

# # C716656 : MAJOR INDUSTRIAL ENGINEERING  
KEY WORD: STATISTICAL / SPC

BOONSOM PRASERTAKARAKUL : IMPROVEMENT OF STATISTICAL PROCESS CONTROL IN THE REFRI-  
GERATOR COMPRESSOR FACTORY. : THESIS ADVISOR : ASSO. PROF. DAMRONG TAVEESANG -  
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The objectives of this thesis are researching an appropriate Statistical Process  
Control (SPC) Method and evaluated of SPC effective in a Sample Production Line.

According to survey and study in Cylinder , Piston Scotch and Slider Production Line,  
some Production Line used SPC but not correct and appropriate. So that , I evaluated Machine  
Capability by using  $C_p$  and evaluated Process Capability by using  $C_{PK}$  , for designing the appro-  
priate SPC.

The results of this project are :

1. Using 2 kinds of SPC for controlling the production process
  - 1.1 Using  $\bar{X}$  - R Chart 2 stations
  - 1.2 Using CPS Check Sheet 11 stations
2. Using 4 kinds of SPC Evaluated
  - 2.1 Using  $C_p$  or  $C_{PK}$  in Production Lines
  - 2.2 Accuracy of Checking in checking point
  - 2.3 Percentage of Defective
  - 2.4 Total of Production

Summation from SPC are :

- 1) Using  $\bar{X}$  - R Chart , % Defect isn't different , but % Total Productive is de-  
creased. (Detail in Chapter 5)
- 2) Using CSP Check Sheet , Checking accuracy is increased. (Detail in Chapter 5)

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