

Postgraduate Certificate Lean Manufacturing in Industrial Production





Postgraduate Certificate Lean Manufacturing in Industrial Production

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online
- » Target Group: University graduates, diploma and degree holders who have previously completed any of the degrees in the field of Social and Legal Sciences, Administration and Business Administration

Website: www.techtute.com/us/school-of-business/postgraduate-certificate/lean-manufacturing-industrial-production

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01 Welcome

Lean Manufacturing is an industrial production methodology focused on maximizing efficiency, minimizing waste and improving the quality of the final product. By focusing on the elimination of waste, better utilization of resources and more agile and effective production is achieved. Therefore, it is a knowledge that demands specialized professionals, which has led TECH to create the following program with the aim of training students in a booming sector with a great demand for human talent. This is a 100% online program, which also includes audiovisual resources, complementary readings and a format that is easy to access from any device with an Internet connection.



Postgraduate Certificate in Lean Manufacturing in Industrial Production
TECH Technological University



“

You will become more agile and efficient in each of the industrial processes within the company with the knowledge of this Postgraduate Certificate”

02

Why Study at TECH?

TECH is the world's largest 100% online business school. It is an elite business school, with a model based on the highest academic standards. A world-class center for intensive managerial skills education.



“

TECH is a university at the forefront of technology, and puts all its resources at the student's disposal to help them achieve entrepreneurial success"

At TECH Technological University



Innovation

The university offers an online learning model that balances the latest educational technology with the most rigorous teaching methods. A unique method with the highest international recognition that will provide students with the keys to develop in a rapidly-evolving world, where innovation must be every entrepreneur's focus.

"*Microsoft Europe Success Story*", for integrating the innovative, interactive multi-video system.



The Highest Standards

Admissions criteria at TECH are not economic. Students don't need to make a large investment to study at this university. However, in order to obtain a qualification from TECH, the student's intelligence and ability will be tested to their limits. The institution's academic standards are exceptionally high...

95% | of TECH students successfully complete their studies



Networking

Professionals from countries all over the world attend TECH, allowing students to establish a large network of contacts that may prove useful to them in the future.

+100000

executives prepared each year

+200

different nationalities



Empowerment

Students will grow hand in hand with the best companies and highly regarded and influential professionals. TECH has developed strategic partnerships and a valuable network of contacts with major economic players in 7 continents.

+500

collaborative agreements with leading companies



Talent

This program is a unique initiative to allow students to showcase their talent in the business world. An opportunity that will allow them to voice their concerns and share their business vision.

After completing this program, TECH helps students show the world their talent.



Multicultural Context

While studying at TECH, students will enjoy a unique experience. Study in a multicultural context. In a program with a global vision, through which students can learn about the operating methods in different parts of the world, and gather the latest information that best adapts to their business idea.

TECH students represent more than 200 different nationalities.



TECH strives for excellence and, to this end, boasts a series of characteristics that make this university unique:



Analysis

TECH explores the student's critical side, their ability to question things, their problem-solving skills, as well as their interpersonal skills.



Academic Excellence

TECH offers students the best online learning methodology. The university combines the Relearning method (postgraduate learning methodology with the best international valuation) with the Case Study. Tradition and vanguard in a difficult balance, and in the context of the most demanding educational itinerary.



Economy of Scale

TECH is the world's largest online university. It currently boasts a portfolio of more than 10,000 university postgraduate programs. And in today's new economy, **volume + technology = a groundbreaking price**. This way, TECH ensures that studying is not as expensive for students as it would be at another university.



Learn with the best

In the classroom, TECH's teaching staff discuss how they have achieved success in their companies, working in a real, lively, and dynamic context. Teachers who are fully committed to offering a quality specialization that will allow students to advance in their career and stand out in the business world.

Teachers representing 20 different nationalities.



At TECH, you will have access to the most rigorous and up-to-date case analyses in academia"

03

Why Our Program?

Studying this TECH program means increasing the chances of achieving professional success in senior business management.

It is a challenge that demands effort and dedication, but it opens the door to a promising future. Students will learn from the best teaching staff and with the most flexible and innovative educational methodology.



“

We have highly qualified teachers and the most complete syllabus on the market, which allows us to offer you education of the highest academic level”

This program will provide you with a multitude of professional and personal advantages, among which we highlight the following:

01

A Strong Boost to Your Career

By studying at TECH, students will be able to take control of their future and develop their full potential. By completing this program, students will acquire the skills required to make a positive change in their career in a short period of time.

70% of students achieve positive career development in less than 2 years.

02

Develop a strategic and global vision of the company

TECH offers an in-depth overview of general management to understand how each decision affects each of the company's different functional fields.

Our global vision of companies will improve your strategic vision.

03

Consolidate the student's senior management skills

Studying at TECH means opening the doors to a wide range of professional opportunities for students to position themselves as senior executives, with a broad vision of the international environment.

You will work on more than 100 real senior management cases.

04

You will take on new responsibilities

The program will cover the latest trends, advances and strategies, so that students can carry out their professional work in a changing environment.

45% of graduates are promoted internally.

05

Access to a powerful network of contacts

TECH connects its students to maximize opportunities. Students with the same concerns and desire to grow. Therefore, partnerships, customers or suppliers can be shared.

You will find a network of contacts that will be instrumental for professional development.

06

Thoroughly develop business projects.

Students will acquire a deep strategic vision that will help them develop their own project, taking into account the different fields in companies.

20% of our students develop their own business idea.

07

Improve soft skills and management skills

TECH helps students apply and develop the knowledge they have acquired, while improving their interpersonal skills in order to become leaders who make a difference.

Improve your communication and leadership skills and enhance your career.

08

You will be part of an exclusive community

Students will be part of a community of elite executives, large companies, renowned institutions, and qualified teachers from the most prestigious universities in the world: the TECH Technological University community.

We give you the opportunity to study with a team of world-renowned teachers.

04 Objectives

TECH has as one of its main objectives to select academic subjects that help students improve their skills and abilities to achieve their work goals. In this way, the Relearning methodology is used, which focuses on a practical process of real cases and simulation, which guarantees practical training based on repetition and experience, leaving behind the conventional model of memorization.



“

As you progress through the program, you will acquire new knowledge that will lead you to enhance your professional profile”

TECH makes its students' objectives its own
Working together to achieve them

The **Postgraduate Certificate training in Lean Manufacturing in Industrial Production** will teach the student to:

01

Analyze and be able to distinguish the lean philosophy from other approaches to operations improvement

02

Identify any waste in the company's processes

03

Distinguish the different types of industrial processes in which it is possible to act





04

Differentiate the different types of flow in an operational context

05

Identify the types of demand that our industry must satisfy

06

Develop the tools and techniques used in Lean Manufacturing quality management

05

Structure and Content

The syllabus of this program has been designed following the guidelines required by the business sector. Inside, the professional will find updated and rigorous information on the use of Lean Manufacturing in industrial production. This content will be available on the Online Campus, which can be accessed from any device with an Internet connection and will be available 24 hours a day.



“

You will stand out in a booming sector with great projection towards the future and with great opportunities at international level”

Syllabus

The academic program has been designed to provide students with a rigorous and complete knowledge of the Lean Manufacturing methodology and its application in industrial production processes. Through this teaching, students will have the opportunity to deepen their understanding of the principles of this management philosophy and the implementation of strategies to achieve the proposed objectives.

The training will include audiovisual summaries of each topic, detailed videos, specialized readings and case studies accessible online from any Internet-connected device at any time of the day.

In addition, the Relearning methodology, based on the continuous repetition of the most important concepts, will facilitate the consolidation of these concepts in the student's mind, without the need to invest long hours in study and memorization.

This flexible academic program is a great opportunity for those students who are looking for a comprehensive and intensive learning and adapts to their daily schedules and professional motivations in a business environment that demands highly qualified personnel with solid management skills.

This Postgraduate Certificate is developed over 6 week and is divided into 1 module:

Module 1

Lean Manufacturing. Principles and Context



Where, When and How is it Taught?

TECH offers the possibility of developing this Postgraduate Certificate in Lean Manufacturing in Industrial Production completely online. During the 6 weeks of the specialization, the student will be able to access all the contents of this program at any time, which will allow the students to self-manage their study time.

A unique, key, and decisive educational experience to boost your professional development and make the definitive leap.

Module 1. Lean Manufacturing Principles and Context

1.1. Lean Manufacturing

- 1.1.1. Lean Manufacturing. Origin
- 1.1.2. Lean Manufacturing Principles
- 1.1.3. Benefits of Lean Manufacturing Methodology

1.2. Benefits of Lean Manufacturing Methodology Production philosophy at the Toyota plant

- 1.2.1. Toyota Production System (TPS)
- 1.2.2. Key principles of the TPS
- 1.2.3. The Pillars of TPS

1.3. Precursors of Lean Manufacturing

- 1.3.1. Kiichiro Toyoda, Taiichi Ohno and Shigeo Shingo
- 1.3.2. Edward Deming
- 1.3.3. James Womack, Daniel Jones and Michael George

1.4. Lean Concept and its Application in Production

- 1.4.1. Value Identification and Value Stream Mapping
- 1.4.2. Creation of continuous flow and establishment of Pull Production
- 1.4.3. Pursuit of Perfection

1.5. Lean Manufacturing and Total Quality Management

- 1.5.1. Lean Manufacturing and Total Quality Management
- 1.5.2. Commonalities between Lean Manufacturing and Total Quality Management
- 1.5.3. Differences between Lean Manufacturing and Total Quality Management

1.6. Lean Manufacturing y 6 Sigma

- 1.6.1. Lean Manufacturing y 6 Sigma
- 1.6.2. Commonalities between Lean Manufacturing and 6 Sigma
- 1.6.3. Differences between Lean Manufacturing and 6 Sigma

1.7. Lean Manufacturing and Process Reengineering

- 1.7.1. Lean Manufacturing and Process Reengineering
- 1.7.2. Commonalities between Lean Manufacturing and process reengineering
- 1.7.3. Differences between Lean Manufacturing and Process Reengineering

1.8. Lean Manufacturing and Theory of Constraints (TOC)

- 1.8.1. Lean Manufacturing and Theory of Constraints (TOC)
- 1.8.2. Commonalities between Lean Manufacturing and Theory of Constraints (TOC)
- 1.8.3. Differences between Lean Manufacturing Theory of Constraints (TOC)

1.9. Lean Manufacturing. Integration with Industry 4.0

- 1.9.1. Evolution of Lean Manufacturing in the Industry 4.0 era
- 1.9.2. Integration of Lean Manufacturing with Industry 4.0
- 1.9.3. Future of Lean Manufacturing in the era of Industry 4.0

1.10. Applications of the Lean philosophy in other areas: Lean Logistics, Lean Office, Lean Service

- 1.10.1. Lean Logistics, Lean Office, Lean Service. Applications
- 1.10.2. Lean Logistics applications
- 1.10.3. Lean Office applications
- 1.10.4. Lean Service



The online modality of this program allows you to combine your daily routine with the acquisition of new knowledge”



06

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.





“

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

TECH Business School uses the Case Study to contextualize all content

Our program offers a revolutionary approach to developing skills and knowledge. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

“*At TECH, you will experience a learning methodology that is shaking the foundations of traditional universities around the world*”



This program prepares you to face business challenges in uncertain environments and achieve business success.



Our program prepares you to face new challenges in uncertain environments and achieve success in your career.

A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch to present executives with challenges and business decisions at the highest level, whether at the national or international level. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and business reality is taken into account.

“

You will learn, through collaborative activities and real cases, how to solve complex situations in real business environments”

The case method has been the most widely used learning system among the world's leading business schools for as long as they have existed. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

What should a professional do in a given situation? This is the question we face in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They must integrate all their knowledge, research, argue and defend their ideas and decisions.

Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

Our online system will allow you to organize your time and learning pace, adapting it to your schedule. You will be able to access the contents from any device with an internet connection.

At TECH you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

Our online business school is the only one in the world licensed to incorporate this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

With this methodology we have trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, markets, and financial instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.



This program offers the best educational material, prepared with professionals in mind:



Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



Management Skills Exercises

They will carry out activities to develop specific executive competencies in each thematic area. Practices and dynamics to acquire and develop the skills and abilities that a high-level manager needs to develop in the context of the globalization we live in.



Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Case Studies

Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best senior management specialists in the world.



Interactive Summaries

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



07

Our Students' Profiles

The Postgraduate Certificate is aimed at Graduates, Diplomas and University Graduates who have previously completed any of the following programs in the fields of Social and Legal Sciences, Administration and Economics.

This program uses a multidisciplinary approach as the students have a diverse set of academic profiles and represent multiple nationalities.

Professionals who, being university graduates in any area, have two years of work experience in the business and industrial field, may also take the Postgraduate Certificate.





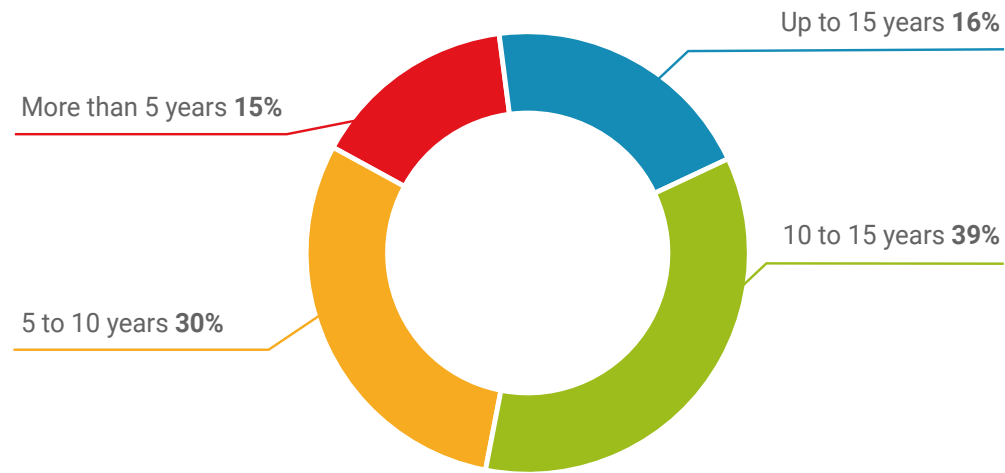
“

You will become an expert in Lean Manufacturing and its application to the industrial world”

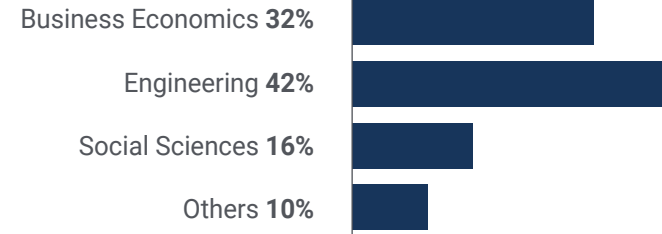
Average Age

Between **35** and **45** years old

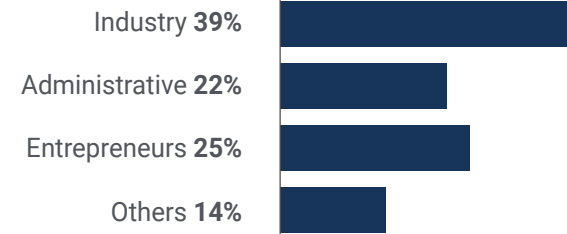
Years of Experience



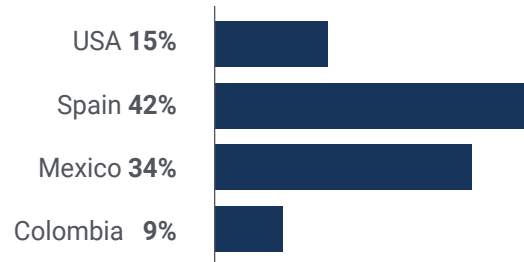
Training



Educational Profile



Geographical Distribution



Carlos Valdez Sanabria

Manager Industrial

"Thanks to the Postgraduate Certificate in Lean Manufacturing in Industrial Production, I have been able to optimize my company's processes and improve the quality of our products"

08

Course Management

In its quest to offer quality academic training, TECH has chosen to lead its program a highly experienced and active teaching team in the field of industrial production. This group of professors is composed of experts and specialists who have stood out throughout their professional careers, implementing the use of Lean Manufacturing in their practice. Together, they have compiled and updated the most rigorous industry information in an exclusive, high-impact academic compendium.





“

You will learn through high-impact audiovisual resources, designed by experts and specialists with several years of experience”

Management



Mr. Luis Jover Miravittles

- ◆ President and Founding Partner Grupo Quarck, S.L. Founding Partner
- ◆ Senior Partner in LOGIXS
- ◆ Vice President of €-Corp. S.L
- ◆ IQS Executive Education Director
- ◆ Associate Professor at IE Business School
- ◆ Coordinator of the Master's Degree in Integral Business Management at the Universidad Iberoamericana in Mexico City
- ◆ Advisor to the employers' association Cecot
- ◆ Chemical Engineer at the Chemical Institute of Sarria (IQS)
- ◆ Master in Business Administration MBA IESE
- ◆ Member of the Hispack organizing committee

Professors

Ms. Cristina Díaz Pizarro

- ◆ Assistant Branch Manager, Banco Santander
- ◆ Double Degree in Business Administration and Tourism Management from the University of Extremadura
- ◆ University Degree in Neuromarketing from Ineaf Business School
- ◆ MIFID II Certification In Financial Advice by Santander Financial Institute
- ◆ Real Estate Credit Products Specialist by Santander Financial Institute



09

Impact on Your Career

Taking the Postgraduate Certificate in Lean Manufacturing in Industrial Production can have a great impact on the career of a professional in the business field. This program offers specialized training in Lean Manufacturing techniques and tools, allowing the student to improve the efficiency of production processes and reduce costs.





“

*You will achieve your goals
thanks to the academic tools
TECH has for you”*

Are you ready to take the leap? Excellent professional development awaits you

TECH's Postgraduate Certificate in Lean Manufacturing in Industrial Production is an intensive program that prepares you to face challenges and business decisions in the field of Lean Manufacturing. The main objective is to promote your personal and professional growth. Helping you achieve success.

If you want to improve yourself, make a positive change at a professional level, and network with the best, then this is the place for you.

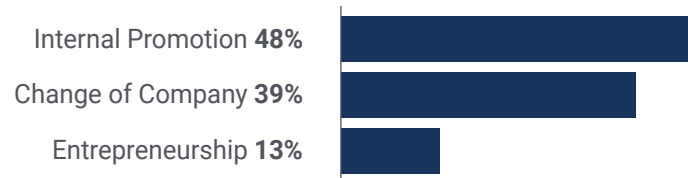
You will be able to complete this program at your own pace, without having to move to an on-site center or take concurrent classes.

A program that will lead you to improve your company's production.

Time of Change



Type of change



Salary increase

This program represents a salary increase of more than **27%** for our students



10

Benefits for Your Company

Companies can gain many benefits by having a specialist who has completed this program in their team. These professionals are able to develop effective personal branding strategies on the platform and improve the company's digital reputation. In addition, their skills in social media management and the creation of quality content can increase the organization's visibility and attract new customers. In short, having specialists trained in Lean Manufacturing in Industrial Production is an advantage for any company that wants to stand out in today's digital market.



“

You will develop extensive skills in a sector with high demand, accessing unique opportunities at national and international level”

Developing and retaining talent in companies is the best long-term investment.

01

Growth of talent and intellectual capital

The professional will introduce the company to new concepts, strategies, and perspectives that can bring about significant changes in the organization.

02

Retaining high-potential executives to avoid talent drain

This program strengthens the link between the company and the professional and opens new avenues for professional growth within the company.

03

Building agents of change

You will be able to make decisions in times of uncertainty and crisis, helping the organization overcome obstacles.

04

Increased international expansion possibilities

Thanks to this program, the company will come into contact with the main markets in the world economy.



05

Project Development

The professional can work on a real project or develop new projects in the field of R & D or business development of your company.

06

Increased competitiveness

This program will equip students with the skills to take on new challenges and drive the organization forward.

11

Certificate

The Postgraduate Certificate in Lean Manufacturing in Industrial Production guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



“

*Successfully complete this program
and receive your university qualification
without having to travel or fill out
laborious paperwork”*

This **Postgraduate Certificate in Lean Manufacturing in Industrial Production** contains the most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees

Title: **Postgraduate Certificate in Lean Manufacturing in Industrial Production**

Official N° of Hours: **150 h.**



*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.



Postgraduate Certificate Lean Manufacturing in Industrial Production

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Postgraduate Certificate Lean Manufacturing in Industrial Production

