

Glass Processing Technology
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Lecture – 01
Introduction

Hello, friends. My name is Chiranjit Roy. I am the instructor for this course on Glass Processing.

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The Building Industry

The Indian economy has seen an unprecedented growth..

- The Private & Govt. infrastructure is perceiving an exponential growth
- More & more constructions are happening and will continue to grow
- Glass is extensively used in contemporary buildings

The emergence of building sector has in turn...

- Glass Processing Industry Progressive
 - Newer Applications
 - New investments
 - Modern Technologies
 - Reaching smaller cities



As you all aware the building industry Indian economy is in a boom now and the Indian economy has been seen an unprecedented code for almost a decade. And because, of this boom the private and government infrastructure is pursuing an exponential growth and more and more constructions are happening and I am expecting it will continue to go further and because of this growth glass is extensively used in all buildings and other applications.

And, because of this growth in the glass demand the processing industries also become progressive, as there are newer new applications where our processing industry is supplying glasses for various applications. And, they are also investing a new investments and they are adopting new technologies and modern technologies and they are now not only limited to all metro cities now the processing industry as a whole is growing.

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The Glass Processing Industry

the challenges faced by the Industry today..

- ⌘ Newer materials & applications
- ⌘ Complexity in process
- ⌘ Stringent Quality Norms
- ⌘ Shortage of skilled personnel

The need of continuing education..

- ⌘ Build Knowledge & Contemporary Skills

Hence this course on Glass Processing is designed

Transformation on Knowledge & Skills

NPTEL GLASS ACADEMY

The slide features a speaker in a dark suit and light blue shirt on the right. The background is white with blue and red accents. Logos for NPTEL and Glass Academy are in the top right. A decorative city skyline is at the bottom.

But, there are challenges they are like newer materials and applications there are complexity in processes there are stringent quality norms because the clients are also become educated, there are lot of architects, consultants, clients are coming from abroad they are also demanding high quality norms. And, moreover there are shortage of skilled personnel because of suddenly unprecedented growth in the industry. Hence, we need to build knowledge and contemporary skills among the people in the industry so, hence the this course on glass processing is designed.

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Course Contents

- ⌘ Glass manufacturing process
 - ⌘ Float Glass Manufacturing
 - ⌘ Coating Technology
- ⌘ Glass as a building material
 - ⌘ Glass Selection
 - ⌘ Applications
- ⌘ Glass Processing
 - ⌘ Industrial & Glass handling safety
 - ⌘ Ware House management
 - ⌘ Production Planning & Control
 - ⌘ Pre-Processing – Cutting/Grinding/Drilling/Washing
 - ⌘ Tempering
 - ⌘ IGU
 - ⌘ Lamination

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So, the course contents will be the glass manufacturing process where we will be imparting knowledge on float manufacture and coating technology. Second we will also be covering glass as a building material how do you select glass what are the applications of glasses. Moreover, in this course we will also cover the in depth understanding on glass processing like industrial and glass handling safety we will covering in depth warehouse management, how do you manage your warehouse.

We will be covering in depth production planning and control see this is very important, how do your production team and sales team can coordinate together to make a successful supplies to the client on time. We will be covering in depth of pre processing like cutting, grinding, drilling, washing, what are the precautions to be taken, in the tempering process what are the challenges you faced in tempering problem will be covering in that in IGUs what are the test important, in lamination process what precautions to be taken for lamination.

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Course Contents

- Heat Soak
- Ceramic fritting- Roller/Screen/Digital
- Processing Standards
- Quality Test
- Non Conformity
- Root Cause Analysis for Troubles
- Testing & Certification
- Post Manufacturing Expenses
- 5S
- QMS
- Cost Saving Programs
- Glazing Systems ,Hardware & Fabrications
- Sustainability
- People Development

The slide includes the NPTEL logo (National Programme on Technology Enhanced Learning) and the Glass Academy logo. A video inset shows a man in a dark suit and light blue shirt speaking.

Heat soaking will be covering, we will be covering different ceramic fritting processes like roller screen digital all kinds of ceramic printing processes. We will be also covering the processing standards for tempering lamination IGU, we will also be covering the quality test to be done for the various processes, how do you do non-conformity, how do you separate nonconformity material.

We will be doing root cause analysis for troubles for the process, what are the different testing and certification we will cover in this course. We will also cover the post manufacturing expenses it is very important for us to understand the post manufacturing expenses see production expenses we can control, but there are some expenses which is happening after the production.

So, we will be discussing on that point also in this course. Then we will be discussing on 5S quality management systems, then you will have some course on cost saving programs. And finally, we will be few a brief about glazing systems, hardware, fabrications; we will be also covering sustainability and people development program. I wish you all the best for this course on glass processing.

Thank you.