

SICKLE SECTIONS**1. SCOPE**

This standard describes the specifications and required drawing practice for sickle knives used by New Holland. The words sickle knife, knife section or section will all be used with the same interpretation.

2. REFERENCE STANDARD

This specification replaces standard 2.50.1 and should be applied to any existing drawing referencing the old standard.

3. GENERAL DRAWING REQUIREMENTS - REFERENCE FIGURE 1:

3.1 The following specifications are required on all sickle knife drawings. Information specified on Figure 1 of this standard is not required on the individual section drawings but some items may also be included on the drawings for clarity.

3.1.1 All drawings will be done in inch dimensions on CAD. For special proprietary part drawings unique to one supplier, the suppliers drawing may be reproduced with the New Holland print border instead of making a CAD drawing.

3.1.2 All drawings will include this sickle section standard as an item in the parts list.

3.1.3 **PART NAMING CONVENTION** - the name used for the knife section shall include abbreviations descriptive of the basic features of the section. These names will help identify the sections in the knife assembly drawings without referring to individual section drawings.

3.1.4 The first word of the name shall be "Section". The abbreviations below shall be used in the 20 allowed characters to complete the name. "Section" can be shortened to "Sectn" if space is a problem in the rest of the name.

Example abbreviations of features:

OS	=	Overserrated cutting edge
US	=	Underserrated cutting edge
SM	=	Smooth cutting edge
BLK	=	Oil protective finish
CRM	=	Hard chrome protective wear finish
BT	=	Proprietary 10 serration per inch serration spacing
STD	=	Straight through mounting holes.
CST	=	Countersunk holes on the top side (top side is same side as the bevel side).
CSB	=	Countersunk holes on the bottom side (side opposite the bevel).
BK	=	Hardened

Example: SECTION OS BLK STD = Knife section with overserrated cutting edge, oil protective finish and straight through mounting holes.

3.1.5 **BEVEL ANGLE** - The bevel angle will be 20/26°. The bevel must be ground on underserrated and smooth sections and coined on top serrated sections.

					NAME	STD SICKEL SECTIONS		
					 NEW HOLLAND		ENGINEERING SPECIFICATION	
ALL	C	EF	110646	10/97	THE INFORMATION HEREON IS THE CONFIDENTIAL AND PROPRIETARY PROPERTY OF NEW HOLLAND NORTH AMERICA, INC. AND/OR NEW HOLLAND CANADA, LTD. ANY USE, EXCEPT THAT FOR WHICH IT MAY BE LOANED, IS PROHIBITED.		FRAME	OF
ALL	B	RLF	110244	JUL 97			1	5
ALL	A	RE	106459	950831			PART NUMBER	
FRAME NO.	REV	BY	ECN NO.	DATE				
APP.	DRAWN		EDF	NOV 95				
KHH AUG 95	CHECKED							

Procedural / Engineering Design

FNHA-3-A-106.00

3.1.6 HEAT TREATED ZONE SPECIFICATIONS

- This specification will apply to the zones shown in Figure 1. The zone area (without dimensions shown in Figure 1) shall be shown on each drawing including the rear zone used on some sections. The heat treat zone hardness shall be spelled out on the print as Rockwell C 49/58 (except underserrated and smooth sections require Rockwell C 54/58). The non shaded area shall be Rockwell C 36 maximum.

3.1.7 There are three thickness of sections used by New Holland with the following variations: the thickness shall be specified on the individual print.

For smooth and underserrated sections:

Regular (Reg) = .091/.078 inch

Heavy (Hvy) = .110/.100 inch

Extra Heavy (XHvy) = .124/.111 inch

For overserrated sections these thicknesses allow for the manufacturing process finish grinding:

Regular (Reg) = .091/.078 Raw material

= .090/.075 Finished

Heavy (Hvy) = .110/.100 Raw material

= .110/.095 Finished

Extra Heavy (XHvy) = .124/.111 Raw material

= .121/.106 Finished

3.1.8 FLATNESS - All drawing will indicate flatness as shown in Figure 1.

3.1.9 IDENTIFICATION MARKINGS AND APPROVED SOURCES - All knife sections must be positively identified with a permanent type identification using recessed stamping. All stamping must be located in one of the two zones shown in Figure 1. All stamping must be at least .25 inch away from any holes. Vertical height of the letters and numbers approximately .188 inch. All information shall be on the top (bevel) side of the section.

The identification shall consist of:

1. "NH"
2. New Holland part number.
3. Vendor identification code letter from the approved sources and code listed below.
4. Country of origin. ie: USA, Austria, or West Germany.

Approved Sources - Only sources listed here are allowed. All other sources must be approved by PA design engineering.

- A = Cardinal - No longer in business - Code can not be used again.
- B = Unknown Previous Supplier - Code can not be used again.
- D = Rasspe.
- E = Unknown Previous Supplier - Code can not be used again.
- G = MSL Stamping (Garret) - No longer in business - Code can not be used again.
- H = Kondex Corporation.
- J = Busatis Austria.

3.1.10 COMMON DIMENSIONS - Common dimensions shown in Figure 1 will apply and be controlled by this standard unless noted by exception on the individual prints.

3.1.11 SERRATION DATA -

3.1.11.1 Knife sections requiring serration will be so indicated on the print by illustrating on the drawing. Standard sections shall number 12 to 15 serration per inch on overserrated parts and 13 to 15 per inch on underserrated parts with measurements taken parallel to the cutting edge. Other serration sizes and spacings may be specified by exception on individual drawings or proprietary vendor drawings with special serration may be reproduced with NH borders.

3.1.11.2 All serration must align parallel to the base of the section.

3.1.11.3 Depth of standard serration is .030/.020 inch for overserrated sections and .024/.016 for underserrated sections.

	NAME			PART NUMBER	
	STD SICKEL SECTIONS			86525976	
ENGINEERING SPECIFICATION			REV. C	FRAME 2	OF 5