

CHEMICAL CONVERSION TREATMENT SOLUTION AND CHEMICALLY CONVERTED STEEL SHEET

ABSTRACT

5 A chemically converted steel sheet having a chemically converted coating film is
made by coating a Zn-based plated steel sheet with a chemical conversion treatment
solution and drying the same. The chemically converted coating film is constituted by a
first chemically converted layer including V, Mo, and P, and a second chemically converted
layer provided on said layer and including a group 4A metal oxygen acid salt, and the ratio
10 of pentavalent V to all the Vs in the chemically converted coating film is 0.7 or greater. The
chemical conversion treatment solution includes specific proportions of V, Mo, an amine,
the group 4A metal oxygen acid salt, and P, and substantially does not include hydrophilic
resins, fluorine, or silicon.

15 FIGURE 1