[0034] I=26.01*Cu+3.88*Ni+1.2*Cr+1.49*Si+17.28*P-7.29*

[0035] Cu*Ni-9.1*Ni*P-33.39*Cu*Cu.

[0036] Six groups of atmospheric corrosion resistant steel plates are manufactured by the production method above, the components of which in % by mass are as follows:

[0037] S1: C: 0.04%, Si: 0.35%, Mn: 1.20%, P: 0.012%, Cu: 0.30%, Cr: 0.40%, Ni: 0.30%, Al: 0.02%, Nb: 0.035%, CEV: 0.36%, Pcm: 0.15%, I: 6.50 and Cu+Cr+Ni=1.0%.

[0038] S: C: 0.06%, Si: 0.18%, Mn: 1.40%, P: 0.015%, Cu: 0.25%, Cr: 0.60%, Ni: 0.45%, Al: 0.04%, Nb: 0.015%, CEV: 0.46%, Pcm: 0.19%, I: 6.50 and Cu+Cr+Ni=1.3%.

[0039] S3: C: 0.1%, Si: 0.35%, Mn: 1.10%, P: 0.014%, Cu: 0.25%, Cr: 0.55%, Ni: 0.45%, Al: 0.04%, Nb: 0.01%, CEV: 0.44%, Pcm: 0.21%, I: 6.70 and Cu+Cr+Ni=1.25%.

[0040] S4: C: 0.04%, Si: 0.35%, Mn: 1.00%, P: 0.008%, Cu: 0.45%, Cr: 0.6%, Ni: 0.30%, Al: 0.02%, Nb: 0.01%, CEV: 0.38%, Pcm: 0.16%, I: 6.50 and Cu+Cr+Ni=1.3%.

[0041] S5: C: 0.08%, Si: 0.34%, Mn: 1.00%, P: 0.015%, Cu: 0.30%, Cr: 0.55%, Ni: 0.5%, Al: 0.05%, Nb: 0.05%, CEV: 0.41%, Pcm: 0.19%, I: 7.00 and Cu+Cr+Ni=1.35%.

[0042] S6: C: 0.04%, Si: 0.35%, Mn: 1.60%, P: ~~0.08%~~0.008%, Cu: 0.30%, Cr: 0.5%, Ni: 0.4%, Alt: 0.03%, Nb: 0.02%, CEV: 0.45%, Pcm: 0.18%, I: 6.70 and Cu+Cr+Ni=1.2%.

[0043] For the steel plates made from the above 6 groups of components, 2 sample plates of different thickness are rolled for each group, and one sample plate 60 mm in thickness is rolled for each composition. The production process parameters are shown in Table 1: