



ExTAG/735/Inf
August 2024

**INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) SYSTEM FOR
CERTIFICATION TO STANDARDS RELATING TO EQUIPMENT FOR USE IN
EXPLOSIVE ATMOSPHERES (IECEX SYSTEM)**

Title: A Proposal received from TC31 WG4 Convenor, Mr Guenter Gabriel, to discuss possible cooperation with IECEx regarding Spark Test Apparatus (STA) with the suggestion to reactivate ExTAG WG08 Common Assessment of IS Equipment and Systems.

Circulated to: ExTAG – IECEx Testing and Assessment Group

INTRODUCTION

This document is a Proposal received from TC31 WG4 Convenor, Mr Guenter Gabriel, to discuss possible cooperation with IECEx regarding Spark Test Apparatus (STA) with the suggestion to reactivate ExTAG WG08 Common Assessment of IS Equipment and Systems. The document is issued for discussion during the ExTAG 2024 Brazil Meeting.

Address:

Level 17, Angel Place
123 Pitt Street
Sydney NSW 2000
Australia

Contact Details:

Tel: +61 2 46 28 4690
Fax: +61 2 46 27 5285
e-mail: info@iecex.com
<http://www.iecex.com>

IECEX ExTAG meeting 2024

Request from
IEC SC31G/WG 4

Author:
Guenter Gabriel



Your automation, our passion.

 **PEPPERL+FUCHS**

Contents

- **Background**
- **Request**
- **Proposal**
- **Questions**

Background

IEC SC 31G/WG 4 has been established after the SC 31G plenary meeting 2011 in Melbourne with the following Title & Task

Spark Test Apparatus

- Monitor the development of the EST
- Improve the use and reliability of the existing STA. This includes further development of the guidance material and specifications drafted by the AHG for submission to MT60079-11 and -25
- Liaise with IECEx with regard to developments on the proficiency testing program for intrinsic safety

One of the convenors of WG 4 works at PTB in the department “Explosion Protection in Sensor Technology and Instrumentation”, which does a lot of research on the physics of spark ignition.

Historically, the PTB has made a significant contribution to the requirements of the current intrinsic safety standard with its research results on the spark test apparatus.

PTB is also the most recent service provider for the IECEx proficiency testing program and has conducted a round of testing with a number of ExTLs for the use of the STA.

Request

At the meeting of WG 4 in Melville in November 2023 the members made a recommendation:

WG4 recommended that IECEx ExTAG be asked to assist in the development of an OD to provide guidance to the ExTLs (users of the STA) on how to perform a proper ignition test with a repeatable and consistent test setup. Convenor Guenter Gabriel will contact the IECEx liaison officer Tim Krause, to discuss the procedure for this task.

This recommendation was based on a discussion, following a presentation titled “**Factors of safety in spark testing**”

Proposal

Background

An inactive WG for intrinsic safety tasks exists in ExTAG (ExTAGWG08):

Title: Common Assessment of IS Equipment and Systems

Description: Following the ExTAG meeting in BRDO in 12th October 2004 it was agreed to set up a working group (WG8) to produce a document that would enable consistent application of the existing Intrinsically Safe apparatus and System standards among bodies operating within the IECEx System. During the ExTAG Meeting held in Melbourne 2009 it was agreed to keep the WG on standby with Mr. David Walker as Convenor.

Proposal:

- Re-activate ExTAGWG08
- Update Title & Task of that WG
- Cooperate with IEC SC 31G/WG 4 experts to create a guidance document (OD) for the STA.
- Call for experts

Questions

Are there any questions?

Pepperl+Fuchs SE

Lilienthalstraße 200
68307 Mannheim
Germany

www.pepperl-fuchs.com

Contact

Guenter Gabriel

+49 621 776-1551

ggabriel@de.pepperl-fuchs.com



Your automation, our passion.

 **PEPPERL+FUCHS**