

THOROUGH INSPECTIONS

WE ENSURE QUALITY

POSITIVE MATERIAL IDENTIFICATION (PMI) CHECKS

Using our own Thermo Scientific Niton Handheld XRF Analyser we perform PMI checks on the austenitic stainless, ferritic stainless, chromium molybdenum etc. items received at our warehouse to ensure we receive the items in the correct material.

DELTA FERRITE TEST OF DUPLEX MATERIALS

We perform delta ferrite tests on items produced in ferritic stainless steels. These steels are also known as Duplex (S31803) and Super Duplex (S32750/S32760). A delta ferrite range of 35-65% for these materials indicate a correct heat treatment, the optimum mechanical properties and corrosion resistance.

SURFACE ROUGHNESS TESTING

Surface roughness testing is a critical part of many industrial processes, as it helps to ensure that the surfaces of components and materials meet the required standards for quality and performance. We have invested in the latest technology and equipment to provide accurate and reliable surface roughness testing services to our clients.

We were founded in 1982 and are a part of Estool 2000 Holding A/S.

We have one of Denmark's largest stocks of pipes, flanges, fittings, bolts, Grayloc products and gaskets that are mostly used in the industry. We deliver to onshore/offshore, oil, gas, and Power-to-X industries.

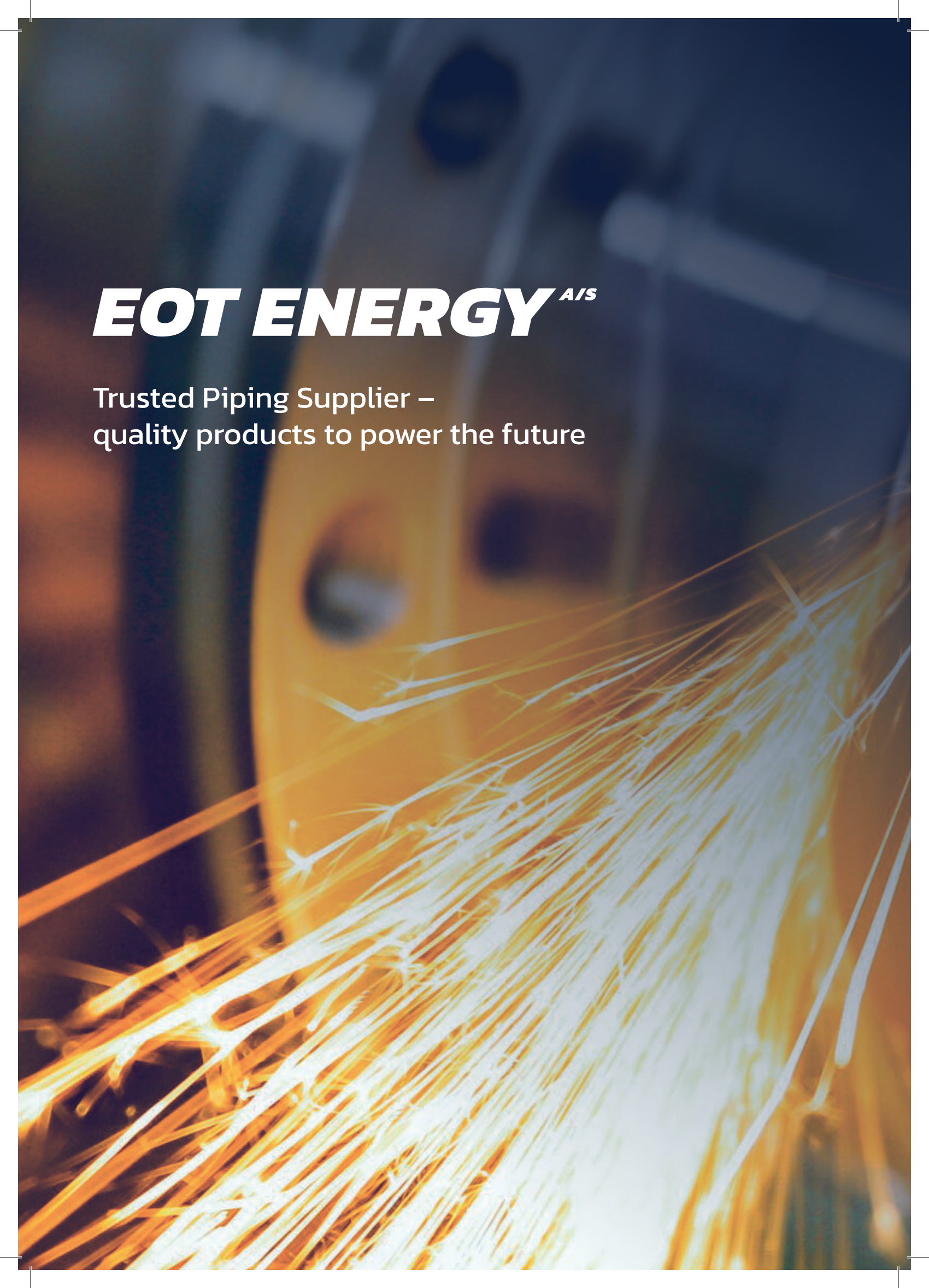
We stock most components according to the American standards but have also begun to be a stock leader in components according to European (EN) standards, which are more often used in industry.

We deliver components to companies in Denmark and abroad and we can usually deliver from day to day.

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EOT ENERGY ^{A/S}

The background of the entire page is a blurred industrial scene. In the foreground, a large, bright spray of orange and yellow sparks or molten metal is being directed towards the right, creating a sense of intense heat and industrial activity. In the background, out of focus, are large, grey industrial components, possibly parts of a machine or a ship's hull, with circular openings.

EOT ENERGY^{A/S}

Trusted Piping Supplier –
quality products to power the future

QUALITY ASSURED

PRODUCTS



PIPES

- Pipes, seamless and welded high & low alloy steels
- Low temperature carbon steel pipes



BOLTS

- LTCS-hot dip galv. & Super Duplex (S32760-FLT) bolting
- Manufacturing of Super Duplex (S32760-FLT) bolting



FITTINGS

- Butt welded fittings, all schedules and heavier wall thickness



GASKETS

- Oct, Oval, RX/BX, Spiral Wound & CNA gaskets



FLANGES

- Flanges from 150lb to 2500lb
- All ASME/ANSI and EN configurations



GRAYLOC PRODUCTS

- Agency

STANDARDS

ANSI – ASME – ASTM – API – DIN – EN

ANSI = American National Standards Institute

ASME = American Society of Mechanical Engineers

ASTM = American Society For Testing and Materials

API = American Petroleum Institute

DIN = Deutsches Institut für Normung

EN = European Norm

STUDBOLTS

Studbolts – For class 150 flanges								Studbolts – For class 300 flanges					
Nominal pipe size			Diameter		Length				Diameter		Length		
DN	NPS	No. of bolts	UNC Inch	ISO mm	1,6 mm RF	Ring joint mm	Ring size	No. of bolts	UNC Inch	ISO mm	1,6 mm RF	Ring joint mm	Ring size
15	1/2	4	1/2	M 14	60			4	1/2	M 14	65	80	R11
20	3/4	4	1/2	M 14	65			4	5/8	M 16	80	90	R13
25	1	4	1/2	M 14	65	80	R15	4	5/8	M 16	80	90	R16
32	1 1/4	4	1/2	M 14	70	85	R17	4	5/8	M 16	85	95	R18
40	1 1/2	4	1/2	M 14	70	85	R19	4	3/4	M 20	90	100	R20
50	2	4	5/8	M 16	85	95	R22	8	5/8	M 16	90	100	R23
65	2 1/2	4	5/8	M 16	90	100	R25	8	3/4	M 20	100	115	R26
80	3	4	5/8	M 16	90	100	R29	8	3/4	M 20	110	120	R31
	3 1/2	8	5/8	M 16	90	100	R33	8	3/4	M 20	110	130	R34
100	4	8	5/8	M 16	90	100	R36	8	3/4	M 20	115	130	R37
125	5	8	3/4	M 20	95	110	R40	8	3/4	M 20	120	135	R41
150	6	8	3/4	M 20	100	115	R43	12	3/4	M 20	125	140	R45
200	8	8	3/4	M 20	110	120	R48	12	7/8	M 24	140	155	R49
250	10	12	7/8	M24	115	130	R52	16	1	M 27	160	170	R53
300	12	12	7/8	M 24	120	135	R56	16	1 1/8	M 30	170	185	R57
350	14	12	1	M 27	135	150	R59	20	1 1/8	M 30	175	190	R61
400	16	16	1	M 30	135	150	R64	20	1 1/4	M 33	190	205	R65
450	18	16	1 1/8	M 30	150	160	R68	24	1 1/4	M 33	195	210	R69
500	20	20	1 1/8	M 30	160	170	R72	24	1 1/4	M 33	205	225	R73
600	24	20	1 1/4	M 33	175	185	R76	24	1 1/2	M 39	230	255	R77

Studbolts – For class 600 flanges								Studbolts – For class 900 flanges					
Nominal pipe size			Diameter		Length				Diameter		Length		
DN	NPS	No. of bolts	UNC Inch	ISO mm	6,4 mm RF	Ring joint mm	Ring size	No. of bolts	UNC Inch	ISO mm	6,4 mm RF	Ring joint mm	Ring size
15	1/2	4	1/2	M 14	75	75	R11	4	3/4	M 20	105	105	R12
20	3/4	4	5/8	M 16	90	90	R13	4	3/4	M 20	115	115	R14
25	1	4	5/8	M 16	90	90	R16	4	7/8	M 24	125	125	R16
32	1 1/4	4	5/8	M 16	95	95	R18	4	7/8	M 24	125	125	R18
40	1 1/2	4	3/4	M 20	110	110	R20	4	1	M 27	140	140	R20
50	2	8	5/8	M 16	110	110	R23	8	7/8	M 24	145	145	R24
65	2 1/2	8	3/4	M 20	120	120	R26	8	1	M 27	160	160	R27
80	3	8	3/4	M 20	125	130	R31	8	7/8	M 24	145	145	R31
	3 1/2	8	7/8	M 24	140	140	R34						
100	4	8	7/8	M 24	145	145	R37	8	1/8	M 30	170	170	R37
125	5	8	1	M 27	165	165	R41	8	1 1/4	M 33	190	190	R41
150	6	12	1	M 27	170	175	R45	12	1 1/8	M 30	190	195	R45
200	8	12	1 1/8	M 30	190	195	R49	12	1 3/8	M 36	220	220	R49
250	10	16	1 1/4	M 33	215	215	R53	16	1 3/8	M 36	235	235	R53
300	12	20	1 1/4	M 33	225	225	R57	20	1 3/8	M 36	255	255	R57
350	14	20	1 3/8	M 36	235	235	R61	20	1 1/2	M 39	275	280	R62
400	16	20	1 1/2	M 39	255	255	R65	20	1 5/8	M 42	285	295	R66
450	18	20	1 5/8	M 42	275	275	R69	20	1 7/8	M 48	325	340	R70
500	20	24	1 5/8	M 42	290	295	R73	20	2	M 52	350	360	R74
600	24	24	1 7/8	M 48	330	335	R77	20	2 1/2	M 64	440	455	R78

Studbolts – For class 1500 flanges								Studbolts – For class 2500 flanges					
Nominal pipe size			Diameter		Length				Diameter		Length		
DN	NPS	No. of bolts	UNC Inch	ISO mm	6,4 mm RF	Ring joint mm	Ring size	No. of bolts	UNC Inch	ISO mm	6,4 mm RF	Ring joint mm	Ring size
15	1/2	4	3/4	M 20	105	105	R12	4	3/4	M 20	120	120	R13
20	3/4	4	3/4	M 20	115	115	R14	4	3/4	M 20	125	125	R16
25	1	4	7/8	M 24	125	125	R16	4	7/8	M 24	140	140	R18
32	1 1/4	4	7/8	M 24	125	125	R18	4	1	M 27	150	150	R21
40	1 1/2	4	1	M 27	140	140	R20	4	1 1/8	M 30	170	170	R23
50	2	8	7/8	M 24	145	145	R24	8	1	M 27	180	180	R26
65	2 1/2	8	1	M 27	160	160	R27	8	1 1/8	M 30	195	205	R28
80	3	8	1 1/8	M 30	180	180	R35	8	1 1/4	M 33	220	230	R32
100	4	8	1 1/4	M 33	200	200	R39	8	1 1/2	M 39	255	260	R38
125	5	8	1 1/2	M 39	250	250	R44	8	1 3/4	M 45	300	310	R42
150	6	12	1 3/8	M 36	260	265	R46	8	2	M 52	345	355	R47
200	8	12	1 5/8	M 42	290	320	R50	12	2	M 52	380	395	R51
250	10	12	1 7/8	M 48	335	345	R54	12	2 1/2	M 64	490	510	R55
300	12	16	2	M 52	375	390	R58	12	2 3/4	M 70	540	560	R60
350	14	16	2 1/4	M 56	405	425	R63						
400	16	16	2 1/2	M 64	445	470	R67						
450	18	16	2 3/4	M 70	495	530	R71						
500	20	16	3	M 76	540	565	R75						
600	24	16	3 1/2	M 90	615	645	R79						

PIPE SCHEDULE

ANSI B36.10 – WELDED AND SEAMLESS WROUGHT STEEL PIPE

ANSI B36.19 – STAINLESS STEEL PIPE

wall = Wall thickness in Millimeter

wt = Weights in Kilogram per meter

Nom. pipe size	OD mm	Sched. 5S		Sched. 10S		Sched. 40S		Sched. 80S		Sched. 10		Sched. 20		Sched. 30		Sched. STD		Sched. 40		Sched. 60		Sched. XS		Sched. 80		Sched. 100		Sched. 120		Sched. 140		Sched. 160		Sched. XXS	
		wall	wt	wall	wt	wall	wt	wall	wt	wall	wt	wall	wt	wall	wt	wall	wt	wall	wt	wall	wt	wall	wt	wall	wt	wall	wt	wall	wt	wall	wt	wall	wt		
1/8	10,3			1,24	0,28	1,73	0,37	2,41	0,47							1,73	0,37	1,73	0,37			2,41	0,47	2,41	0,47										
1/4	13,7			1,65	0,49	2,24	0,63	3,02	0,80							2,24	0,63	2,24	0,63			3,02	0,80	3,02	0,80										
3/8	17,1			1,65	0,63	2,31	0,84	3,2	1,10							2,31	0,84	2,31	0,84			3,20	1,10	3,20	1,10										
1/2	21,3	1,65	0,80	2,11	1,00	2,77	1,27	3,73	1,62							2,77	1,27	2,77	1,27			3,73	1,62	3,73	1,62						4,78	1,95	7,47	2,55	
3/4	26,7	1,65	1,03	2,11	1,28	2,87	1,69	3,91	2,20							2,87	1,69	2,87	1,69			3,91	2,20	3,91	2,20						5,56	2,90	7,82	3,64	
	33,4	1,65	1,30	2,77	2,09	3,38	2,50	4,55	3,24							3,38	2,50	3,38	2,50			4,55	3,24	4,55	3,24						6,35	4,24	9,09	5,45	
	11/4	42,2	1,65	1,65	2,77	2,70	3,56	3,39	4,85	4,47						3,56	3,39	3,56	3,39			4,85	4,47	4,85	4,47						6,35	5,61	9,70	7,77	
11/2	48,3	1,65	1,94	2,77	3,11	3,68	4,05	5,08	5,41							3,68	4,05	3,68	4,05			5,08	5,41	5,08	5,41						7,14	7,25	10,15	9,56	
2	60,3	1,65	2,40	2,77	3,93	3,91	5,44	5,54	7,48							3,91	5,44	3,91	5,44			5,54	7,48	5,54	7,48						8,74	11,1	11,07	13,4	
2 1/2	73,0	2,11	3,69	3,05	5,26	5,16	8,63	7,01	11,4							5,16	8,63	5,16	8,63			7,01	11,4	7,01	11,4						9,53	14,9	14,02	20,4	
3	88,9	2,11	4,51	3,05	6,45	5,49	11,29	7,62	15,3							5,49	11,3	5,49	11,3			7,62	15,3	7,62	15,3						11,13	21,4	15,24	27,7	
3 1/2	101,6	2,11	5,18	3,05	7,40	5,74	13,57	8,08	18,6							5,74	13,6	5,74	13,6			8,08	18,6	8,08	18,6										
4	114,3	2,11	5,84	3,05	8,36	6,02	16,07	8,56	22,3							6,02	16,1	6,02	16,1			8,56	22,3	8,56	22,3			11,13	28,3		13,49	33,5	17,12	41,0	
5	141,3	2,77	9,47	3,40	11,57	6,55	21,77	9,53	31,0							6,55	21,8	6,55	21,8			9,53	31,0	9,53	31,0			12,70	40,3		15,88	49,1	19,05	57,4	
6	168,3	2,77	11,3	3,40	13,84	7,11	28,26	10,97	42,6							7,11	28,3	7,11	28,3			10,97	42,6	10,97	42,6			14,27	54,2		18,62	67,6	21,95	79,2	
8	219,1	2,77	14,8	3,76	19,96	8,18	42,55	12,70	64,6			6,35	33,3	7,04	36,8	8,18	42,6	8,18	42,6	10,31	53,1	12,70	64,6	12,7	64,6	15,09	75,9	18,26	90,4	20,62	101	23,01	111	22,23	108
10	273,0	3,40	22,6	4,19	27,78	9,27	60,31	12,70	81,6			6,35	41,8	7,8	51,0	9,27	60,3	9,27	60,3	12,7	81,6	12,70	81,6	15,09	96,0	18,26	115	21,44	133	25,40	155	28,58	172	25,40	155
12	323,8	3,96	31,3	4,57	36,00	9,53	73,88	12,70	97,5			6,35	49,7	8,38	65,2	9,53	73,9	10,31	79,7	14,27	109	12,70	97,5	17,48	132	21,44	160	25,40	187	28,58	208	33,32	239	25,4	187
14	355,6	3,96	34,4	4,78	41,30					6,35	54,7	7,92	67,9	9,53	81,3	9,53	81,3	11,13	94,6	15,09	127	12,70	107	19,05	158	23,83	195	27,79	225	31,75	254	35,71	282		
16	406,4	4,19	41,6	4,78	47,29					6,35	62,6	7,92	77,8	9,53	93,3	9,53	93,3	12,7	123	16,66	160	12,70	123	21,44	204	26,19	246	30,96	287	36,53	333	40,49	365		
18	457,2	4,19	46,8	4,78	53,26					6,35	70,6	7,92	87,7	11,13	122	9,53	105	14,27	156	19,05	206	12,70	139	23,83	255	29,36	310	34,93	364	39,67	408	45,24	459		
20	508,0	4,78	59,3	5,54	68,61					6,35	78,6	9,53	117	12,7	155	9,53	117	15,09	183	20,62	248	12,70	155	26,19	311	32,54	382	38,1	441	44,45	508	50,01	565		
22	558,8	4,78	65,2	5,54	75,53					6,35	86,5	9,53	129	12,7	171	9,53	129			22,23	294	12,70	171	28,58	374	34,93	451	41,28	527	47,63	601	53,98	672		
24	609,6	5,54	82,5	6,35	94,45					6,35	94,5	9,53	141	14,27	210	9,53	141	17,48	255	24,61	355	12,70	187	30,96	442	38,89	548	46,02	640	52,37	720	59,54	808		
26	660,4									7,92	127	12,7	203			9,53	153					12,70	203												
28	711,2									7,92	137	12,7	219	15,88	271	9,53	165					12,70	219												
30	762,0	6,35	118	7,92	147					7,92	147	12,7	235	15,88	292	9,53	177					12,70	235												
32	812,8									7,92	157	12,7	251	15,88	312	9,53	189	17,48	343			12,70	251												
34	863,6									7,92	167	12,7	267	15,88	332	9,53	200	17,48	365			12,70	267												
36	914,4									7,92	177	12,7	282	15,88	352	9,53	213	19,05	420			12,70	282												