

INVOLUTE SPLINES - 1976**1. SCOPE**

This standard covers Involute Splines based on ANSI B92.1 dated 1976.

2.2 This standard replaces the following company standard:

New Holland

2.26.3

2. RELATED STANDARDS**2.1 REFERENCE STANDARDS**

ANSI B92.1 (1976) - Involute Splines and Inspections (Metric Version)
 86529543 (FNHA-3-A-220.00) - Center Drills
 86529826 (FNHA-3-A-235.00) - Involute Splines
 86508287 (FNHA-3-B-204) - CAD Figures for Splines

3. REQUIREMENTS**3.1 DRAWING REQUIREMENTS**

Use forms from Section 3.1.2 of 86508287 (FNHA-3-B-204).

3.2 TAPERED SPLINE DATA

For information, see Sections 3.3 through 3.9 of 86529826 (FNHA-3-A-235.00).

3.3 EFFECTIVE CLEARANCES

Pitch	Class 5		Class 4	
	Min.	Max. *	Min.	Max. *
8/16	0	.0024 - .0030	0	.0016 - .0022
16/32	0	.0024 - .0030	0	.0016 - .0022

* The Max. figure depends on the number of teeth (see Tables).

NOTE: Fillets on 30 deg. pressure angle, flat root side fit splines if generated have a varying radius of curvature. They are controlled by the form diameter and specification is usually not required.

					NAME	STD INV SPLINES 1976	
					 NEW HOLLAND		ENGINEERING SPECIFICATION
							FRAME 1
ALL	B	RLF	110244	JUL 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.		PART NUMBER
ALL	A	RE	107244	960111			
FRAME NO.	REV	BY	ECN NO.	DATE			
APP.	DRAWN		BJF	DEC 95 ..			
KHH JAN 96	CHECKED						86529827 Documents

TABLE 1 - EXTERNAL, 8/16 PITCH, 30° PRESSURE ANGLE, FLAT ROOT SIDE FIT

	1	1 - 1/4	1 - 3/8	1 - 1/2	1 - 5/8	1 - 3/4	2	2 - 3/8	2 - 1/2	3	3 - 1/2	No. of Teeth
	7	9	10	11	12	12	15	18	19	23	27	
Base Dia (Ref)	.7578	.9743	1.0825	1.1908	1.2990	1.4073	1.6238	1.9486	2.0568	2.4898	2.9228	
Pitch Dia (Ref)	.8750	1.1250	1.2500	1.3750	1.5000	1.6250	1.8750	2.250	2.3750	2.8750	3.3750	
Major Dia Max.	1.000	1.250	1.375	1.500	1.625	1.750	2.000	2.375	2.500	3.000	3.500	
Min.	.965	1.215	1.340	1.465	1.590	1.715	1.965	2.340	2.465	2.965	3.465	
Minor Dia Min.	.692	.942	1.067	1.192	1.317	1.442	1.691	2.066	2.191	2.690	3.190	
Form Dia	.772	1.011	1.133	1.255	1.375	1.501	1.748	2.120	2.245	2.744	3.243	
Circular Tooth Thick Max Effective	.1963											
Min Eff (Ref)	.1951	.1951	.1950	.1950	.1950	.1950	.1950	.1949	.1949	.1949	.1948	
Max Actual (Ref)	.1947	.1946	.1946	.1946	.1946	.1945	.1947	.1945	.1944	.1943	.1943	
Min Actual	.1935	.1934	.1933	.1933	.1933	.1932	.1932	.1931	.1930	.1929	.1928	
Over Pins Min	1.2065	1.4652	1.6101	1.7207	1.8618	1.9746	2.2277	2.6149	2.7316	3.2343	3.7362	
Max Eff	.1963											
Min Eff (Ref)	.1955	.1955	.1954	.1954	.1954	.1954	.1954	.1953	.1953	.1953	.1952	
Max Actual (Ref)	.1951	.1950	.1951	.1951	.1951	.1950	.1950	.1950	.1950	.1949	.1949	
Min Actua	.1943	.1942	.1942	.1942	.1942	.1941	.1941	.1940	.1940	.1939	.1938	
Over Pins Min	1.2076	1.4662	1.6113	1.7220	1.8631	1.9759	2.2290	2.6163	2.7331	3.1175	3.7377	
Pin Dia Invo. Prof. Var. (Ref)	.240 Class 5: +.0005 -.007 ----- Class 4: +.0004 -.0005											
Total Index Var												
Max (Ref) Class 5	.0015	.0015	.0015	.0016	.0016	.0016	.0016	.0016	.0017	.0018	.0019	
Class 4	.0011	.0011	.0011	.0011	.0011	.0011	.0011	.0011	.0012	.0013	.0013	
Lead Var (Ref)	Depends on length of engagement											
Length	.5	1	2	3	4	5	6	7	8	9	10	
Variation Class 5	.0003	.0004	.0005	.0006	.0007	.0008	.0009	.0010	.0011	.0012	.0013	
Class 4	.0002	.0003	.0004	.0004	.0005	.0006	.0006	.0007	.0008	.0009	.0009	

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	ENGINEERING SPECIFICATION						REV. B	FRAME 2	OF 5