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## Earth-moving machinery — Product identification numbering system

*Engins de terrassement — Système de numérotation pour  
l'identification des produits*

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# Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 General requirements</b> .....	<b>2</b>
4.1 Characters in the PIN.....	2
4.2 Protection against adding characters.....	2
4.3 Allowed characters.....	3
4.4 World manufacturer code (WMC).....	3
4.5 Machine descriptor section (MDS).....	3
4.6 Machine indicator section (MIS).....	3
4.7 Check letter (CL).....	3
4.8 Duplication.....	4
4.9 PIN format.....	4
<b>5 Product label/plate</b> .....	<b>4</b>
5.1 Components.....	4
5.2 Location.....	5
5.3 Fixation.....	5
<b>6 Marking</b> .....	<b>5</b>
6.1 Primary marking.....	5
6.2 Optional marking.....	5
6.2.1 Product label/plate.....	5
6.2.2 Concealed marking.....	5
<b>7 PIN character readability</b> .....	<b>6</b>
<b>8 Instruction manual reference</b> .....	<b>6</b>
<b>Annex A (normative) WMC listing procedure</b> .....	<b>7</b>
<b>Bibliography</b> .....	<b>8</b>

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 3, *Machine characteristics, electrical and electronic systems, operation and maintenance*.

This third edition cancels and replaces the second edition (ISO 10261:2002), of which it constitutes a minor revision. It also incorporates the Amendment ISO 10261:2002/Amd 1:2015. The changes compared to the previous edition are as follows:

- merge the content of ISO 10261:2002/Amd 1:2015, Table 2 into [Table 1](#);
- update the text in accordance with the latest editions of ISO/IEC Directives, Part 1 and Part 2; especially update [Annex A](#) wordings as to Registration Authority for “WMC” in accordance with ISO/IEC Directives, Part 1:2020, Annex SN.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

# Earth-moving machinery — Product identification numbering system

## 1 Scope

This document specifies the requirements, content, structure and identification location of a product identification numbering system for earth-moving machinery as defined in ISO 6165.

NOTE ISO 10261 PIN can be used on other types of off-road work machines.

It is not applicable to the identification of components or attachments.

## 2 Normative references

There are no normative references in this document.

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>  
<https://standards.iteh.ai/catalog/standards/sist/fc1da6aa-e4d9-4d12-af0e-f4135efa310f/iso-10261-2021>

### 3.1

#### product identification number

##### PIN

unique set of 17 alphanumeric characters assigned to a complete machine by the *manufacturer* (3.6) for identification purposes

Note 1 to entry: The PIN consists of four *fields* (3.5) as defined in 3.1.1 to 3.1.4.

#### 3.1.1

##### world manufacturer code

##### WMC

first *field* (3.5) of the *PIN* (3.1), alphanumeric code designating the *manufacturer* (3.6) of the machine

#### 3.1.2

##### machine descriptor section

##### MDS

second *field* (3.5) of the *PIN* (3.1), comprising information describing the machine

#### 3.1.3

##### machine indicator section

##### MIS

last *field* (3.5) of the *PIN* (3.1), distinguishing, in conjunction with the WMC and MDS, one machine from another by designation

**3.1.4**  
**check letter**  
**CL**

third *field* (3.5) of the *PIN* (3.1), consisting of an alpha character in the ninth position based on a calculation of the remaining 16 characters in the *PIN* and determining its validity or assigned, non-calculated, alpha character

**3.2**  
**primary marking**  
*PIN* (3.1) placed on a machine in a visible location

**3.3**  
**concealed marking**  
*PIN* (3.1), or derivative consisting of the *MIS*, placed on the machine in a concealed location

**3.4**  
**product label/plate**  
means of displaying the *PIN* (3.1) and machine details on the machine

**3.5**  
**field**  
set of one to eight-character positions reserved for specific information

EXAMPLE *WMC* (3.1.1), *MDS* (3.1.2), *MIS* (3.1.3), *CL* (3.1.4).

**3.6**  
**manufacturer**  
individual, partnership or company responsible for ensuring the uniqueness of the *PIN* (3.1)

Note 1 to entry: The manufacturer may be a single entity even when several factories produce the product.

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**4 General requirements**

**4.1 Characters in the PIN**

The primary marking on the machine and on the product label/plate shall consist of 17 characters on a single horizontal line without breaks or separations between the characters. There shall be no additional signs, letters or characters before or after the preceding and ensuing symbols specified in 4.2. Zero (0) shall be used in the first positions of a field whenever fewer than the required number of characters is used.

EXAMPLE In the *MDS*, for model “AF3”, 00AF3, not AF3, is used.

**4.2 Protection against adding characters**

An acceptable symbol shall immediately precede the first numeral or letter of the *PIN* and immediately follow the last numeral of the *PIN*.

The acceptable symbol shall be

- an asterisk (\*),
- greater-than and less-than signs (> <),
- a corporate symbol, or
- a company logo.

Instead of greater-than and less-than signs, angular brackets or similar “vee” symbols horizontally pointing inwards may be placed on either side of the *PIN*.

### 4.3 Allowed characters

Only the following characters shall be used in the PIN:

1234567890

ABCDEFGHIJKLMNPOQRSTUVWXYZ

Characters conforming to ISO 1073-2 are recommended.

### 4.4 World manufacturer code (WMC)

The WMC shall consist of three alphanumeric (alpha or numeric) characters in positions 1, 2 and 3. The manufacturer shall follow the procedure in [Annex A](#) to secure a WMC listing. The registration process will require sufficient information to identify a manufacturer.

### 4.5 Machine descriptor section (MDS)

The MDS shall consist of five alphanumeric characters in positions 4, 5, 6, 7 and 8. The manufacturer is to determine the coding and sequence of the information. This field may be comprised of general descriptive attributes of the machine. It is recommended that this field make use of information that is readily visible on the machine.

EXAMPLE For a model 493C, a suitable character sequence would be 00493 or 0493C.

### 4.6 Machine indicator section (MIS)

The MIS shall designate a unique manufacturing number and consist of eight alphanumeric characters in positions 10, 11, 12, 13, 14, 15, 16 and 17. Alpha or numeric characters may be used in positions 10, 11, 12 and 13. Only numerals shall be used in positions 14, 15, 16 and 17. The content of the MIS is at the discretion of the manufacturer. The manufacturer may choose to designate the year of manufacture. It is recommended that the year be indicated by the first character of the MIS (position 10). The recommended code to be used to identify the year is given in [Table 1](#).

**Table 1 — Year designation codes**

Year	Code	Year	Code	Year	Code	Year	Code
2000	Y	2012	C	2024	R	2036	6
2001	1	2013	D	2025	S	2037	7
2002	2	2014	E	2026	T	2038	8
2003	3	2015	F	2027	V	2039	9
2004	4	2016	G	2028	W	2040	A
2005	5	2017	H	2029	X	2041	B
2006	6	2018	J	2030	Y	2042	C
2007	7	2019	K	2031	1	2043	D
2008	8	2020	L	2032	2	2044	E
2009	9	2021	M	2033	3	2045	F
2010	A	2022	N	2034	4	2046	G
2011	B	2023	P	2035	5	2047	H

### 4.7 Check letter (CL)

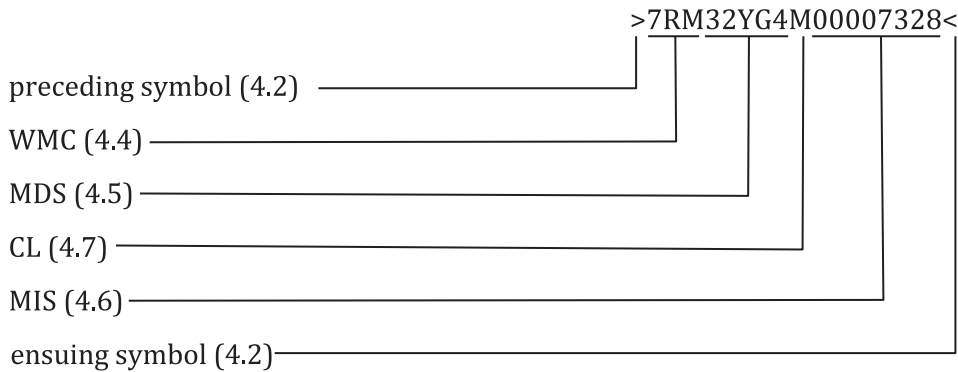
The calculation to determine the CL shall be based on a formula provided by the website manager to the manufacturer (see [Annex A](#)). As an alternative, the website manager may provide a non-calculated letter that the manufacturer may use in this position for machine models having a volume of less than 100 units per year.

### 4.8 Duplication

The manufacturer shall ensure that the same 17-character PIN number shall not be reissued for 30 years. The manufacturer is responsible for maintaining a complete file of PIN records for all machines using the assigned WMC.

### 4.9 PIN format

The following example shows a PIN meeting the requirements of this document.



## 5 Product label/plate

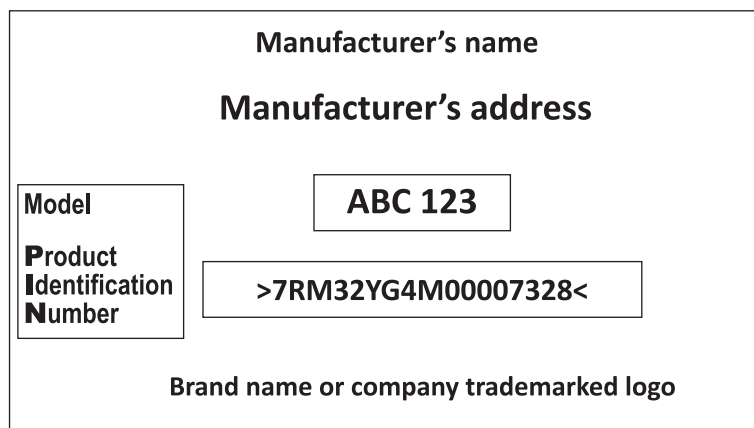
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### 5.1 Components

The product label/plate (see [Figure 1](#)) shall contain at least the following information:

- a) name and address of manufacturer; ISO 10261:2021  
<https://standards.iteh.ai/catalog/standards/sist/fc1da6aa-e4f9-4d12-af0e-f316fa2f06e1/iso-10261-2021>
- b) machine model designation, or designation of series or type (if any), which shall be arranged according to the manufacturer’s specifications;
- c) the words “Product Identification Number” written in full;
- d) PIN.

The brand name or company-trademarked logo may be included. The sample label/plate shown in [Figure 1](#) meets the requirements of this document.



**Figure 1 — Example**



Text on the product label/plate shall be in a colour that contrasts with the colour of the background. Product label/plate materials shall be selected to maintain legibility during the expected life of the machine.

The product label/plate shall be constructed in a manner that makes it difficult to alter or remove without detection or mutilation.

## 5.2 Location

The product label/plate shall be placed in such a location as to minimize the risk of damage during machine operation or from weathering.

The preferred location of the product label/plate is on the left-hand side of the machine and on the frame or other permanent structure of the machine not considered a replaceable item. The location should be adjacent to the operator's access area in a clearly visible and accessible position.

The product label/plate shall be visible without removing any part of the machine and shall be readable under daylight conditions.

## 5.3 Fixation

The product label/plate shall be affixed to the machine in a manner that makes it difficult to alter or remove without detection or mutilation.

## 6 Marking

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### 6.1 Primary marking

The PIN shall be embossed, stamped or engraved on a frame or other permanent structure not subject to replacement and in a clearly visible and accessible position, readable from outside the machine. For large machines, the preferred primary marking location is on the right-hand side near the front of the machine.

### 6.2 Optional marking

#### 6.2.1 Product label/plate

The label/plate shall be in accordance with [Clause 5](#).

#### 6.2.2 Concealed marking

The machine may also have a concealed marking consisting of the PIN or a derivation of the PIN. The aim of this marking is to make identification of the machine possible if the primary marking is destroyed or becomes unreadable. The concealed marking location shall not be published in the operator's or service manuals; it is to be divulged only to authorized law enforcement officers and others on a need-to-know basis.

The concealed marking location shall be

- a) difficult to discover accidentally,
- b) possible to read by use of a flashlight or mirror,
- c) placed on a permanent structure or a part of the machine not susceptible to damage or repair, and
- d) visible without removing, detaching or dismantling any major part of the machine (except for lightweight guards, shields, etc.).

## 7 PIN character readability

PIN characters on the product label/plate shall be embossed, stamped, engraved, impressed, laser-cut or printed in a durable manner.

PIN characters on the machine structure shall be stamped, laser-cut or engraved in accordance with [6.1](#) or [6.2.2](#).

For stamped characters, the minimum depth shall be 0,2 mm.

The minimum height of characters (numerals and letters) shall be

- a) at least 4 mm for characters marked in the empty spaces on the product label/plate, and
- b) at least 6 mm for characters marked directly on the machine structure.

## 8 Instruction manual reference

The locations in which the primary marking and product label/plate appear on the machine shall be shown and described in the instruction manual for operation and maintenance, or equivalent product publications.

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