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PRACTICE**

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Cutting Edge - Cross Sections Loader Straight

RATIONALE

The technical report covers technology, products, or processes which are mature and not likely to change in the foreseeable future.

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1. **Scope**—For cutting edges used on buckets for loaders defined in SAE J1057a. The dimensions are applicable to rolled, cast, forged, flame cut, and machined cutting edge sections. Straight cutting edges are defined as those whose leading edge and rear edge are parallel and, thus, are of constant cross section. For "straight cutting edge sections with bolt holes," see SAE J1304 FEB85.

NOTE—For some heavy duty applications, cross sections with larger blunts and greater bevel angles may be required.

- 1.1 **Purpose**—To specify dimensions for straight cutting edge cross sections to be used on loader buckets as described by SAE J731d. This recommended practice was conceived to minimize the number of different cutting edge sections used, therefore, allowing for possible future standardization of replacement cutting edges and weld-on tooth adapters.
- 1.2 **Rationale**—This document has been reaffirmed to comply with the SAE 5-Year Review policy.

2. References

- 2.1 **Applicable Publications**—The following publications form a part of the specification to the extent specified herein. Unless otherwise indicated the latest revision of SAE publications shall apply.

- 2.1.1 SAE PUBLICATIONS—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or 724-776-4970 (outside USA), www.sae.org.

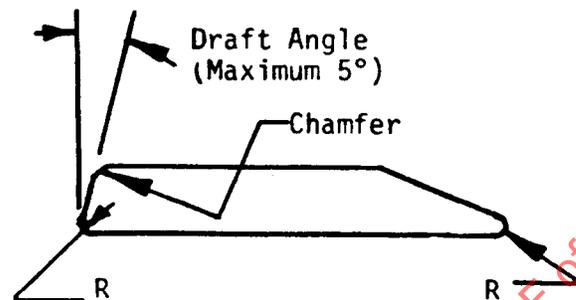
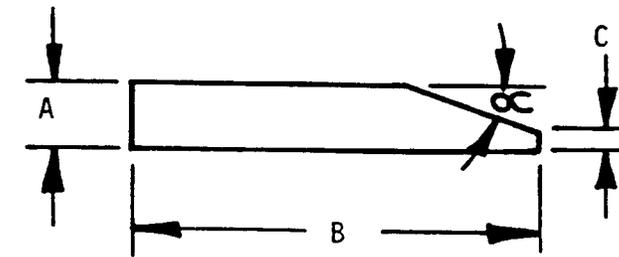
SAE J731d—Component Nomenclature

SAE J1057a—Identification Terminology of Earthmoving Machines

SAE J1304 FEB85—Cutting Edge - Cross Sections Loader Straight with Bolt Holes

3. **Dimensions and Tolerances**—See Figure 1 and Table 1 for recommended specifications.

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OPTIONAL CONSTRUCTION

FIGURE 1—Dimensions Associated With Loader Straight Cutting Edge Cross Sections

TABLE 1—DIMENSIONS FOR LOADER STRAIGHT CUTTING EDGE CROSS SECTIONS

A Thickness ⁽¹⁾		B Section Width ⁽²⁾		α Bevel Angle ⁽³⁾	C Blunt ⁽¹⁾	
mm	in	mm	in	deg	mm	in
10	0.39	80	3.15	23	2	0.08
10	0.39	100	3.94	23	2	0.08
12	0.47	80	3.15	23	2	0.08
12	0.47	100	3.94	23	2	0.08
12	0.47	150	5.91	23	2	0.08
16	0.63	80	3.15	23	3	0.12
16	0.63	100	3.94	23	3	0.12
16	0.63	150	5.91	23	3	0.12
20	0.79	100	3.94	23	4	0.16
20	0.79	150	5.91	23	4	0.16
20	0.79	200	7.87	23	4	0.16
22	0.87	100	3.94	23	4	0.16
22	0.87	150	5.91	23	4	0.16
22	0.87	200	7.87	23	4	0.16