



Nippon Yakin Kogyo

Award: Safety
Category: Workplace Improvement

Reducing toxicity of thermal insulation material by replacing it with lower hazardous material

Challenge

Industrial Safety and Health Law has newly identified Refractory Ceramic Fiber (hereinafter, RCF) as a Specific Chemical Substance that may be carcinogenic. We conventionally used higher toxic RCF as a thermal insulation material for mainly furnaces at 14 sites in our plant. In addition, being itself toxic, however, we have several kinds of problems with regard to storing, to disposing of it as well as to checking the workplace environments according to Industrial Safety and Health Law.

Action

We tried to apply the Bio-soluble fiber that contains lower hazardous material and has same performance as we used conventionally at our all 14 sites. The test results allowed us to use it at every site, consequently we have replaced higher toxic RCF with lower hazardous material, that is the Bio-soluble fiber. Furthermore, the Bio-soluble fiber is out of the scope of Specific Chemical Substances.

Outcome

Since the new thermal insulation material is the Bio-soluble fiber, the possibility of carcinogenesis has declined even if we breath it in. In addition, we have reduced the legal procedures with regard to the thermal insulation material.