In the last decade the use of wide diameter implants (WDI, i.e. diameter > 3.75 mm) has increased especially in posterior jaws because it is generally accepted that WDI: 1- improve the ability of posterior implants to tolerate occlusal forces, 2- create a wider base for proper prosthesis, and 3- avoid placing two standard-size implants (SSI = 3.75 mm) at one site to obtain a double-root prosthetic tooth. Since no report is available on a new type of implants, a retrospective study was performed. A total of 124 two-piece implants (FMD srl, Rome, Italy) were inserted, 56 in female and 68 in males. The median age was 59 ± 12 (min-max 28-75 years). Implants were inserted 59 in the maxilla and 65 in the mandible; they replaced 7 incisors, 4 cuspids, 23 premolars and 90 molars. One implant was lost, survival rate = 99.20%. Among the studies variables immediate loaded implants (p=0.05) and upper jaw (p=0.005) have a statistically significant worse outcome. Then peri-implant bone resorption (i.e. delta IAJ) was used to investigate SCR. Among the remaining 123 implants, 2 fixtures have a crestal bone resorption greater than 1.5 mm (SCR = 97.54). Statistical analysis demonstrated that single crown have a higher peri-implant crestal bone resorption if compared with bridge supported by 2 or more implants (p=0.03). In conclusion FMD implants are reliable devices for oral rehabilitation with a very high SCR and SVR.