

Thesis Title	A study of Job Characteristics of Industrial Technicians that Meet the Needs of Automotive Parts Industries	
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Abstract

The purpose of this research was to study the general conditions, knowledge, skills, and tools utilized by the technicians at automotive parts industries both overall and classified by industrial parts production. The sample in this study were entrepreneurs, managers, and supervisors of 83 automotive parts industries. The instruments for data collection were a questionnaire and an interview form. The statistics of data collected were analyzed by using Percentage (%), Ranking, Rating Scale, Means (\bar{x}), Standard Deviation (S.D.), and Content Analysis.

The results of the research were as follows :

1) Most of the automotive parts industries were classified into six groups: automotive parts, electrical accessories and parts industries, gear, motive system and steering wheel system industries, auto-body, tire and battery parts industries, special accessories, sound instruments and air-conditioned industries, and added competence equipment industries. The organization of industries could be divided into 6 groups which consisted of writing and reading blueprints, raw materials selecting, press metal forming, finishing, safety, quality control, and tools / instruments utilization. Then, most of the staff were graduated from secondary schools (M.4-M.6). Only staff who held vocational certificate and diploma majored in machine shops. The desirable behaviors of staff were diligence. The significant problem of automotive parts industries was working system.

2) The overall of knowledge, skills, and tools utilized while working at automotive industries could be concluded as follows :

2.1 It was agreed at the less level that while working at the workplace the knowledge was the calculation for sizes of the automotive parts, the skills were welding metrology, and the calculation for sizes of the automotive parts and the tool was the three-line screw measurement.

2.2 It was agreed at the great level that while working at the workplace the knowledge was the regularities and safety, the skills were the measurement of workplace and the application of safety equipment to prevent the danger from working and machine.

3) When the automotive parts industries was considered according to the types of automotive industries, the findings were as follows.

1. It was agreed at the less level that while working at industries especially on special accessories, sound instruments and air-conditioned including auto-body, tire and battery parts, the knowledge would be materials, chemical, metals, non-metals polishing, automation system and hydraulic system, the skills would be electrical signs and system, mould design, welding, control system, polishing, an application of test instrument, an adjustment of injection machine, machine and automatic machine, measurement tools, facility tools, and the software Auto Cad. On the other hand, it was agreed at the great level that tools utilized at workplace were measurement tools, jig and fixture, safety equipment(goggles and welding shield) and machine. What's more, the measurement tools and safety equipment (helmet, boots, gloves) were at the most level.

2. It was agreed at the great level that while working at industries especially on automotive parts and added competence equipment, the knowledge would be the use of manual, the use of worksheet, computer, report writing, work presentation, language, measurement tools, materials, safety, machine adjustment and fabrication and machine finishing.

3. It was agreed at the most level that while working at industries especially on added competence equipment, the knowledge and skills would be workplace measurement, workplace fabrication, color spraying and its equipment, quality control and statistic. Then , it was agreed at the great level that the skills utilized at workplace were the use of manual, the use of worksheet, report writing on performance, working behavior, signs and the use of electrical

equipment, chemicals, the use and the adjustment of equipment and measurement tools, the use of safety tools, the maintenance of equipment, tools and machine, fabrication and finishing, as well as facility tools. On the other hand, the knowledge and skills which were not utilized would be the clearance, mould design, welding, sensor, finishing and checking.

4. It was agreed that while working while working at industries especially on automotive parts, gear, motive system and steering wheel system, special accessories, sound instruments and air conditions, and added competence equipment, the tools would be the software Master Cam and Smart Cam as well as the Wire Cut machine

Keywords : Knowledge / Skills / Equipment / Tools / Automotive Parts