

Abstract

An object of the present invention is to provide a machining tool system that uses and recycles a lubricating fluid for a machining tool that does not contain an oil-soluble material derived from a mineral oil, and a hydraulic fluid and a processing fluid for machining tools. The machining tool system is a machining tool system that utilizes a machining tool operating in an environment in which a hydraulic fluid and a processing fluid to be used to process a processed member with the machining tool are mixed, in which a water-soluble material that does not contain an oil-soluble materials derived from a mineral is used for both the hydraulic fluid and the processing fluid, and the machining tool system includes: collecting means for collecting the hydraulic fluid and the processing fluid after a lubricating effect ends in a mixed manner, the collecting means being disposed downstream of a lubricating flow path of the machining tool; a discharging container that communicates with the collecting means and stores the hydraulic fluid and the processing fluid; and circulating means for directly suctioning the hydraulic fluid and the processing fluid inside the discharging container without separation into oil and water from an inlet port disposed in the discharging container at a position separated from a

bottom portion and returning the hydraulic fluid and the processing fluid to a supply flow path of the processing fluid and/or the hydraulic fluid.

Figure 4