

Steel sheet suitable for a multistep hot stamping process and associated manufacturing process, said steel sheet having a composition comprising, by weight percent: C: 0.13-0.4 %, Mn: 0.4 - 4.2 %, Si: 0.1 - 2.5 %, Cr $\leq$ 2 %, Mo $\leq$ 0.65 %, Nb $\leq$ 0.1 %, Al $\leq$ 3.0 %, Ti $\leq$ 0.1 %, B $\leq$ 0.005 %, P $\leq$ 0.025 %, S $\leq$ 0.01 %, N $\leq$ 0.01 %, Ni $\leq$ 2.0 %, Ca $\leq$ 0.1 %, W $\leq$ 0.30 %, V $\leq$ 0.1 %, Cu $\leq$ 0.2 %, wherein Q is less than 20, said factor Q being defined as (the elements are expressed in weight percent): $Q = 114 - 68 \cdot C - 18 \cdot Mn + 20 \cdot Si - 56 \cdot Cr - 61 \cdot Ni - 37 \cdot Al + 39 \cdot Mo + 79 \cdot Nb - 17691 \cdot B$, said steel sheet having a microstructure comprising, in surface fraction, from 60 % to 100 % of recrystallized ferrite, less than 40 % of the sum of martensite, bainite and carbides and less than 5 % of non-recrystallized ferrite.