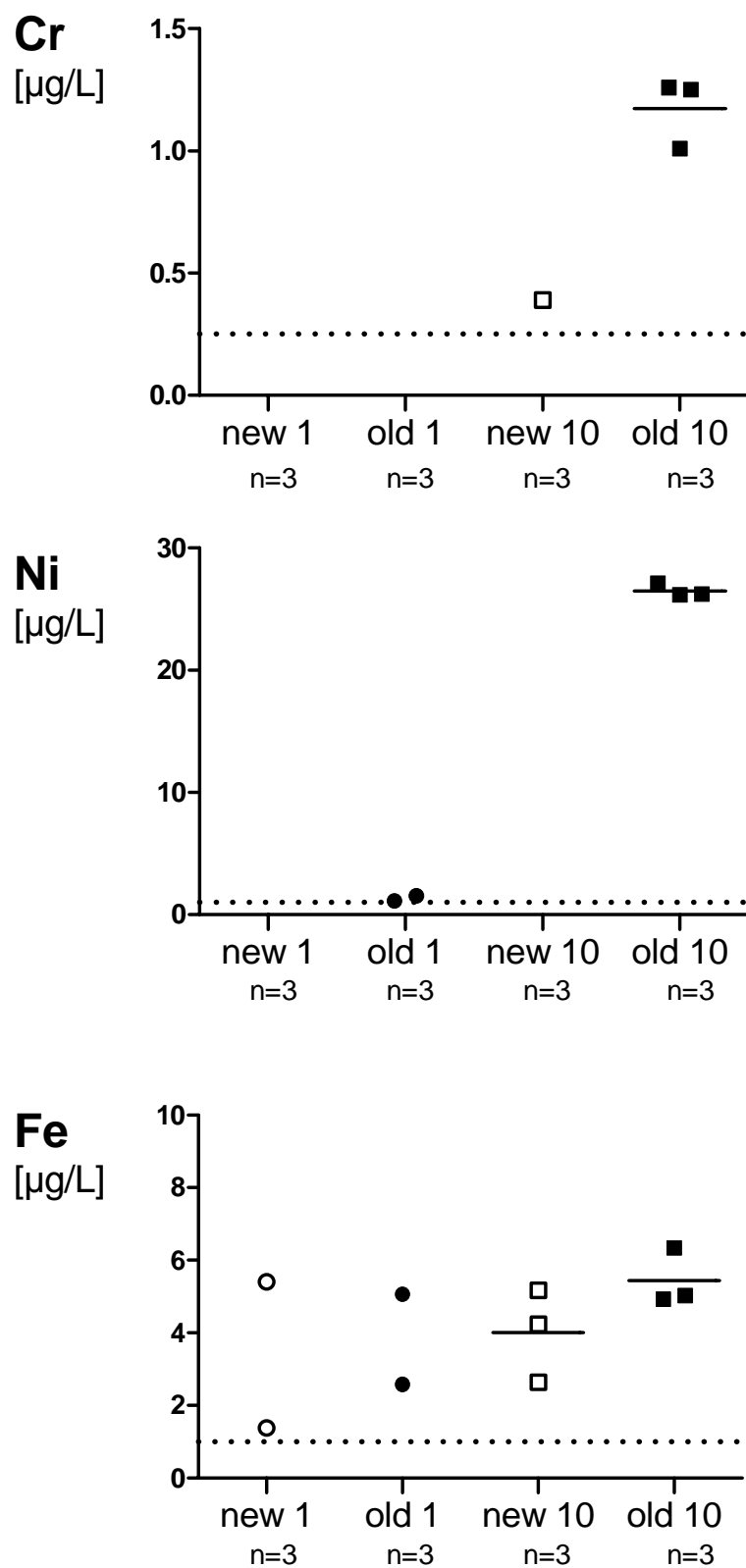


Figure S 2

