



# **iJRASET**

International Journal For Research in  
Applied Science and Engineering Technology



---

# **INTERNATIONAL JOURNAL FOR RESEARCH**

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

---

**Volume: 7      Issue: II      Month of publication: February**

**DOI: <http://doi.org/10.22214/ijraset.2019.2117>**

**[www.ijraset.com](http://www.ijraset.com)**

**Call:  08813907089**

**E-mail ID: [ijraset@gmail.com](mailto:ijraset@gmail.com)**

# Analysing and Process Development of Products in Production

K. Balachandar<sup>1</sup>, S. Niranjana<sup>2</sup>, S. Mohamed Fahim<sup>3</sup>

<sup>1,2,3</sup>Mechanical Department, Prathyusha Engineering College

**Abstract:** *The objective of this project is to make documentation of process planning that going to Improving new product development (NPD) process by analysing failure cases for the Industries and the automobile with the help of certain strategies and workflow. Process planning is one of the most important and necessary step in manufacturing industry. By production this process one can have a greater control over the process. It is very useful in industries for manufacturing Units in order to save the time and manpower. Most of industries getting suffered to do production without error and failure of products. But by using this methodology can get clear solution from this and they can improve production as well as reduce cost by making more targets by keeping customer demand in our mind.*

**Keywords:** *Cross over product, Existing failure product, Auto-cad, Proper work flow, Failure and rectified model*

## I. INTRODUCTION

Now a day's most of automobile industries having major problem that recovery the failure product to working model. So we analysed some of the methodology that getting New Product Development (NPD) process by analysing failure cases. For this process we gone through **cross over** failed product by working through design to find error destination to be rectified. We used design software called Auto-Cad for making a rectifying product. Most of industries getting suffered to do production without error and failure of products. But by using this methodology can get clear solution from this and they can improve production as well as reduce cost by making more targets by keeping customer demand in our mind. By analysing failure model we found that major error was degree changing on interlink place of cross over. Finally we changed degree by doing some work flow and specification on failed design to get rectified product.

## II. WORK FLOW

- 1) *Step 1:* Prospective studies of the NPD process are performed using the existing literature and preliminary references.
- 2) *Step 2:* Comparative analysis between the current processes and a NPD process is performed.
- 3) *Step 3:* Phase-based evaluations upon failed product cases are conducted with a NPD process so as to identify the abridged steps and root-causes of failures.
- 4) *Step 4:* Finally, renewed priorities are set forth by utilizing the analytic hierarchy process analysis and questionnaire analysis upon the above identified causes of failures.

## III. OPERATIONS

Following steps has been used on failure model to get rectified product.

- 1) Job Review & Approval
- 2) Cut to Required Length
- 3) Dimensional Inspection
- 4) Machine OD. & ID. as per Attached Drawing
- 5) Dimensional Inspection
- 6) Machine XT -57. Pin Connection at one End.
- 7) Dimensional Inspection
- 8) Machine 4-1/2" NC-50 Box Connection at one End
- 9) Dimensional Inspection
- 10) Final inspection
- 11) Marking & stamping
- 12) Phosphating
- 13) Inspection
- 14) Painting
- 15) Final inspection done by delivery man. (To check with paper work & tool).

#### IV. DESIGN OF FAILURE PRODUCT

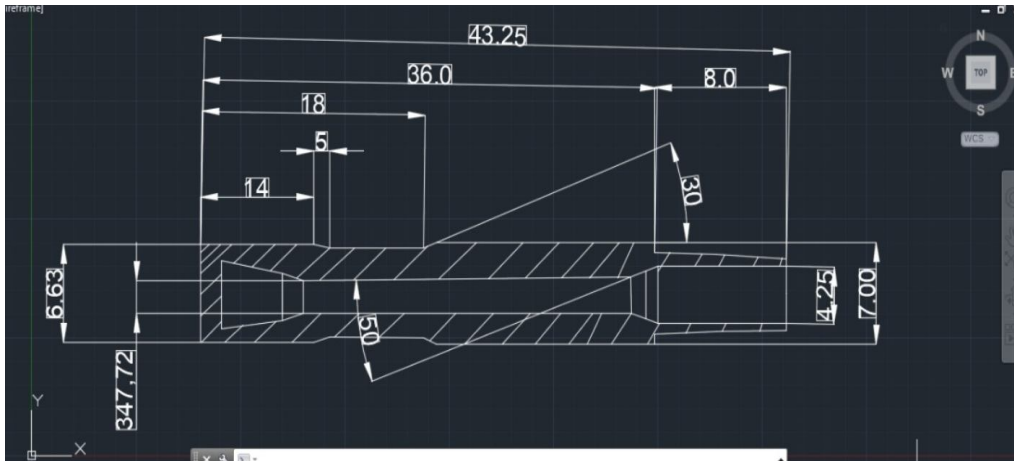
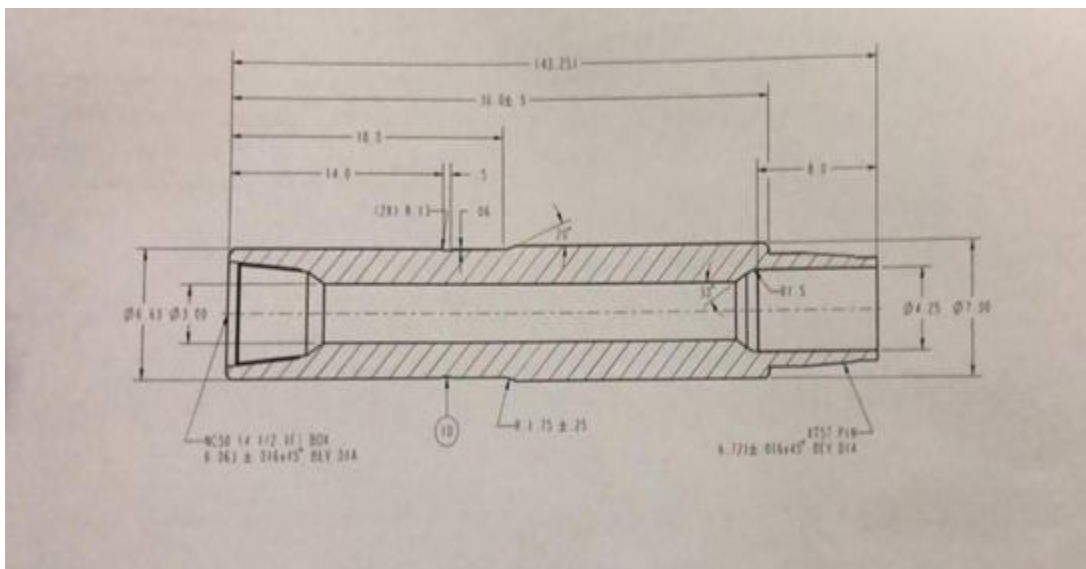


TABLE I  
PRODUCT SPECIFICATION

s.no	ATTRIBUTES	VALUE
1	Coating specification, Connection down name, Generic description, Overall length	WC 101 XT 57 Cross over 43.25 in
2	Minimum Inside Diameter, Connection Up Type, Connection Down Type	2.97 in Box Pin
3	Coating specification supplements	S 0
4	Maximum outside diameter	7.03 in
5	Model designation	sub

#### V. ANALYSED DESIGN



## VI. ACKNOWLEDGMENT

From this we justified that most of industries getting suffer to do production with less cost and less manpower. But by using this they can get clear solution from this and they can improve production as well as reduce cost by making more targets by keeping customer demand in our mind.

## VII. CONCLUSIONS

We are very please in presenting our project on “ANALYSING AND PROCESS DEVELOPMENT OF PRODUCTS IN PRODUCTION” under us ateam work.

We would like to thank our chairman Mr. P. RAJA RAO, our honorable Principal Dr.P.L.N. RAMESH of this institution for extending their cooperation throughout our project.

It is our privilege to express our sincere gratitude to Dr. P. JAYARAMAN, Head of the department of mechanical engineering for prompt and help in providing facilities to complete this project successfully.

We own our sincere gratitude to Mr.K.BALACHANDER, Assistant professor, Department of mechanical engineering, who guided us throughout the process of the process work. His enthusiasm and vision always inspired and enlightened us.

## REFERENCES

- [1] [Yeon-Hak Kim](#), [Sun-Wong Park](#), [Yeong-Wha Sawng](#), (2016) "Improving new product development (NPD) process by analysing the existing NPD process and failure cases of the Company.", Asia Pacific Journal of Innovation and Entrepreneurship, Vol. 10 Issue: 1, pp.134-150.
- [2] Edgett, S. & Cooper, R. 2008. Ideation for Product Innovation: What are the best methods?. PDMA Visions Magazine, .pp. 3-4.
- [3] Soni, A. & Cohen, H. 2000. Successfully launching your product: getting it right. Handbook of Business Strategy, 5(1), pp. 263-268.
- [4] Thomke, S. & Donald, R. 2012. Six myths of product development. Harvard Business Review.
- [5] Ulrich, K. T. & Eppinger, S. P. 2012. Product Design and Development. McGraw-Hill. New York.
- [6] Adams, D. 2012. B2B Launch: Advanced Industrial Marketing, Inc. 1st ed. Akrani, G., 2010. Marketing Mix and 4P's of Marketing.



10.22214/IJRASET



45.98



IMPACT FACTOR:  
7.129



IMPACT FACTOR:  
7.429



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24\*7 Support on Whatsapp)