Noise induced hearing loss (NIHL) is a sensori-neural hearing deficit that begin at the higher frequencies (3000 to 6000 Hz) and develops gradually as a result of chronic exposure to excessive sound level. It is mostly found in the developing and industrial countries workers. The objective of this study was to prove that chronic exposure noise of machine could lead to NIHL on steel factory workers. A cross section study of 50 steel factory workers in Sidoarjo of East Java was done during the period of January to June 2004. The method of this study included: interview, noise measurement in the steel production machine room and in the administration room, ENT examination and hearing test with audiometer of 50 workers. This sample divided into two groups, a group of 25 workers of the steel production machine division as case group, and another 25 workers of the administrative division as control group. The results of this study was as follows: The noise intensity in the steel production machine room was 102 dB and in the administration room was 60.4 dB and a number of 21 workers (84 %) of the case group got NIHL, compared to 1 worker (4 %) of the control group. There was a significant difference in the incidence of NIHL between the two groups. There was also a significant difference in correlation between NIHL and working period (p < 0.05).