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Guidance on Practice for Electric Heat Tracing

GP 12-40

BP GROUP
ENGINEERING TECHNICAL PRACTICES

Foreword

This is the first issue of Engineering Technical Practice (ETP) GP 12-40. This Guidance on Practice (GP) is based on the following heritage documents from merged BP companies:

ACES

A EL-HT-00-G	Electrical—heat tracing—guide
A EL-HT-00-E	Electrical—heat tracing—engineering specification
A EL-HT-00-C	Electrical—heat tracing—installation specification

BP Chemicals US

CP 17-12-1	Electrical heat tracing
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BP RPSE

RP 12-15	Electrical Systems and Installations - Electric Surface Heating
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1. Scope

This document provides guidance for the design, installation, operation and maintenance of electrical heat tracing.

2. Normative references

The following normative documents contain requirements that, through reference in this text, constitute requirements of this technical practice. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this technical practice are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies.

BP Engineering Technical Practices (ETP)

GP 12-25	Earthing/Grounding
GP 12-60	Hazardous Area Electrical Installations

Institute of Electrical and Electronic Engineers (IEEE)

IEEE Std 515	Recommended practice for the testing, design, installation and maintenance of electrical resistance heat tracing for industrial applications
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National Electrical Manufacturer's Association (NEMA)

NEMA ICS 1	General standards for industrial control and systems
NEMA ICS 2	Industrial control devices, controllers and assemblies
NEMA 250	Enclosures for Electrical Equipment (1,000 Volts Maximum)

National Fire Protection Agency (NFPA)

NFPA 70	National electric code (NEC).
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International Electrotechnical Commission (IEC)

IEC 60529	Classification of degrees of protection provided by enclosures
IEC 60947	Low-voltage switchgear and control gear – All relevant parts
IEC 62086-1	Electrical Apparatus for Explosive Gas Atmospheres - Electrical resistance trace heating - Part 1: General and testing requirements
IEC 62086-2	Electrical Apparatus for Explosive Gas Atmospheres - Electrical resistance trace heating - Part 2: Application Guide for design, installation and maintenance

British Standard (BS)

BS 6351-1	Electric surface heating — Part 1: Specification for electric surface heating devices
BS 6351-2	Electric surface heating — Part 2: Guide to the design of electric surface heating systems
BS 6351-3	Electric surface heating — Part 3: Code of Practice for the installation, testing and maintenance of electric surface heating systems

