

# American National Standard

*for Outdoor Power Equipment –  
Portable, Handheld,  
Internal Combustion Engine-Powered  
Cut-Off Machines –  
Safety and Environmental  
Requirements*



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**ANSI/OPEI B175.4-2018**

Revision of  
ANSI/OPEI B175.4-2013

American National Standard  
for Outdoor Power Equipment –

Portable, Handheld,  
Internal Combustion Engine-Powered  
Cut-Off Machines –  
Safety and Environmental Requirements

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**Outdoor Power Equipment Institute**

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# American National Standard

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**Foreword** (This foreword is not part of American National Standard ANSI/OPEI B175.4-2018.)

This standard revises ANSI/OPEI B175.4-2013, *American National Standard for Outdoor Power Equipment - Portable, Handheld, Internal-Combustion-Engine-Driven Cut-Off Machines - Safety Requirements*.

The B175.4 Standards Development Committee developed this standard. The Committee is comprised of several organizations and individuals that evaluate or manufacture these products and accessories.

This standard covers maximum wheel diameters up to 16 inches.

A summary of the principal changes included in this standard is as follows:

- Figures were harmonized with ISO;
- Front handle and rear handle dimensional requirements clauses were removed, as these are adequately covered in 4.2.1, Table 1, and Figures 4 - 6;
- Throttle control lockout performance requirements were added;
- Fuel test procedures that are common across OPEI B175 product standards were moved from the body of the standard to Annex A;
- Fuel tank structural integrity test procedures were further clarified;
- Excessive fuel heating performance requirements were added;
- Heat protection test procedures were added;
- Minimum flange dimensions (Tables 2 and 3) were updated to reflect nominal wheel diameters;
- The maximum operator ear sound pressure level was reduced from 90 to 85 dB(A) to harmonize with other OPEI B175 standards;
- Sound measurement procedures in Annexes B and C were updated to reflect the most recent IEC standard 61762-1.

Consensus for this standard was achieved by the use of the Canvass Method.

There are seven annexes in this standard. Annexes A - F are normative and are considered part of the standard. Annex G is informative and is not considered part of the standard.

Suggestions for improvements of this standard are welcome. They should be sent to the Outdoor Power Equipment Institute, 1605 King Street, 3rd Floor, Alexandria, VA 22314.

The following entities, recognized as having interest in the standardization of safety requirements for cut-off machines, were contacted prior to the approval of this revised standard. Inclusion in this list does not necessarily imply that the organization concurred with the submittal of the proposal to ANSI:

Mr. Terry Ditsch - User

Mr. Dan Murraray - User

Mr. Pat O'Brien - Concrete Sawing & Drilling Association - User

Mr. Vinny Mago - American Rental Association - User

Mr. Dag Garskog - Husqvarna - Producer

Mr. Sebastian Hanusseck - Andreas Stihl Ag & Co - Producer

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American National Standard  
for Outdoor Power Equipment –

# Portable, Handheld, Internal Combustion Engine–Powered Cut-Off Machines – Safety and Environmental Requirements

## 1. Scope and purpose

This standard applies to portable, handheld, internal combustion engine-powered machines, which use a rotating cut-off (abrasive) wheel that is center-mounted on and driven by a spindle shaft, and designed for cutting construction materials such as asphalt, concrete, stone, and metal.

The requirements in this standard apply to machines using up to 16 in (400 mm) nominal cut-off wheels. If the machine is designed for larger than 16 in (400 mm) nominal cut-off wheels, the requirements of this standard shall be considered. The requirements listed may apply to machines designed for larger cut-off wheels.

Cut-off wheel design and safety specifications are not included in this standard.

The effective implementation date of this standard shall be two (2) years after the publication date and shall apply to all products built after that date. Manufacturers may also comply with the requirements of this standard any time after the publication date.

“ANSI/OPEI B175.4-2018” and “ANSI B175.4-2018” may be used interchangeably wherever referenced or required in this standard.

### 1.1. Purpose

This standard establishes safety and environmental requirements to reduce the risk of injury associated with the use of portable, handheld, internal combustion engine-powered machines using a rotating cut-off (abrasive) wheel.

## 2. Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this American National Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ANSI B7.1-2017, *Safety requirements for the use, care, and protection of abrasive wheels*