

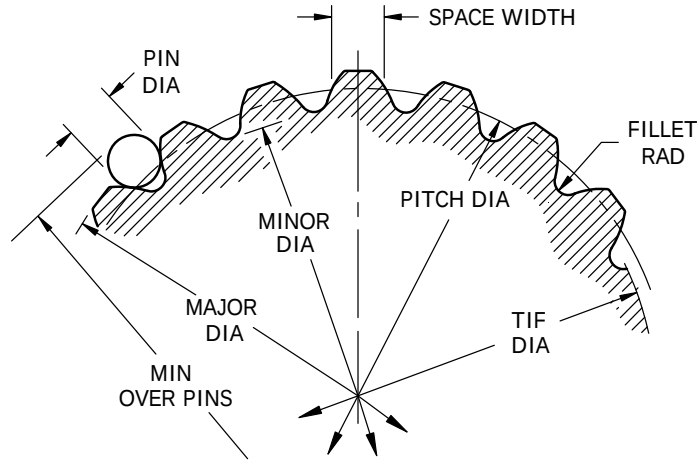


FIGURE 1 – FILLET ROOT SHAFT SPLINE

TABLE I – 8/16 DIAMETRAL PITCH SHAFT SPLINE /a/

2ND DASH NO. OR NO. OF TEETH	PITCH DIA (REF)	BASE CIRCLE DIA (REF)	FILLET-ROOT			TIF DIA MAX	MEASUREMENT OVER PINS		TOOTH THICKNESS		MEAS. PIN DIA
			MAJOR DIA +.0000 -.0070	MINOR DIA +.0000 -.0175	FILLET RAD MIN		MAX EFFECTIVE	MIN DIMEN- SIONAL			
									MAX	MIN	
1	2	3	4	5	6	7	8	9	10	11	12
8-11	1.3750	1.1908	1.5000	1.1500	.044	1.2500	1.7219	1.7198	.1958	.1926	.2400
8-13	1.6250	1.4073	1.7500	1.4000	.043	1.5000	1.9761	1.9739	.1958	.1926	.2400
8-15	1.8750	1.6238	2.0000	1.6500	.042	1.7500	2.2291	2.2269	.1958	.1926	.2400
8-17	2.1250	1.8403	2.2500	1.9000	.042	2.0000	2.4814	2.4792	.1958	.1926	.2400
8-19	2.3750	2.0568	2.5000	2.1500	.041	2.2500	2.7334	2.7311	.1958	.1926	.2400
8-21	2.6250	2.2733	2.7500	2.4000	.041	2.5000	2.9850	2.9827	.1958	.1926	.2400
8-23	2.8750	2.4898	3.0000	2.6500	.041	2.7500	3.2362	3.2339	.1958	.1926	.2400
8-25	3.1250	2.7063	3.2500	2.9000	.040	3.0000	3.4873	3.4850	.1958	.1926	.2400
8-27	3.3750	2.9228	3.5000	3.1500	.040	3.2500	3.7382	3.7359	.1958	.1926	.2400
8-29	3.6250	3.1393	3.7500	3.4000	.040	3.5000	3.9890	3.9866	.1958	.1925	.2400
8-31	3.8750	3.3559	4.0000	3.6500	.039	3.7500	4.2397	4.2373	.1958	.1925	.2400
8-33	4.1250	3.5724	4.2500	3.9000	.039	4.0000	4.4904	4.4880	.1958	.1925	.2400
8-35	4.3750	3.7889	4.5000	4.1500	.039	4.2500	4.7409	4.7385	.1958	.1925	.2400
8-37	4.6250	4.0054	4.7500	4.4000	.039	4.5000	4.9914	4.9890	.1958	.1925	.2400
8-39	4.8750	4.2219	5.0000	4.6500	.039	4.7500	5.2419	5.2395	.1958	.1925	.2400
8-41	5.1250	4.4384	5.2500	4.9000	.039	5.0000	5.4923	5.4899	.1958	.1925	.2400
8-43	5.3750	4.6549	5.5000	5.1500	.039	5.2500	5.7427	5.7403	.1958	.1925	.2400
8-45	5.6250	4.8714	5.7500	5.4000	.039	5.5000	5.9930	5.9906	.1958	.1925	.2400
8-47	5.8750	5.0879	6.0000	5.6500	.038	5.7500	6.2432	6.2408	.1958	.1925	.2400

/a/ PRESSURE ANGLE = 30°, ADDENDUM (BASIC) = .0625, DEDENDUM = .0770, CIRCULAR PITCH = .3927

② COMPLETELY REVISED

THIRD ANGLE PROJECTION		CUSTODIAN		REVISION	
		NATIONAL AEROSPACE STANDARDS COMMITTEE		2	
		TITLE		CLASSIFICATION	
PROCUREMENT SPECIFICATION	NONE	INVOLUTE SPLINE, SHAFT, 30° FULL FILLET		DESIGN STANDARD	
				DAS581 SHEET 1 OF 4	

TABLE II – 16/32 DIAMETRAL PITCH SHAFT SPLINE /b/

2ND DASH NO. OR NO. OF TEETH	PITCH DIA (REF)	BASE CIRCLE DIA (REF)	FILLET-ROOT			TIF DIA MAX	MEASUREMENT OVER PINS		TOOTH THICKNESS		MEAS. PIN DIA
			MAJOR DIA +.0000 -.0050	MINOR DIA +.0000 -.0112	FILLET RAD MIN		MAX EFFECTIVE	MIN DIMEN- SIONAL			
									MAX	MIN	
1	2	3	4	5	6	7	8	9	10	11	12
16-11	.6875	.5954	.7500	.5625		.6250	.8595	.8574	.0977	.0946	.1200
16-13	.8125	.7036	.8750	.6875	.019	.7500	.9866	.9844	.0977	.0946	.1200
16-15	.9375	.8119	1.0000	.8125	.018	.8750	1.1131	1.1109	.0977	.0946	.1200
16-17	1.0625	.9202	1.1250	.9375	.018	1.0000	1.2392	1.2370	.0977	.0946	.1200
16-19	1.1875	1.0284	1.2500	1.0625	.017	1.1250	1.3652	1.3629	.0977	.0946	.1200
16-21	1.3125	1.1367	1.3750	1.1875	.017	1.2500	1.4909	1.4886	.0977	.0946	.1200
16-23	1.4375	1.2449	1.5000	1.3125	.017	1.3750	1.6166	1.6143	.0977	.0946	.1200
16-25	1.5625	1.3532	1.6250	1.4375	.016	1.5000	1.7421	1.7398	.0977	.0946	.1200
16-27	1.6875	1.4614	1.7500	1.5625	.016	1.6250	1.8676	1.8653	.0977	.0946	.1200
16-29	1.8125	1.5697	1.8750	1.6875	.016	1.7500	1.9929	1.9905	.0977	.0945	.1200
16-31	1.9375	1.6779	2.0000	1.8125	.016	1.8750	2.1183	2.1159	.0977	.0945	.1200
16-35	2.1875	1.8944	2.2250	2.0625	.015	2.1250	2.3688	2.3664	.0977	.0945	.1200
16-39	2.4375	2.1109	2.5000	2.3125	.015	2.3750	2.6193	2.6169	.0977	.0945	.1200
16-43	2.6875	2.3274	2.7500	2.5625	.015	2.6250	2.8090	2.8672	.0977	.0945	.1200
16-47	2.9375	2.5440	3.0000	2.8125	.015	2.8750	3.1197	3.1173	.0977	.0944	.1200

/b/ PRESSURE ANGLE = 30°, ADDENDUM (BASIC) = .0313, DEDENDUM = .0395, CIRCULAR PITCH = .1963

TABLE III – 32/64 DIAMETRAL PITCH SHAFT SPLINE /c/

2ND DASH NO. OR NO. OF TEETH	PITCH DIA (REF)	BASE CIRCLE DIA (REF)	FILLET-ROOT			TIF DIA MAX	MEASUREMENT OVER PINS		TOOTH THICKNESS		MEAS. PIN DIA
			MAJOR DIA +.0000 -.0030	MINOR DIA +.0000 -.0081	FILLET RAD MIN		MAX EFFECTIVE	MIN DIMEN- SIONAL			
1	2	3	4	5	6	7	8	9	10	11	12
32-11	.3438	.2977	.3750	.2813	.010	.3125	.4283	.4269	.0486	.0460	.0600
32-13	.4063	.3518	.4375	.3438	.009	.3750	.4917	.4903	.0486	.0460	.0600
32-15	.4688	.4059	.5000	.4063	.009	.4375	.5550	.5535	.0486	.0460	.0600
32-17	.5313	.4601	.5625	.4688	.008	.5000	.6181	.6166	.0486	.0460	.0600
32-19	.5938	.5142	.6250	.5313	.008	.5625	.6810	.6795	.0486	.0460	.0600
32-21	.6563	.5683	.6875	.5938	.008	.6250	.7439	.7424	.0486	.0460	.0600
32-23	.7188	.6225	.7500	.6563	.008	.6875	.8066	.8051	.0486	.0460	.0600
32-25	.7813	.6766	.8125	.7188	.008	.7500	.8695	.8679	.0486	.0460	.0600
32-27	.8438	.7307	.8750	.7813	.007	.8125	.9322	.9306	.0486	.0460	.0600
32-29	.9063	.7848	.9375	.8438	.007	.8750	.9947	.9931	.0486	.0460	.0600
32-31	.9688	.8390	1.0000	.9063	.007	.9375	1.0573	1.0557	.0486	.0459	.0600
32-35	1.0938	.9472	1.1250	1.0313	.007	1.0625	1.1826	1.1810	.0486	.0459	.0600
32-39	1.2188	1.0555	1.2500	1.1563	.007	1.1875	1.3079	1.3063	.0486	.0459	.0600
32-43	1.3438	1.1637	1.3750	1.2813	.007	1.3125	1.4330	1.4314	.0486	.0459	.0600
32-47	1.4688	1.2720	1.5000	1.4063	.007	1.4375	1.5580	1.5564	.0486	.0458	.0600

/c/ PRESSURE ANGLE = 30°, ADDENDUM (BASIC) = .0156, DEDENDUM = .0190, CIRCULAR PITCH = .0982

EXAMPLE OF CALL-OUT:

NAS581-16-23

NUMBER OF TEETH

16/32 DIAMETRAL PITCH

BASIC PART NUMBER

REVISION

2

② COMPLETELY REVISED



Documents

SHEET 2

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