

Process Flow Chart of Pigtail Production Workshop



Overview

Improve your business productivity by following clear and easy-to-read steps in this production process flowchart template from Edraw.

Key Takeaways

The production of fiber optic pigtails involves a structured workflow from raw material preparation to final inspection, ensuring high-quality and reliable components. 1.

Raw Material Preparation

The process begins with selecting the appropriate fiber optic cables (single-mode or multi-mode) and connectors (SC, LC, ST, FC, MTP, etc.) based on customer requirements. Protective sheathing and jackets are also prepared to ensure durability and protection of the fiber core during handling and installation. All materials are organized and labeled for easy access during production.

2.

Cutting and Stripping

Fiber cables are typically supplied on reels and must be cut to the required lengths using a fiber cable cutting machine. This ensures precision and consistency. After cutting, the outer jacket is stripped using a jacket stripper, and the tight buffer cladding is removed with a fiber miller stripper to expose the core for connector insertion.

3.

Cleaning and Pre-handling

Cleanliness is critical in fiber optic production. The exposed fiber is cleaned to remove dust and residues, preventing contamination that could affect signal transmission. Cables are arranged in a sequence that facilitates smooth connector attachment.

4.

Connector Attachment

The fiber is injected with epoxy glue (commonly 353 epoxy) and inserted into the ferrule of the connector. This can be done manually or using automated machines. The fiber is then cured in a vertical or horizontal solidification furnace to harden the epoxy and secure the fiber in place.

5.

Polishing and Inspection

After curing, the half-finished pigtails are cleaned using an ultrasonic cleaning machine. The connector interface is polished to ensure the fiber core aligns perfectly with the ferrule. Microscopic inspection (400x or 600x) is performed to verify cleanliness and alignment, ensuring minimal signal loss.

6.

Testing and Quality Control

Each pigtail undergoes optical testing to measure insertion loss, return loss, and other performance parameters. Defective units are rejected or reworked. Visual management tools and standardized procedures help maintain consistent quality throughout the workshop.

7.

Packaging and Storage

Finished pigtails are labeled, coiled, and packaged according to customer specifications. Proper storage prevents damage and contamination before shipment.

8.

Workshop Layout and Workflow Optimization

A well-organized workshop follows Lean Manufacturing principles, including a continuous flow layout, clearly marked zones, and visual management tools like Kanban boards and KPIs. This ensures efficient material flow, reduces waste, and allows for rapid problem-solving and process improvement. By following this structured process flow, a pigtail production workshop can achieve high-quality output, operational efficiency, and consistent product reliability.

Article Content

Flow chart of workshop product production management

This is a flow chart template for production management of workshop products, From mold development to production arrangement, Product quality inspection, What are the links in the process of

Understanding Manufacturing Process Flowcharts (With Examples)

Example 1. Swimlane DiagramExample 2. Manufacturing Process Flow DiagramExample 3. Car Manufacturing WBS TemplateExample 4. Product Manufacturing Process RoadmapA manufacturing process flow diagram is an extensively used optimization tool used to improve processes and eliminate delays. This type of diagram illustrates the movement of goods from the time the raw materials arrive at the facility to the delivery to the end user. See more on edrawsoft Edraw Software

Free Production Process Flowchart Templates - Edraw Software

Improve your business productivity by following clear and easy-to-read steps in this production process flowchart template from Edraw. Label and customize any of these single text boxes to highlight the

Free Flowchart Maker | Create Flow Charts Easily With SmartDraw's

You start by picking one of the flow chart templates included and add steps in just a few clicks. Our flowchart maker aligns everything automatically so you don't have to worry about formatting,

Free Production FlowChart Templates, Editable and Printable

Explore professionally designed production flowchart templates that are customizable and printable for free. Elevate your projects now! Production FlowChart templates are visual diagrams that map the

Layout of workshop 4.1.2. Process flow chart of the workshop

The reasonable layout of the production workshop not only helps to improve the handling efficiency of the workshop materials, but also can effectively reduce production waste and improve ...

Manufacturing Process Flow Chart | PDF | Production And ...

The document provides process flow charts for quality control from raw materials to finished goods. It includes charts for: identifying products; planning production processes and controls; processing raw

Free Flowchart Maker

Customize your flow chart template with a range of backgrounds, illustrations, graphics, and layouts that matches the process or sequence of steps you want to visualize.

How to Make a Production Flow Chart for Manufacturing Processes ...

To better understand a production flow chart, let's look at an example and illustrate what that process looks like in a production flow chart for a typical manufacturing cycle.

Process and metallurgical evaluation of outlet pigtails damage in the ...

Inevitably, the service life of components such as the reformer tubes and process gas manifold is limited. Hence, pigtail damage is an industry-wide problem and their failure is a common

What are Pigtails | Piping Glossary

What is a pigtail used for in piping systems? It protects instruments from temperature, vibration, and pressure by forming a coiled buffer between the

Linear organizational chart template for a production workshop

This linear organizational chart template for a production workshop illustrates the hierarchical structure and reporting relationships within the workshop. The flowchart outlines key

Process Flowcharts

When developing the flow chart, it is important to focus on the actual flow as it would happen in production, this includes every step from raw material coming into the factory, quality

What is a Flowchart? Process Flow Diagrams & Maps

Discover what a flowchart is, explore process flow diagrams, and learn how flow charts simplify workflows with examples, symbols, and templates at ASQ .

Pigtail Connectors Guide

Pigtail Connectors Guide - Definition, Operating Principles and Construction, Types In exploring key components in modern electrical systems, pigtail connectors

Layout of workshop 4.1.2. Process flow chart of the workshop production ...

It is the production process diagram that records the product from the raw material investment to the finished product after from publication: Research on Layout Optimization of Furniture Workshop ...

Patch Cord Pigtail Production Process-Step by Step

Detailed instructions for producing fiber optic patch cord&Pigtail, Step by Step. Want original PDF instructions? Please contact sabrina@surfiber

Free Process Flow Diagram Maker and Examples | Canva

Map, analyze, and improve your workflow or business process with a process flow diagram. Visualize your ideas with whiteboard tools and templates from Canva's online process flow diagram maker.

ISO 9001 Flowchart Basics

ISO 9001 Flowchart Training Package This full featured package includes: 27 flow diagrams Mapping Workflows Online Course (.2 CEU's) A flow chart can:

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

Contact Us

Continue your research online:

Website: <https://alfa-pro.co.za>

Technical inquiry: <https://alfa-pro.co.za/contact.html>

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

