

**ABSTRACT**

M.Sc. Thesis

**TIME REQUIREMENTS AND COSTS DURING MILKING  
MECHANIZATION  
AT THE DAIRY FARM MODELS**

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This study is conducted to determine time requirements and machinery costs related to milking at dairy farms which contain various milking systems. For this purpose, milking systems at the farms are considered for farm selection and 3 pipeline milking system-using, 3 bucket milking system-using and 3 mobile milking system-using dairy farms were selected. ISO compatibilities of the milking systems and machineries were examined and non-compliant ones were rendered compatible with ISO standards. Time and cost studies using estimations regarding milking process (before, during and after milking) were conducted and by this way the time requirements and machinery costs of the milking systems were calculated. As a result, pipeline milking systems were found to be 54.91% beneficial compared to bucket milking systems and 73.04% beneficial compared to mobile milking systems; in terms of yearly total milking duration per cow values. Likewise, pipeline milking systems were found to be 38.72% beneficial compared to bucket milking systems and 51.07% beneficial compared to mobile milking systems; in terms of yearly total machinery usage costs per cow values

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Milking machine, milking time, time requirement, cost