

What is the inner diameter of the pigtail heat fusion tube



Article Overview

The inner diameter of a pigtail heat fusion tube should match the nominal pipe size and wall thickness specified by the manufacturer to ensure proper flow and reliable fusion joints.

Determining the Inner Diameter

The inner diameter (ID) of a heat fusion tube is critical because it directly affects flow rate, pressure handling, and the quality of the fusion joint. It is calculated based on the outer diameter (OD) and wall thickness (t) of the tube: $ID = OD - 2 \times \text{Wall Thickness}$. This ensures that the tube maintains the correct pressure rating and allows proper formation of fusion beads during the heat fusion process.

Considerations for Heat Fusion

- **Pipe Material and Specification:** Pigtail tubes are typically made from polyethylene (PE), and the ID must comply with the pipe's nominal size and the relevant standard (e.g., ASTM F2620 for field joining of PE pipes), .
- **Fusion Bead Formation:** During heat fusion, molten polyethylene flows outward to form inner and outer beads. The ID must allow sufficient material flow without overfilling or underfilling the joint, which could compromise strength .
- **Wall Thickness and Pressure Rating:** Thicker walls increase pressure resistance but reduce ID. The ID should balance flow requirements with structural integrity .
- **Manufacturer Guidelines:** Always consult the pipe or tube manufacturer for recommended ID and wall thickness for pigtail tubes, as variations in molecular wei...

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Phase 5 // AR-15/M16 Pistol Pigtail Gas Tube

Fix over-gassing and improve timing with the Phase 5 AR-15/M16 Pistol Pigtail Gas Tube. This 6.75" stainless tube simulates a

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Advancements in butt fusion jointing of HDPE pipes: A comprehensive ...

This review serves a dual purpose, it distils best practices for fusion-condition optimisation and evaluates joint-integrity

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Comprehensive Guide to Fiber Optic Pigtails | Gezhi Photonics

Armored Pigtails: Encased with a stainless steel tube or other sturdy material inside the outer jacket, armored fiber

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Failure analysis of cracking in the welded joints of hydrogen reformer ...

Abstract Cracking failure of Incoloy 800H welded joints used for about eight months occurred in hydrogen reformer

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F2620 Standard Practice for Heat Fusion Joining of Polyethylene Pipe ...

1.1 This practice describes procedures for making joints with polyethylene (PE) pipe and fittings by means of heat

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SIMPLEX FIBER OPTIC PIGTAILS DATASHEET

Fiber optic pigtail is a tight buffered fiber cable with connectors pre-terminated on one end and exposed fiber on the other. The

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BUTT FUSION

Butt Fusion Standard Butt Fusion Joint The most widely used method for joining individual lengths of PE pipe and pipe to PE fittings

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Tube Sizing Chart | OD, ID & Wall Thickness Reference

Tube sizing chart showing outside diameter, inside diameter, wall thickness, and gauge. Reference dimensions for custom and

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High Pressure Pigtail Selection Guide

Oxygen charging manifolds should include flexible hoses with “heat sinks” installed near CGA connection. The heat sinks will help to

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Failure analysis and creep remaining life of hydrogen reformer outlet ...

The remaining life evaluation was performed based on metallurgical evaluation of the outer diameter (OD), middle of

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(PDF) Failure analysis and creep remaining life of hydrogen reformer ...

Long-term creep failure of pigtail tubes occurred before their 100,000-hour design life. Onset of tertiary creep identified at 9.3% strain

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Failure analysis and creep remaining life of hydrogen reformer outlet ...

Pigtail tubes constitute a critical component of the outlet system of steam reformer units for hydrogen production in

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100pcs 60mm PE Heat Shrinkable Tubing Fiber Optical Cable

The optical fiber splice element is composed of: the outer diameter of the heat shrinkable tube (outer tube) is about

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Syphons for instrumentation

They are made of seamless steel pipe, carbon steel or stainless steel and in diameters of 1/4", 3/8" and 1/2" and thicknesses to

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PPI TN-51-2026

As shown in Figure 1, the external roll-back beads (outer diameter and inner diameter) are byproducts of the fusion joining

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Tubing diameter

When measuring tubing diameter, there are certain basic rules to follow. Ideally, the inner diameter should be measured using a

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60mm Fusion Splice Sleeves, 50 Pack

This sleeve contains a custom inner tube made of polyolifin, which melts around the fiber to provide both moisture and cushion

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HDPE FUSION MANUAL

NOTICE: A concave melt surface has a raised edge on the inside and outside diameter of the heated pipe end. Concave melt

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Heat Fusion Methods & Tools

The pipe and fittings are heated while being pressed against a “heated plate” for a specified period of time. The heat is absorbed into

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Molded Electrofusion Fitting Product Specification Sheet

IntegriFuse Electrofusion Fittings from Integrity Fusion Products are manufactured, tested, certified, and listed in

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How to Splice Fiber Optic Pigtailes: A Step-by-Step Guide

Master the art of fiber termination. Learn how to splice fiber optic pigtailes using fusion splicing, follow the color code,

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HEAT FUSION JOINING PROCEDURES

There are three types of heat fusion joints currently used in the industry: butt, saddle and socket fusion. Additionally, there are two

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the importance of a PIGTAIL ON A STEAM PRESSURE GAUGE

The pigtail allows steam to change phase from a gas into a liquid by dissipating the latent heat energy of steam and allowing the

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Fusion Splicing Fiber Optics

A fusion splice is a way of joining two fiber cores by melting the ends together using an electric arc. A splicing machine is used

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Mastering the Percutaneous Pigtail Thoracostomy Catheter

The optimal candidate for a pigtail catheter is a stable patient whose clinical condition can afford the additional time

Contact Us

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