

ГОСТ 24737-81 - Основные нормы взаимозаменяемости. Резьба трапецеидальная однозаходная. Основные размеры

Группа Г13

МЕЖГОСУДАРСТВЕННЫЙ СТАНДАРТ

Основные нормы взаимозаменяемости
РЕЗЬБА ТРАПЕЦЕИДАЛЬНАЯ ОДНОЗАХОДНАЯ
Основные размеры

ГОСТ
24737—81

Взамен
ГОСТ 24737—73 (в части
основных размеров)

Basic norms of interchangeability. Trapezoidal single-start screw thread.
Basic dimensions

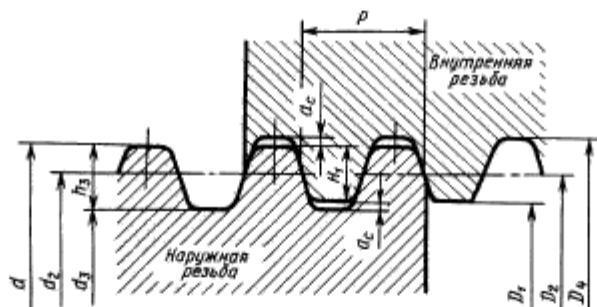
Постановлением Государственного комитета СССР по стандартам от 30 апреля 1981 г. № 2262 дата введения установлена

01.01.82

1. Настоящий стандарт распространяется на трапецеидальную однозаходную резьбу с профилем по ГОСТ 9484—81, диаметрами и шагами по ГОСТ 24738—81 и устанавливает номинальные диаметры резьбы.

Стандарт полностью соответствует СТ СЭВ 838—78.

2. Номинальные диаметры резьбы должны соответствовать указанным на чертеже и в таблице.



d — наружный диаметр наружной резьбы (винта); d_2 — средний диаметр наружной резьбы; d_3 — внутренний диаметр наружной резьбы; D_1 — внутренний диаметр внутренней резьбы (гайки); D_2 — средний диаметр внутренней резьбы; D_3 — наружный диаметр внутренней резьбы; P — шаг резьбы; a_1 — зазор по вершине резьбы; h_2 — высота профиля наружной резьбы; h_1 — рабочая высота профиля резьбы.

Значения диаметров вычислены по формулам:

$$\begin{aligned} D_1 &= d - 2H_1 = d - P; \\ D_4 &= d + 2a_1; \\ d_2 &= D_2 = d - H_1 = d - 0,5P; \\ d_3 &= d - 2h_1 \end{aligned}$$

Издание официальное

★

Перепечатка воспрещена

Переиздание.

мм

Номиналь- ный диаметр резьбы d	Шаг P	Диаметр резьбы				
		наружный		средний	внутренний	
		d	D_2	$d_2 - D_1$	d_1	D_1
8	1,5	8,000	8,300	7,250	6,200	6,500
	2	8,000	8,500	7,000	5,500	6,000
9	1,5	9,000	9,300	8,250	7,200	7,500
	2	9,000	9,500	8,000	6,500	7,000
10	1,5	10,000	10,300	9,250	8,200	8,500
	2	10,000	10,500	9,000	7,500	8,000
11	2	11,000	11,500	10,000	8,500	9,000
	3	11,000	11,500	9,500	7,500	8,000
12	2	12,000	12,500	11,000	9,500	10,000
	3	12,000	12,500	10,500	8,500	9,000
14	2	14,000	14,500	13,000	11,500	12,000
	3	14,000	14,500	12,500	10,500	11,000
16	2	16,000	16,500	15,000	13,500	14,000
	4	16,000	16,500	14,000	11,500	12,000
18	2	18,000	18,500	17,000	15,500	16,000
	4	18,000	18,500	16,000	13,500	14,000
20	2	20,000	20,500	19,000	17,500	18,000
	4	20,000	20,500	18,000	15,500	16,000
22	2	22,000	22,500	21,000	19,500	20,000
	3	22,000	22,500	20,500	18,500	19,000
	5	22,000	22,500	19,500	16,500	17,000
	8	22,000	23,000	18,000	13,000	14,000
24	2	24,000	24,500	23,000	21,500	22,000
	3	24,000	24,500	22,500	20,500	21,000
	5	24,000	24,500	21,500	18,500	19,000
	8	24,000	25,000	20,000	15,000	16,000
26	2	26,000	26,500	25,000	23,500	24,000
	3	26,000	26,500	24,500	22,500	23,000
	5	26,000	26,500	23,500	20,500	21,000
	8	26,000	27,000	22,000	17,000	18,000
28	2	28,000	28,500	27,000	25,500	26,000
	3	28,000	28,500	26,500	24,500	25,000
	5	28,000	28,500	25,500	22,500	23,000
	8	28,000	29,000	24,000	19,000	20,000
30	3	30,000	30,500	28,500	26,500	27,000
	6	30,000	31,000	27,000	23,000	24,000
	10	30,000	31,000	25,000	19,000	20,000
32	3	32,000	32,500	30,500	28,500	29,000
	6	32,000	33,000	29,000	25,000	26,000
	10	32,000	33,000	27,000	21,000	22,000
34	3	34,000	34,500	32,500	30,500	31,000
	6	34,000	35,000	31,000	27,000	28,000
	10	34,000	35,000	29,000	23,000	24,000
36	3	36,000	36,500	34,500	32,500	33,000
	6	36,000	37,000	33,000	29,000	30,000
	10	36,000	37,000	31,000	25,000	26,000
38	3	38,000	38,500	36,500	34,500	35,000
	6	38,000	39,000	35,000	31,000	32,000
	7	38,000	39,000	34,500	30,000	31,000
	10	38,000	39,000	33,000	27,000	28,000

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Продолжение

Номиналь- ный диаметр резьбы d	Шаг P	мм				
		Диаметр резьбы				
		наружный		средний	внутренний	
d	D_e	$d_2 - D_2$	d_1	D_1		
40	3	40,000	40,500	38,500	36,500	37,000
	6	40,000	41,000	37,000	33,000	34,000
	7	40,000	41,000	36,500	32,000	33,000
	10	40,000	41,000	35,000	29,000	30,000
42	3	42,000	42,500	40,500	38,500	39,000
	6	42,000	43,000	39,000	35,000	36,000
	7	42,000	43,000	38,500	34,000	35,000
	10	42,000	43,000	37,000	31,000	32,000
44	3	44,000	44,500	42,500	40,500	41,000
	7	44,000	45,000	40,500	36,000	37,000
	8	44,000	45,000	40,000	35,000	36,000
	12	44,000	45,000	38,000	31,000	32,000
46	3	46,000	46,500	44,500	42,500	43,000
	8	46,000	47,000	42,000	37,000	38,000
	12	46,000	47,000	40,000	33,000	34,000
48	3	48,000	48,500	46,500	44,500	45,000
	8	48,000	49,000	44,000	39,000	40,000
	12	48,000	49,000	42,000	35,000	36,000
50	3	50,000	50,500	48,500	46,500	47,000
	8	50,000	51,000	46,000	41,000	42,000
	12	50,000	51,000	44,000	37,000	38,000
52	3	52,000	52,500	50,500	48,500	49,000
	8	52,000	53,000	48,000	43,000	44,000
	12	52,000	53,000	46,000	39,000	40,000
55	3	55,000	55,500	53,500	51,500	52,000
	8	55,000	56,000	51,000	46,000	47,000
	9	55,000	56,000	50,500	45,000	46,000
	12	55,000	56,000	49,000	42,000	43,000
	14	55,000	57,000	48,000	39,000	41,000
60	3	60,000	60,500	58,500	56,500	57,000
	8	60,000	61,000	56,000	51,000	52,000
	9	60,000	61,000	55,500	50,000	51,000
	12	60,000	61,000	54,000	47,000	48,000
	14	60,000	62,000	53,000	44,000	46,000
65	4	65,000	65,500	63,000	60,500	61,000
	10	65,000	66,000	60,000	54,000	55,000
	16	65,000	67,000	57,000	47,000	49,000
70	4	70,000	70,500	68,000	65,500	66,000
	10	70,000	71,000	65,000	59,000	60,000
	16	70,000	72,000	62,000	52,000	54,000
75	4	75,000	75,500	73,000	70,500	71,000
	10	75,000	76,000	70,000	64,000	65,000
	16	75,000	77,000	67,000	57,000	59,000
80	4	80,000	80,500	78,000	75,500	76,000
	10	80,000	81,000	75,000	69,000	70,000
	16	80,000	82,000	72,000	62,000	64,000
85	4	85,000	85,500	83,000	80,500	81,000
	5	85,000	85,500	82,500	79,500	80,000
	12	85,000	86,000	79,000	72,000	73,000
	18	85,000	87,000	76,000	65,000	67,000
	20	85,000	87,000	75,000	63,000	65,000

мм						
Номинальный диаметр резьбы d	Шаг P	Диаметр резьбы				
		наружный		средний	внутренний	
		d	D_4	$d_2 = D_2$	d_1	D_1
90	4	90,000	90,500	88,000	85,500	86,000
	5	90,000	90,500	87,500	84,500	85,000
	12	90,000	91,000	84,000	77,000	78,000
	18	90,000	92,000	81,000	70,000	72,000
	20	90,000	92,000	80,000	68,000	70,000
95	4	95,000	95,500	93,000	90,500	91,000
	5	95,000	95,500	92,500	89,500	90,000
	12	95,000	96,000	89,000	82,000	83,000
	18	95,000	97,000	86,000	75,000	77,000
	20	95,000	97,000	85,000	73,000	75,000
100	4	100,000	100,500	98,000	95,500	96,000
	5	100,000	100,500	97,500	94,500	95,000
	12	100,000	101,000	94,000	87,000	88,000
	20	100,000	102,000	90,000	78,000	80,000
110	4	110,000	110,500	108,000	105,500	106,000
	5	110,000	110,500	107,500	104,500	105,000
	12	110,000	111,000	104,000	97,000	98,000
	20	110,000	112,000	100,000	88,000	90,000
120	6	120,000	121,000	117,000	113,000	114,000
	14	120,000	122,000	113,000	104,000	106,000
	16	120,000	122,000	112,000	102,000	104,000
	22	120,000	122,000	109,000	96,000	98,000
	24	120,000	122,000	108,000	94,000	96,000
130	6	130,000	131,000	127,000	123,000	124,000
	14	130,000	132,000	123,000	114,000	116,000
	16	130,000	132,000	122,000	112,000	114,000
	22	130,000	132,000	119,000	106,000	108,000
	24	130,000	132,000	118,000	104,000	106,000
140	6	140,000	141,000	137,000	133,000	134,000
	14	140,000	142,000	133,000	124,000	126,000
	16	140,000	142,000	132,000	122,000	124,000
	24	140,000	142,000	128,000	114,000	116,000
150	6	150,000	151,000	147,000	143,000	144,000
	16	150,000	152,000	142,000	132,000	134,000
	24	150,000	152,000	138,000	124,000	126,000
160	6	160,000	161,000	157,000	153,000	154,000
	8	160,000	161,000	156,000	151,000	152,000
	16	160,000	162,000	152,000	142,000	144,000
	24	160,000	162,000	148,000	134,000	136,000
	28	160,000	162,000	146,000	130,000	132,000
170	6	170,000	171,000	167,000	163,000	164,000
	8	170,000	171,000	166,000	161,000	162,000
	16	170,000	172,000	162,000	152,000	154,000
	24	170,000	172,000	158,000	144,000	146,000
	28	170,000	172,000	156,000	140,000	142,000
180	8	180,000	181,000	176,000	171,000	172,000
	18	180,000	182,000	171,000	160,000	162,000
	20	180,000	182,000	170,000	158,000	160,000
	28	180,000	182,000	166,000	150,000	152,000
	32	180,000	182,000	164,000	146,000	148,000

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Продолжение

Номиналь- ный диаметр резьбы d	Шаг P	мм				
		Диаметр резьбы				
		наружный		средний	внутренний	
d	D_e	$d_2 - D_2$	d_1	D_1		
190	8	190,000	191,000	186,000	181,000	182,000
	18	190,000	192,000	181,000	170,000	172,000
	20	190,000	192,000	180,000	168,000	170,000
	32	190,000	192,000	174,000	156,000	158,000
200	8	200,000	201,000	196,000	191,000	192,000
	10	200,000	201,000	195,000	189,000	190,000
	18	200,000	202,000	191,000	180,000	182,000
	20	200,000	202,000	190,000	178,000	180,000
	32	200,000	202,000	184,000	166,000	168,000
210	8	210,000	211,000	206,000	201,000	202,000
	10	210,000	211,000	205,000	199,000	200,000
	20	210,000	212,000	200,000	180,000	190,000
	32	210,000	212,000	194,000	176,000	178,000
	36	210,000	212,000	192,000	172,000	174,000
220	8	220,000	221,000	216,000	211,000	212,000
	10	220,000	221,000	215,000	209,000	210,000
	20	220,000	222,000	210,000	198,000	200,000
	32	220,000	222,000	204,000	186,000	188,000
	36	220,000	222,000	202,000	182,000	184,000
230	8	230,000	231,000	226,000	221,000	222,000
	20	230,000	232,000	220,000	208,000	210,000
	36	230,000	232,000	212,000	192,000	194,000
240	8	240,000	241,000	236,000	231,000	232,000
	12	240,000	241,000	234,000	227,000	228,000
	22	240,000	242,000	229,000	216,000	218,000
	24	240,000	242,000	228,000	214,000	216,000
	36	240,000	242,000	222,000	202,000	204,000
	40	240,000	242,000	220,000	198,000	200,000
250	12	250,000	251,000	244,000	237,000	238,000
	22	250,000	252,000	239,000	226,000	228,000
	24	250,000	252,000	238,000	224,000	226,000
	40	250,000	252,000	230,000	208,000	210,000
260	12	260,000	261,000	254,000	247,000	248,000
	22	260,000	262,000	249,000	236,000	238,000
	24	260,000	262,000	248,000	234,000	236,000
	40	260,000	262,000	240,000	218,000	220,000
270	12	270,000	271,000	264,000	257,000	258,000
	24	270,000	272,000	258,000	244,000	246,000
	40	270,000	272,000	250,000	228,000	230,000
280	12	280,000	281,000	274,000	267,000	268,000
	24	280,000	282,000	268,000	254,000	256,000
	40	280,000	282,000	260,000	238,000	240,000
290	12	290,000	291,000	284,000	277,000	278,000
	24	290,000	292,000	278,000	264,000	266,000
	44	290,000	292,000	268,000	244,000	246,000
300	12	300,000	301,000	294,000	287,000	288,000
	24	300,000	302,000	288,000	274,000	276,000
	40	300,000	302,000	280,000	258,000	260,000
	44	300,000	302,000	278,000	254,000	256,000
320	12	320,000	321,000	314,000	307,000	308,000
	48	320,000	322,000	296,000	270,000	272,000

Номиналь- ный диаметр резьбы d	Шаг P	мм				
		Диаметр резьбы				
		наружный		средний	внутренний	
d	D_e	$d_2 = D_2$	d_1	D_1		
340	12	340,000	341,000	334,000	327,000	328,000
	48	340,000	342,000	316,000	290,000	292,000
360	12	360,000	361,000	354,000	347,000	348,000
	48	360,000	362,000	336,000	310,000	312,000
380	12	380,000	381,000	374,000	367,000	368,000
	48	380,000	382,000	356,000	330,000	332,000
400	12	400,000	401,000	394,000	387,000	388,000
	48	400,000	402,000	376,000	350,000	352,000
420	16	420,000	422,000	412,000	402,000	404,000
440	16	440,000	442,000	432,000	422,000	424,000
460	16	460,000	462,000	452,000	442,000	444,000
480	16	480,000	482,000	472,000	462,000	464,000
500	16	500,000	502,000	492,000	482,000	484,000
520	20	520,000	522,000	510,000	498,000	500,000
540	20	540,000	542,000	530,000	518,000	520,000
560	20	560,000	562,000	550,000	538,000	540,000
580	20	580,000	582,000	570,000	558,000	560,000
600	24	600,000	602,000	588,000	574,000	576,000
620	24	620,000	622,000	608,000	594,000	596,000
640	24	640,000	642,000	628,000	614,000	616,000