CLAIMS

1. A method for treating an inner surface in a processing apparatus using chlorine trifluoride, comprising:

integrally connecting a gas supply passage ~~(2)~~ and a gas discharge passage ~~(3)~~ to a processing chamber ~~(1)~~ of a processing apparatus in which chlorine trifluoride is used as an etching gas; and

applying chlorine trifluoride gas having a concentration ~~equal to or~~ higher than the concentration of chlorine trifluoride gas supplied during etching process operation on inner surfaces of at least the processing chamber ~~(1)~~ and the gas supply passage ~~(2)~~ among the processing chamber ~~(1)~~, the gas supply passage ~~(2)~~, and the gas discharge passage ~~(3)~~, which are integrally formed, to coat the inner surfaces of at least the processing chamber ~~(1)~~ and the gas supply passage ~~(2)~~ with a fluoride film, prior to the etching process using chlorine trifluoride gas.

2. A method for treating an inner surface in a processing apparatus using chlorine trifluoride, comprising:

integrally connecting a gas supply passage ~~(2)~~ and a gas discharge passage ~~(3)~~ to a processing chamber ~~(1)~~ of a processing apparatus in which chlorine trifluoride is used as an etching gas; and

applying, at a room temperature (20 to 30°C), chlorine trifluoride gas having a concentration equal to ~~or higher than~~ the concentration of chlorine trifluoride gas supplied during etching process operation on inner surfaces of at least the processing chamber ~~(1)~~ and the gas supply passage ~~(2)~~ among the processing chamber ~~(1)~~, the gas supply passage ~~(2)~~, and the gas discharge passage ~~(3)~~, which are integrally formed, to coat the inner surfaces of at least the processing chamber ~~(1)~~ and the gas supply passage ~~(2)~~ with a fluoride film, prior to the etching process using chlorine trifluoride gas.