

Metal Heat Treatment Gas Standards

(Nitrogen N₂, Hydrogen H₂, Argon Ar)

YIGAS INTERNATIONAL LIMITED

1. Overview

Heat treatment gases are used to control the furnace atmosphere and prevent oxidation. YIGAS offers N₂, H₂, and Ar mixtures for annealing, sintering, and carburizing.

2. Technical Specifications

Gas	Purity Level	Typical Phase	Temperature Range	Common Pressure
N ₂	≥99.999%	Gas	-196 °C	5—200 bar
H ₂	≥99.999%	Gas	-253 °C	10—200 bar
Ar	≥99.999%	Gas	-186 °C	5—200 bar

3. Industrial Standards

All gases comply with:

- ISO 14175 – Industrial protective gases
- EIGA Doc 84/19 – Furnace gas safety
- GB/T 8982–2020 – Purity and analysis

4. Applications

- N₂: Inert atmosphere protection
- H₂: Reducing gas for bright annealing
- Ar: Heat treatment of high-value alloys

5. Packaging & Supply

Cylinder • Tube Bundle • Bulk Tank • On-site Generator

6. Contact Information

www.yigasgroup.com

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This document provides reference specifications for YIGAS metal heat treatment gases. Customized supply and technical support are available upon request.