

<b>STN P</b>	<b>Požiadavky na zber, logistiku a spracovanie OEEZ Časť 5: Špecifikácia na konečné spracovanie frakcií OEEZ Med' a drahé kovy</b>	<b>STN P CLC/TS 50625-5</b>
		83 9062

Collection, logistics & Treatment requirements for WEEE - Part 5: Specification for the final treatment of WEEE fractions - Copper and precious metals

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/17

Obsahuje: CLC/TS 50625-5:2017

**125837**

---

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2018

Podľa zákona č. 264/1999 Z. z. o technických požiadavkách na výrobky a o posudzovaní zhody a o zmene a doplnení niektorých zákonov v znení neskorších predpisov sa slovenská technická norma a časti slovenskej technickej normy môžu rozmnogoovať alebo rozširovať len so súhlasom slovenského národného normalizačného orgánu.

**TECHNICAL SPECIFICATION**  
**SPÉCIFICATION TECHNIQUE**  
**TECHNISCHE SPEZIFIKATION**

**CLC/TS 50625-5**

August 2017

ICS 13.030.99

English Version

**Collection, logistics & Treatment requirements for WEEE - Part  
 5: Specification for the final treatment of WEEE fractions -  
 Copper and precious metals**

Exigences de collecte, logistique et traitement pour les déchets d'équipements électriques et électroniques (DEEE)  
 - Partie 5: Spécification pour le traitement final des fractions de DEEE - Cuivre et métaux précieux

Anforderungen an die Sammlung, Logistik und Behandlung von Elektro- und Elektronikaltgeräten (WEEE) - Teil 5:  
 Spezifikation für die Endbehandlung der Fraktionen von Elektro- und Elektronik-Altgeräten - Kupfer und Edelmetalle

This Technical Specification was approved by CENELEC on 2017-05-29.

CENELEC members are required to announce the existence of this TS in the same way as for an EN and to make the TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



European Committee for Electrotechnical Standardization  
 Comité Européen de Normalisation Electrotechnique  
 Europäisches Komitee für Elektrotechnische Normung

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Contents

	Page
European foreword .....	3
Introduction .....	4
1      Scope .....	5
2      Normative references .....	5
3      Terms and definitions .....	5
4      Administrative and organisational requirements .....	9
4.1    General .....	9
4.2    Management principles .....	9
4.3    Environment, Health and Safety - EHS requirements .....	9
4.4    Agreement for acceptance of materials.....	10
5      Technical requirements.....	11
5.1    General .....	11
5.2    Acceptance .....	11
5.3    Sampling and assaying .....	12
5.4    Plant and process conditions .....	13
5.5    Output wastes at the final facility.....	13
6      Monitoring and reporting .....	14
6.1    General .....	14
6.2    Recycling rate and recovery rate .....	14
6.3    Classification.....	15
6.4    Calculation .....	16
6.5    Metal yield .....	17
7      Documentation .....	17
Annex A (informative) Generic flowsheet .....	19
Annex B (normative) Limit values in final water effluent stream discharge to environment, limit values at stack to air and limit values for noise .....	20
Annex C (normative) Limit values of occupational health monitoring .....	22
Annex D (informative) Guidance on theoretical recycling and recovery rate achievements.....	23
Bibliography .....	24

## **European foreword**

This document (CLC/TS 50625-5:2017) has been prepared by CLC/TC 111X "Environment".

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

## Introduction

In order to support EN 50625-1, *Collection, logistics & Treatment requirements for WEEE - Part 1: General treatment requirements*, covering treatment of WEEE, it is essential to include normative requirements, such as management and technical requirements and target and limit values, into a document that is able to be revised to take into account both practical experience and changes in treatment technologies.

## 1 Scope

This Technical Specification addresses the processes regarding the recycling of copper and/or precious metals contained in WEEE and fractions of WEEE.

NOTE 1 For the treatment of WEEE EN 50625-1 applies.

This Technical Specification relates to the chemical and metallurgical processes used for the recycling of copper and/or precious metals contained in WEEE and fractions of WEEE, thereby differentiating it from manual/mechanical processing (see Annex A).

All chemical and metallurgical processes are included up and until the output materials will be used for their original purpose or for other purposes or will be finally disposed of.

NOTE 2 The main precious metals concerned are gold, silver and palladium.

NOTE 3 The majority of the WEEE volumes that are processed by final treatment operators consists of fractions of WEEE (e.g. circuit boards) containing copper and/or precious metals, however there may be whole small WEEE that can be treated directly in final treatment (e.g. USB sticks).

NOTE 4 Chemical and metallurgical processes are processes in which a chemical reaction takes place for example: pyrolysis, smelting, refining, solvent extraction, ion exchange, leaching/dissolution in water acids or base, precipitation, cementation or pressure leaching. They differ from mechanical / physical processes such as sorting and separation based on physical properties (e.g. density, magnetism, colour) and size reduction processes such as shredding and grinding.

NOTE 5 In general, these final treatment facilities are covered by the IED 2010/75/EU, e.g. copper smelters or refiners.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 50625-1:2014, *Collection, logistics & Treatment requirements for WEEE - Part 1: General treatment requirements*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**