
**Earth-moving machinery — Cutting edges
used on tractor-dozers, graders and
scrapers — Principal shapes and basic
dimensions**

*Engins de terrassement — Bords coupants utilisés sur les tracteurs à lame,
niveleuses et décapeuses — Principales formes et dimensions de base*



Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 7129 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 3, *Operation and maintenance*.

This third edition cancels and replaces the second edition (ISO 7129:1989), which has been technically revised.

Annex A forms an integral part of this International Standard.

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Earth-moving machinery — Cutting edges used on tractor-dozers, graders and scrapers — Principal shapes and basic dimensions

1 Scope

This International Standard specifies

- the principal shapes and dimensions of the cross-section,
- the hole location for the mounting bolts,
- the shapes and dimensions of holes for the mounting bolts,

for cutting used on tractor-dozers, graders and scrapers, as defined in ISO 6165, taking interchangeability into consideration.

NOTE — Some values in inches in this International Standard are not equivalent to the corresponding values in millimetres because widely used values have been adopted.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 6165:1997, *Earth-moving machinery — Basic types — Vocabulary*.

3 Cross-sections of cutting edges — Principal shapes and basic dimensions

The principal shapes and basic dimensions of the cutting edge cross-section shall be as shown in figures 1 and 2 and given in tables 1 and 2.

Table 1 — Tractor-dozers and scrapers (see figure 1)

Dimensions in millimetres
(Inch values in parentheses)

Application ¹⁾		Width, <i>W</i>		Thickness, <i>T</i>		Tip of chamfer, <i>F</i>	
Tractor with dozer	Tractor scraper	nom	tol.	nom.	tol.	max.	min
x		153 (6)	$\pm 3 (\pm 0,118)$	12,7 (0,5)		8 (0,32)	
x		153 (6)		16 (0,625)		10 (0,39)	
x		153 (6)		19 (0,75)		12 (0,47)	
x		160 (6,3)		16 (0,625)		10 (0,39)	
x		165 (6,5)	$+ 1,5 \left(+ 0,059 \right)$ $- 4,5 \left(- 0,177 \right)$	16 (0,625)		10 (0,39)	4 (0,16)
x		204 (8)		16 (0,625)		10 (0,39)	
x		204 (8)		19 (0,75)		12 (0,47)	
x		204 (8)		22 (0,875)		13 (0,51)	
x		204 (8)		25,4 (1)		14 (0,55)	
x	x	254 (10)		19 (0,75)		12 (0,47)	
	x	254 (10)		22 (0,875)		13 (0,51)	
x	x	254 (10)		25,4 (1)		14 (0,55)	
x		254 (10)		32 (1,25)		20 (0,79)	
	x	254 (10)		41 (1,625)		25 (0,98)	
	x	305 (12)		19 (0,75)	For casting material: $+ 2,4 \left(+ 0,095 \right)$ $- 0,6 \left(- 0,025 \right)$	12 (0,47)	
	x	305 (12)		22 (0,875)		13 (0,51)	
x		305 (12)		25,4 (1)		14 (0,55)	
x		305 (12)		28,6 (1,125)		18 (0,71)	
x		305 (12)		32 (1,25)	For material other than casting: $+ 0,8 \left(+ 0,032 \right)$ $- 1,2 \left(- 0,047 \right)$	20 (0,79)	
	x	305 (12)		38 (1,5)		23 (0,91)	
	x	330 (13)		19 (0,75)		12 (0,47)	
	x	330 (13)		22 (0,875)		13 (0,51)	
	x	330 (13)		25,4 (1)		14 (0,55)	
x	x	330 (13)		28,6 (1,125)		18 (0,71)	
x		330 (13)		32 (1,25)		20 (0,79)	
x	x	330 (13)		35 (1,375)		21 (0,83)	
	x	330 (13)		38 (1,5)		23 (0,91)	
	x	330 (13)		41 (1,625)		25 (0,98)	
	x	330 (13)		44,5 (1,75)		27 (1,06)	
	x	360 (14)		19 (0,75)		12 (0,47)	
	x	360 (14)		22 (0,875)		13 (0,51)	
	x	360 (14)		25,4 (1)		14 (0,55)	
x		360 (14)		28,6 (1,125)		18 (0,71)	
x		360 (14)		32 (1,25)		20 (0,79)	
x		360 (14)		35 (1,375)		21 (0,83)	
	x	406 (16)		22 (0,875)		13 (0,51)	
	x	406 (16)		25,4 (1)		14 (0,55)	
	x	406 (16)		28,6 (1,125)		18 (0,71)	
	x	406 (16)		32 (1,25)		20 (0,79)	
x	x	406 (16)		35 (1,375)		21 (0,83)	
x		406 (16)		38 (1,5)		23 (0,91)	
x		406 (16)		41 (1,625)		25 (0,98)	
	x	406 (16)		44,5 (1,75)		27 (1,06)	
	x	482 (19)		28,6 (1,125)		18 (0,71)	
	x	482 (19)		32 (1,25)		20 (0,79)	
	x	482 (19)		35 (1,375)		21 (0,83)	
	x	482 (19)		38 (1,5)		23 (0,91)	
	x	482 (19)		41 (1,625)		25 (0,98)	
	x	482 (19)		44,5 (1,75)		27 (1,06)	

1) Recommendation only.

NOTE — The shapes and dimensions of cutting edges with a 140 mm hole pitch are specified in annex A.

Table 2 — Graders (see figure 2)

Dimensions in millimetres
(Inch values in parentheses)

Width, W		Thickness, T		Radius of curvature, R		Chamfer	
nom.	tol.	nom.	tol.	nom.	tol.	E	F min.
152 (6)	$+3 \begin{pmatrix} +0,118 \\ -0,059 \end{pmatrix}$	13 (0,5)	$\pm 0,6 (\pm 0,025)$	273 (10,75) or 280 (11)	$\pm 10 (\pm 0,394)$	30 (1,18)	2,5 (0,1)
152 (6)		16 (0,625)					
152 (6)		19 (0,75)					
204 (8)		16 (0,625)					
204 (8)		19 (0,75)					
NOTE — The shapes and dimensions of cutting edges with 140 mm and 280 mm hole pitches are specified in annex A							

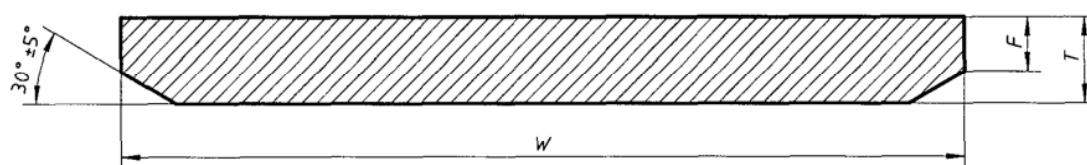


Figure 1 — Cutting edge for tractor-dozers and scrapers

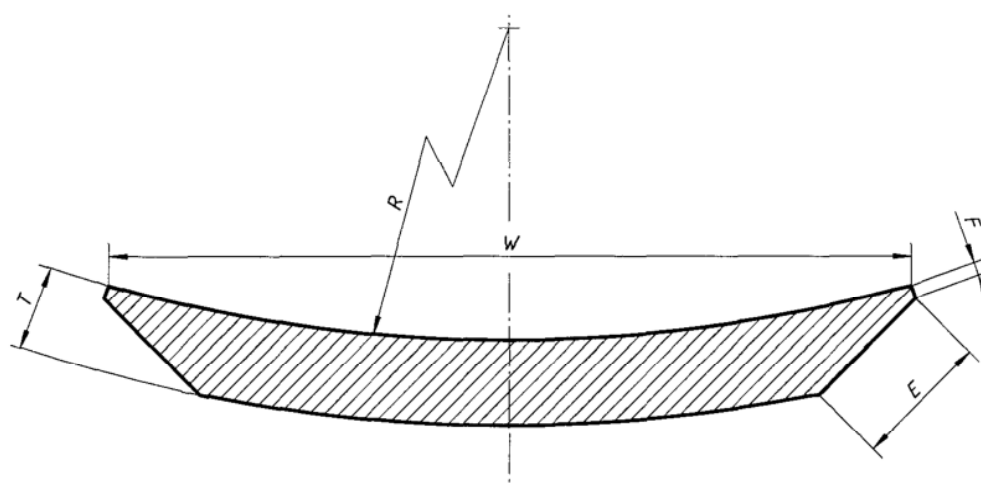


Figure 2 — Cutting edge for graders