## **TECHNOLOGY 92**

## I'M THE KING OF TECHNOLOGY

## Chapter 92 Light Tubes

When Landon got to the lower region, he immediately went to the Department C2 (glass) and loaded a truck with already cut glass tubes and bulbs..... As well as 7 oven like-kilns for heating.

There were several shapes presently made: large long tubes, small long tubes, short spiral tubes, and so on.

Prior to this month, Landon had already known that he would make light bulbs for the new industries. Hence he requested for the glass department to make tons of these tubes.

Flourescent lights are generally long lasting, and best for schools, industries, homes, hospitals and so on.

Although Incandescent light bulbs were way more inefficient and short lasting than fluorescent bulbs, they could still be used in residential houses.

Since they wouldn't last long, it was clear to see that they would be cheaper than fluorescent bulbs.. Although not by a lot.

People always choose cheaper items first, even if the difference between the 2 items was by a penny.... Hence Landon still had to make these bulbs for those who wanted to valued quantity over quality.

One Incandescent light bulb could last for only 1,500 hours.... but the latter could last for more than 10,000 hours.

Once Landon reached Department C6, he realized that this department needed more buildings.

Department C6 alone occupied 4 buildings.. but right now, Landon decided to add another building for the department.

Which would be designated for the creation of light bulbs.

Speaking of which, Landon realised that the construction industry was quickly running out of space.

Previously, there were 13 departments that already occupied 16 buildings within the Construction Industry.

But now, he added a new department for tissue paper and a new building towards department C6.

With those out of the way, the construction Industry had no more massive unused buildings left.

There were just 7 wide, one-story buildings that were previously used as sleeping quarters for the maids, slaves and servants.

Off the bat, those 7 slave buildings could only be used as storage units.

So if Landon wanted more space, he would just have to construct more buildings, or create a new industry for whatever he wanted to create.

Looking at the electrical engineers in Training, Landon realized that he couldn't just pull them all out... As they were still needed in creating heavy machines, at building 4 of department C6.

Hence he decided to break the men into 2 groups, and alternate teaching them daily.

Today, he would teach group 1... While the other group would carry on with their usual duties... And the next day, he would focus group 2.

In addition by the end of the week, Landon would assign specific people amongst them to continue light bulb production.

He just wanted to teach them all, as it was beneficial for their education as electrical engineers.

Plus, some of them might even end up as repair men when maintenance is needed... So it was best for them to understand everything as much as possible.

The men offloaded the tubes from the trucks gently, lest they broke... and carried them into their new building.

Landon had the men set up the room as a lecture hall, and also placed all the materials in front of them.

"Today, we'll create long fluorescent light tubes, and the day after that, I'll show you all how to make compact fluorescent bulbs... And later on, we'll make incandescent bulbs as well.

In addition next month, I will continue on by teaching you all how to create Halogen and LED light bulbs.

But for this month, let's concentrate on the first 3: Fluorsecent tubes, fluorescent bulbs, and Incandescent bulbs."

Speaking of which, Landon couldn't wait to make LED lights... those ones could last for more than 50,000 hours, and were widely used back on earth by 80% of all the industries, schools and so on.

Those ones took time to make, hence Landon postponed them for next month.

The men wore their safety wear, and they sat in the classroom quietly.

"Question!!... For electricity to work, what do we need?"

Immediately, several hands were raised at once.

Landon smiled.

For the past 3 months, every Saturday was used as lecture day.

Landon would teach them for 3 hours and give them weekly assignments to complete.

"Yes, Christopher."

A young man in his early 20's got up instantly.

"There needs to be a supply of electric charges, some form of push to move the charges, and a pathway to carry the charges."

"Correct"

**Everyone clapped** 

"Usually what push system is used in electricity?"

"Cathode-anode push system.. the cathode is positively charged and the anode is negatively charged.. making the electrons flow freely between 2 points". Another answered.

"What are the types of Current flow?"

"Static?" Someone answered.

"Good guess..... But no... .. That is a type of electricity... What I asked for, was the 'Current Flow'....who else?"

"A.C and D.C.. that's Alternating and Direct Current flow"

"Correct... Now hold the larger glass tube in front of you all and let's begin."

Each person held the large glass tube in front of them, and followed Landon's lead.

Landon took out his own glass tube and passed white phosphor liquid through the clear transparent tube, instantly coating it white.

Phosphor was a chemical that could cause the bulbs to basically glow brightly. This kind of glow could be green, pink, white, blue and so on.

After the workers had their own tubes coated, they immediately started taking notes on the importance of phosphor coating.

Landon then went on to the next phase.

It was time to start with the internal workings of the bulbs, specifically the electrical components.

Landon took coiled tungsten wires, and placed them at both ends of a smaller glass tube that was on his table.

The mouth of smaller tube was heated, so as to melt to glass around the Tungsten wire... Hence forming a glass mold around the wire.

As the lecture progressed, the men began to note the importance of other coating chemicals like Barium, that was used along the wire.

At the end, tubes were filled with mercury, argon, and nitrogen gases, as well as other important tube components.

These gases all had different uses.. Like argon that is useful for extending the life-slan of the light tubes.

At the end of the day, Baymard had successfully created their first batch of Fluorescent tubes.