

[Title of Invention] LASER CUTTING AND MACHINING METHOD FOR
PLATED STEEL PLATE, LASER CUT-AND-MACHINED PRODUCT, THERMAL
CUTTING AND MACHINING METHOD, THERMAL CUT-AND-MACHINED PRODUCT,
SURFACE-TREATED STEEL PLATE, LASER CUTTING METHOD, AND LASER
5 MACHINING HEAD

ABSTRACT

A laser cutting and machining method for plated steel plated,
when irradiating a laser beam LB on to the upper surface of a
10 plated steel plate W and laser cutting and machining same: a
plating layer-containing metal that has been melted and/or
evaporated by the irradiation of the laser beam LB is caused
to flow on to a cut surface of the plated steel plate W as a
result of assist gas that is jetted towards a laser machining
15 units; and the plating layer-containing metal is coated on the
cut surface.

FIG. 1