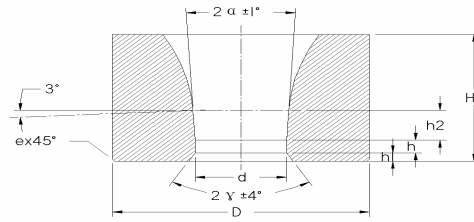
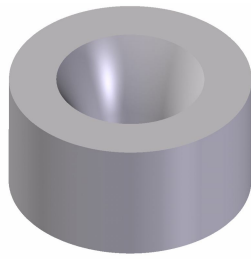


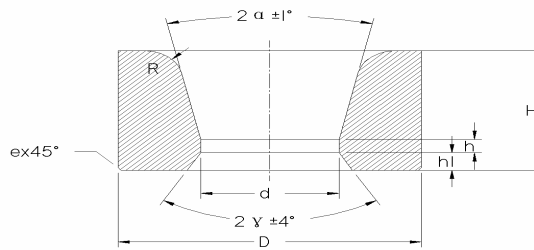
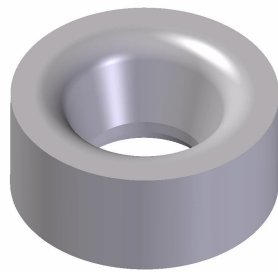
1. Карбид вольфрамовая фильера для волочения труб типа S20



Новый тип	Старый тип	Размеры (мм)					Размеры для расчетов (мм)			
		D	H	d	2α	2γ	h	h ₁	h ₂	e
S20-0161410-2.0	LS20-2	16	14	2.0	10°	60°	1.0	1.5	2.5	1.0
S20-0161410-3.0	LS20-3	16	14	3.0	10°	60°	1.5	1.5	3.5	1.0
S20-0221810-4.0	LS20-4	22	18	4.0	10°	60°	2.0	1.5	4.5	1.0
S20-0302210-5.0	LS20-5	30	22	5.0	10°	60°	3.0	2.0	7.0	1.2
S20-0302210-6.0	LS20-6	30	22	6.0	10°	60°	3.0	2.0	7.0	1.2
S20-0302210-7.0	LS20-7	30	22	7.0	10°	60°	3.0	2.0	7.0	1.2
S20-0302210-8.0	LS20-8	30	22	8.0	10°	60°	3.0	2.0	7.0	1.2
S20-0352510-9.0	LS20-9	35	25	9.0	10°	60°	3.0	2.0	7.0	1.2
S20-0352510-10.0	LS20-10	35	25	10.0	10°	60°	3.0	2.0	7.0	1.2
S20-0352510-11.0	LS20-11	35	25	11.0	10°	60°	3.0	2.0	7.0	1.2
S20-0402810-12.0	LS20-12	40	28	12.0	10°	60°	3.0	2.0	7.0	1.5
S20-0402810-13.0	LS20-13	40	28	13.0	10°	60°	3.0	2.0	7.0	1.5
S20-0402810-14.0	LS20-14	40	28	14.0	10°	60°	3.0	2.0	7.0	1.5
S20-0453010-15.0	LS20-15	45	30	15.0	10°	60°	3.0	2.0	7.0	1.5
S20-0453010-16.0	LS20-16	45	30	16.0	10°	60°	3.0	2.0	7.0	1.5
S20-0453010-17.0	LS20-17	45	30	17.0	10°	60°	3.0	2.0	7.0	1.5
S20-0503210-18.0	LS20-18	50	32	18.0	10°	60°	4.0	2.5	7.0	1.5
S20-0503210-19.0	LS20-19	50	32	19.0	10°	60°	4.0	2.5	7.0	1.5
S20-0503210-20.0	LS20-20	50	32	20.0	10°	60°	4.0	2.5	7.0	1.5
S20-0503210-21.0	LS20-21	50	32	21.0	10°	60°	4.0	2.5	7.0	1.5
S20-0553210-22.0	LS20-22	55	32	22.0	10°	60°	4.0	2.5	8.0	1.5
S20-0553210-23.0	LS20-23	55	32	23.0	10°	60°	4.0	2.5	8.0	1.5
S20-0553210-24.0	LS20-24	55	32	24.0	10°	60°	4.0	2.5	8.0	1.5
S20-0553210-25.0	LS20-25	55	32	25.0	10°	60°	4.0	2.5	8.0	1.5
S20-0603410-26.0	LS20-26	60	34	26.0	10°	60°	4.0	2.5	8.0	1.5
S20-0603410-27.0	LS20-27	60	34	27.0	10°	60°	4.0	2.5	8.0	1.5
S20-0603410-28.0	LS20-28	60	34	28.0	10°	60°	4.0	2.5	8.0	1.5
S20-0653610-29.0	LS20-29	65	36	29.0	10°	60°	4.0	2.5	8.0	1.5
S20-0653610-30.0	LS20-30	65	36	30.0	10°	60°	4.0	2.5	8.0	1.5
S20-0653610-31.0	LS20-31	65	36	31.0	10°	60°	4.0	2.5	8.0	1.5
S20-0754210-33.0	LS20-33	75	42	33.0	10°	60°	5.0	3.0	10.0	1.5
S20-0754210-35.0	LS20-35	75	42	35.0	10°	60°	5.0	3.0	10.0	1.5
S20-0854510-37.0	LS20-37	85	45	37.0	10°	60°	5.0	3.0	10.0	1.5

S20-0854510-39.0	LS20-39	85	45	39.0	10°	60°	5.0	3.0	10.0	1.5
S20-0954810-40.0	LS20-40	95	48	40.0	10°	60°	5.0	3.0	10.0	1.5
S20-0954810-41.0	LS20-41	95	48	41.0	10°	60°	5.0	3.0	10.0	1.5
S20-0954810-42.0	LS20-42	95	48	42.0	10°	60°	5.0	3.0	10.0	1.5
S20-0954810-43.0	LS20-43	95	48	43.0	10°	60°	5.0	3.0	10.0	1.5
S20-0954810-45.0	LS20-45	95	48	45.0	10°	60°	5.0	3.0	10.0	1.5
S20-1005210-47.0	LS20-47	100	52	47.0	10°	60°	7.0	4.0	12.0	1.5
S20-1005210-48.0	LS20-48	100	52	48.0	10°	60°	7.0	4.0	12.0	1.5
S20-1005210-51.0	LS20-51	100	52	51.0	10°	60°	7.0	4.0	12.0	1.5
S20-1105210-56.0	LS20-56	110	52	56.0	10°	60°	7.0	4.0	12.0	1.5
S20-1105210-57.0	LS20-57	110	52	57.0	10°	60°	7.0	4.0	12.0	1.5
S20-1105210-60.0	LS20-60	110	52	60.0	10°	60°	7.0	4.0	12.0	1.5

2. Карбид вольфрамовая фильера для волочения труб типа S22

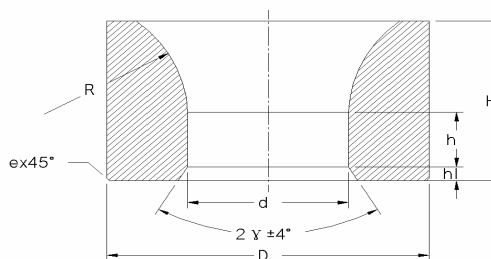
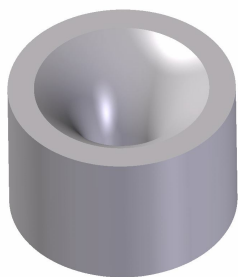


Новый тип	Старый тип	Размеры (мм)					Размеры для расчетов (мм)			
		D	H	d	2α	2γ	h	h ₁	R	e
S22-0201324-2.8	LS22-2.8	20	13	2.8	24°	60°	1.5	3.0	4.0	1.0
S22-0201324-3.2		20	13	3.2	24°	60°	1.5	3.0	4.0	1.0
S22-0201324-3.8	LS22-3.8	20	13	3.8	24°	60°	1.5	3.0	4.0	1.0
S22-0201324-4.3		20	13	4.3	24°	60°	1.5	3.0	4.0	1.0
S22-0201324-4.7	LS22-4.7	20	13	4.7	24°	60°	1.5	3.0	4.0	1.0
S22-0201324-5.0		20	13	5.0	24°	60°	1.5	3.0	4.0	1.0
S22-0201424-5.5	LS22-5.5T	20	14	5.5	24°	60°	2.0	3.0	4.5	1.0
S22-0201324-5.7	LS22-5.7	20	13	5.7	24°	60°	1.5	3.0	4.0	1.0
S22-0201424-7.6	LS22-7.6T	20	14	7.6	24°	60°	3.0	3.0	4.0	1.2
S22-0251824-10	LS22-10A-25	25	18	10	24°	60°	2.0	3.0	4.5	1.2
S22-0251524-11	LS22-11T	25	15	11.0	24°	60°	3.0	3.0	4.5	1.2
S22-0301824-6.7	LS22-6.7	30	18	6.7	24°	60°	2.0	3.0	4.5	1.2
S22-0301824-7.3		30	18	7.3	24°	60°	2.0	3.0	4.5	1.2
S22-0301824-7.6	LS22-7.6	30	18	7.6	24°	60°	2.0	3.0	4.5	1.2
S22-0301824-8.1		30	18	8.1	24°	60°	2.0	3.0	4.5	1.2
S22-0301824-8.6	LS22-8.6	30	18	8.6	24°	60°	2.0	3.0	4.5	1.2
S22-0301824-9.1		30	18	9.1	24°	60°	2.0	3.0	4.5	1.2
S22-0301824-9.6	LS22-9.6	30	18	9.6	24°	60°	2.0	3.0	4.5	1.2
S22-0301824-10.5	LS22-10	30	18	10.5	24°	60°	2.0	3.0	4.5	1.2
S22-0301824-11.5	LS22-11	30	18	11.5	24°	60°	2.0	3.0	4.5	1.2

S22-0351824-13	LS22-13T	35	18	13	24°	60°	4.0	3.0	5.5	1.2
S22-0452424-12.5	LS22-12	45	24	12.5	24°	60°	2.7	3.0	5.5	1.2
S22-0452424-13.5	LS22-13	45	24	13.5	24°	60°	2.7	3.0	5.5	1.2
S22-0452424-13.7	LS22-13.7	45	24	13.7	24°	60°	4.2	3.0	5.5	1.2
S22-0452424-14.5	LS22-14	45	24	14.5	24°	60°	2.7	3.0	5.5	1.2
S22-0452424-14.7	LS22-14.7	45	24	14.7	24°	60°	4.2	3.0	5.5	1.2
S22-0452424-15.5	LS22-15	45	24	15.5	24°	60°	2.7	3.5	5.5	1.2
S22-0452424-15.7	LS22-15.7	45	24	15.7	24°	60°	4.2	3.5	5.5	1.2
S22-0452424-16.5	LS22-16	45	24	16.5	24°	60°	2.7	3.5	5.5	1.2
S22-0452424-17.5	LS22-17	45	24	17.5	24°	60°	2.7	3.5	5.5	1.2
S22-0452424-18.5	LS22-18	45	24	18.5	24°	60°	2.7	3.5	5.5	1.2
S22-0452424-19.5	LS22-19	45	24	19.5	24°	60°	2.7	3.5	5.5	1.2
S22-0452424-20.5	LS22-20	45	24	20.5	24°	60°	2.7	3.5	5.5	1.2
S22-0452424-21.5	LS22-21	45	24	21.5	24°	60°	2.7	3.5	5.5	1.2
S22-0452424-22.5	LS22-22	45	24	22.5	24°	60°	2.7	3.5	5.5	1.2
S22-0452424-23.5	LS22-23	45	24	23.5	24°	60°	2.7	3.5	5.5	1.2
S22-0502524-26	LS22-26T	50	25	26.0	24°	60°	5.0	4.0	7.0	1.5
S22-0542724-21.5	LS22-21T	54	27	21.5	24°	60°	4.0	4.5	5.5	1.2
S22-0542720-22.5	LS22-22T	54	27	22.5	20°	60°	4.0	4.5	5.5	1.2
S22-0542720-23.5	LS22-23T	54	27	23.5	20°	60°	4.0	4.5	5.5	1.2
S22-0603028-24.0	LS22-24A	60	30	24.0	28°	60°	3.5	5.0	6.0	1.5
S22-0603024-24.5	LS22-24	60	30	24.5	24°	60°	3.5	4.0	7.0	1.5
S22-0603024-25.5	LS22-25	60	30	25.5	24°	60°	3.5	4.0	7.0	1.5
S22-0603024-25.6	LS22-25.6	60	30	25.6	24°	60°	5.5	4.0	7.0	1.5
S22-0603024-26.5	LS22-26	60	30	26.5	24°	60°	3.5	4.0	7.0	1.5
S22-0603024-26.6	LS22-26.6	60	30	26.6	24°	60°	5.5	4.0	7.0	1.5
S22-0603024-27.5	LS22-27	60	30	27.5	24°	60°	3.5	4.0	7.0	1.5
S22-0603024-27.6	LS22-27.6	60	30	27.6	24°	60°	5.5	4.0	7.0	1.5
S22-0603024-28.5	LS22-28	60	30	28.5	24°	60°	3.5	4.0	7.0	1.5
S22-0603024-28.6	LS22-28.6	60	30	28.6	24°	60°	5.5	4.0	7.0	1.5
S22-0603028-29.0	LS22-29A	60	30	29.0	28°	60°	3.5	5.0	6.0	1.5
S22-0603024-29.5	LS22-29	60	30	29.5	24°	60°	3.5	4.0	7.0	1.5
S22-0603024-30.5	LS22-30	60	30	30.5	24°	60°	3.5	4.0	7.0	1.5
S22-0603024-31.5	LS22-31	60	30	31.5	24°	60°	3.5	4.0	7.0	1.5
S22-0603024-32.5	LS22-32	60	30	32.5	24°	60°	3.5	4.0	7.0	1.5
S22-0603024-33.5	LS22-33	60	30	33.5	24°	60°	3.5	4.0	7.0	1.5
S22-0803524-34.5	LS22-34	80	35	34.5	24°	60°	4.0	5.0	10.0	1.5
S22-0803524-35.5	LS22-35	80	35	35.5	24°	60°	4.0	5.0	10.0	1.5
S22-0803524-36.5	LS22-36	80	35	36.5	24°	60°	4.0	5.0	10.0	1.5
S22-0803524-37.5	LS22-37	80	35	37.5	24°	60°	4.0	5.0	10.0	1.5
S22-0803524-38.5	LS22-38	80	35	38.5	24°	60°	4.0	5.0	10.0	1.5
S22-0803524-39.5	LS22-39	80	35	39.5	24°	60°	4.0	5.0	10.0	1.5
S22-0803524-40.0	LS22-40	80	35	40.0	24°	60°	4.0	5.0	10.0	1.5

S22-0803524-41.5	LS22-41	80	35	41.5	24°	60°	4.0	5.0	10.0	1.5
S22-0803524-42.0	LS22-42	80	35	42.0	24°	60°	4.0	5.0	10.0	1.5
S22-0803524-43.5	LS22-43	80	35	43.5	24°	60°	4.0	5.0	10.0	1.5
S22-0803524-44.5	LS22-44	80	35	44.5	24°	60°	4.0	5.0	10.0	1.5
S22-0803524-45.5		80	35	45.5	24°	60°	4.0	5.0	10.0	1.5
S22-0803524-47.0	LS22-47	80	35	47.0	24°	60°	4.0	5.0	10.0	1.5
S22-0904024-49.0	LS22-49	90	40	49.0	24°	60°	6.5	5.0	10.0	2.0
S22-0904024-50.0		90	40	50.0	24°	60°	6.5	5.0	10.0	2.0
S22-0904024-52.0	LS22-52	90	40	52.0	24°	60°	5.5	5.5	10.0	2.0
S22-1004024-53.0	LS22-53	100	40	53.0	24°	60°	5.5	5.5	10.0	2.0
S22-1004024-55.0	LS22-55	100	40	55.0	24°	60°	5.5	5.5	10.0	2.0
S22-1004024-56.0	LS22-56	100	40	56.0	24°	60°	5.5	5.5	10.0	2.0
S22-1004024-57.0	LS22-57	100	40	57.0	24°	60°	5.5	5.5	10.0	2.0
S22-1204524-59.0	LS22-59	120	45	59.0	24°	60°	5.5	5.5	10.0	2.0
S22-1204524-61.0		120	45	61.0	24°	60°	5.5	5.5	10.0	2.0
S22-1204524-62.0	LS22-62	120	45	62.0	24°	60°	5.5	5.5	10.0	2.0
S22-1204524-63.0		120	45	63.0	24°	60°	5.5	5.5	10.0	2.0
S22-1204524-64.0	LS22-64	120	45	64.0	24°	60°	5.5	5.5	10.0	2.0
S22-1204524-65.0		120	45	65.0	24°	60°	5.5	5.5	10.0	2.0
S22-1204524-67.0	LS22-67	120	45	67.0	24°	60°	5.5	5.5	10.0	2.0
S22-1305024-69.0	LS22-69	130	50	69.0	24°	60°	6.0	5.5	12.0	2.0
S22-1305024-71.0		130	50	71.0	24°	60°	6.0	5.5	12.0	2.0
S22-1305024-72.0	LS22-72	130	50	72.0	24°	60°	6.0	5.5	12.0	2.0
S22-1305024-73.0		130	50	73.0	24°	60°	6.0	5.5	12.0	2.0
S22-1305024-74.0	LS22-74	130	50	74.0	24°	60°	6.0	5.5	12.0	2.0
S22-1305024-75.0	LS22-75	130	50	75.0	24°	60°	6.0	5.5	12.0	2.0
S22-1305024-76.0		130	50	76.0	24°	60°	6.0	5.5	12.0	2.0
S22-1305024-77.0	LS22-77	130	50	77.0	24°	60°	6.0	5.5	12.0	2.0
S22-1305024-78.0	LS22-78	130	50	78.0	24°	60°	6.0	5.5	12.0	2.0
S22-1405024-79.0	LS22-79	140	50	79.0	24°	60°	6.0	5.5	12.0	2.0
S22-1405024-81.0		140	50	81.0	24°	60°	6.0	5.5	12.0	2.0
S22-1405024-84.0	LS22-84	140	50	84.0	24°	60°	6.0	5.5	12.0	2.0
S22-1405024-86.0		140	50	86.0	24°	60°	6.0	5.5	12.0	2.0
S22-1405024-88.0	LS22-88	140	50	88.0	24°	60°	6.0	5.5	12.0	2.0
S22-2306024-138.0	LS22-138	230	60	138.0	24°	60°	10.0	10.0	10.0	3.0
S22-2406024-152.0	LS22-152	240	60	152.0	24°	60°	10.0	10.0	10.0	3.0

3. Карбид вольфрамовая фильера для волочения труб типа S23



Новый тип	Старый тип	Размеры (мм)				Размеры для расчетов (мм)			
		D	H	d	2γ	h	h ₁	R	e
S23-0151000-2.7	LS23-2.7	15	10	2.5	60°	2.5	1.0	8.0	2.0
S23-0151000-3.5	LS23-3.5	15	10	3.5	60°	2.5	1.0	8.0	2.0
S23-0201400-4.3	LS23-4.3	20	14	4.3	60°	4.6	1.0	9.0	2.0
S23-0201400-4.7	LS23-4.7	20	14	4.7	60°	4.7	1.0	9.0	2.0
S23-0201400-5.1	LS23-5.1	20	14	5.1	60°	4.8	1.0	9.0	2.0
S23-0201400-5.5	LS23-5.5	20	14	5.5	60°	4.9	1.0	9.0	2.0
S23-0201400-5.9	LS23-5.9	20	14	5.9	60°	4.4	1.0	10.0	2.0
S23-0201400-6.3	LS23-6.3	20	14	6.3	60°	4.5	1.0	10.0	2.0
S23-0201400-6.9	LS23-6.9	20	14	6.9	60°	4.7	1.0	10.0	2.0
S23-0201400-7.3	LS23-7.3	20	14	7.3	60°	4.8	1.0	10.0	2.0
S23-0201400-7.5	LS23-7.5	20	14	7.5	60°	4.9	1.0	10.0	2.0
S23-0201400-7.9	LS23-7.9	20	14	7.9	60°	5.0	1.0	10.0	2.0
S23-0241800-8.4	LS23-8.4	24	18	8.4	60°	6.2	1.5	12.0	2.0
S23-0240900-8.9	LS23-8.9B	24	9	8.9	60°	2.5	2.4	4.2	1.0
S23-0241800-8.9	LS23-8.9	24	18	8.9	60°	6.7	1.5	12.0	2.0
S23-0241800-9.1	LS23-9.1	24	18	9.1	60°	6.8	1.5	12.0	2.0
S23-0241800-9.3	LS23-9.3	24	18	9.3	60°	6.8	1.5	12.0	2.0
S23-0240900-9.9	LS23-9.9B	24	9	9.9	60°	2.5	2.4	4.5	1.0
S23-0241800-9.9	LS23-9.9	24	18	9.9	60°	7.1	1.5	12.0	2.0
S23-0241800-10.3	LS23-10.3	24	18	10.3	60°	6.1	1.5	13.0	2.0
S23-0241800-10.9	LS23-10.9	24	18	10.9	60°	6.3	1.5	13.0	2.0
S23-0241800-11.6	LS23-11.6	24	18	11.6	60°	6.8	1.5	13.0	2.0
S23-0241800-12.0	LS23-12	24	18	12.0	60°	7.0	1.5	13.0	2.0
S23-0241800-12.7	LS23-12.7	24	18	12.7	60°	7.3	1.5	13.0	2.0
S23-0452400-20.0	L23-20-45A	45	24	20.0	60°	4.0	2.5	30.0	1.5
S23-0503200-20.0	L23-20	50	32	20.0	60°	12.0	2.0	30.0	1.5
S23-0503200-22.0	L23-22	50	32	22.0	60°	12.0	2.0	30.0	1.5
S23-0503200-24.0	L23-24	50	32	24.0	60°	12.0	2.0	30.0	1.5
S23-0603500-26.0	L23-26	60	35	26.0	60°	12.0	2.0	35.0	1.5
S23-0603500-28.0	L23-28	60	35	28.0	60°	12.0	2.0	35.0	1.5
S23-0603500-30.0	L23-30	60	35	30.0	60°	12.0	2.0	35.0	1.5
S23-0704200-32.0	L23-32	70	42	32.0	60°	15.0	2.5	35.0	1.5
S23-0703400-34.0	L23-34-70A	70	34	34.0	60°	6.5	2.5	35.0	1.5

S23-0704200-34.0	L23-34	70	42	34.0	60°	15.0	2.5	35.0	1.5
S23-0704200-36.0	L23-32	70	42	36.0	60°	15.0	2.5	35.0	1.5
S23-0754200-38.0	L23-38	75	42	38.0	60°	15.0	2.5	35.0	1.5
S23-0754200-40.0	L23-40	75	42	40.0	60°	15.0	2.5	35.0	1.5
S23-0854500-42.0	L23-42	85	45	42.0	60°	15.0	3.0	40.0	1.5
S23-0854500-44.0	L23-44	85	45	44.0	60°	15.0	3.0	40.0	1.5
S23-0854500-46.0	L23-46	85	45	46.0	60°	15.0	2.5	40.0	1.5
S23-1005000-48.0	L23-48	100	50	48.0	60°	18.0	3.0	40.0	2.4
S23-1005000-50.0	L23-50	100	50	50.0	60°	18.0	3.0	40.0	2.4
S23-1005000-52.0	L23-52	100	50	52.0	60°	18.0	3.0	40.0	2.4
S23-1005000-54.0	L23-54	100	50	54.0	60°	18.0	3.0	40.0	2.4
S23-1105000-56.0	L23-56	110	50	56.0	60°	18.0	3.0	40.0	2.4
S23-1105000-58.0	L23-58	110	50	58.0	60°	18.0	3.0	40.0	2.4
S23-1105000-60.0	L23-60	110	50	60.0	60°	18.0	3.0	40.0	2.4
S23-1105000-62.0	L23-62	110	50	62.0	60°	18.0	3.0	40.0	2.4
S23-1255500-64.0	L23-64	125	55	64.0	60°	20.0	3.0	40.0	2.0
S23-1255500-66.0	L23-66	125	55	66.0	60°	20.0	3.0	40.0	2.0
S23-1255500-68.0	L23-68	125	55	68.0	60°	20.0	3.0	40.0	2.0
S23-1255500-70.0	L23-70	125	55	70.0	60°	20.0	3.0	40.0	2.0
S23-1475500-72.0	L23-72	147	55	72.0	60°	20.0	3.0	40.0	2.0
S23-1475500-76.0	L23-76	147	55	76.0	60°	20.0	3.0	40.0	2.0
S23-1475500-79.5	L23-79.5	147	55	79.5	60°	20.0	3.0	40.0	2.0
S23-1475500-82.0	L23-82	147	55	82.0	60°	20.0	3.0	40.0	2.0
S23-1475500-85.0	L23-85	147	55	85.0	60°	20.0	3.0	40.0	2.0
S23-1475500-87.0	L23-87	147	55	87.0	60°	20.0	3.0	40.0	2.0
S23-1475500-89.0	L23-89	147	55	89.0	60°	20.0	3.0	40.0	2.0
S23-1475500-90.0	L23-90	147	55	90.0	60°	20.0	3.0	40.0	2.0
S23-1685500-91.0	L23-91	168	55	91.0	60°	20.0	4.0	50.0	2.0
S23-1685500-94.0	L23-94	168	55	94.0	60°	20.0	4.0	50.0	2.0
S23-1685500-101.0	L23-101	168	55	101.0	60°	20.0	4.0	50.0	2.0
S23-1685500-104.0	L23-104	168	55	104.0	60°	20.0	4.0	50.0	2.0
S23-1685500-107.0	L23-107	168	55	107.0	60°	20.0	4.0	50.0	2.0
S23-1685500-109.0	L23-109	168	55	109.0	60°	20.0	4.0	50.0	2.0
S23-1685500-111.0	L23-111	168	55	111.0	60°	20.0	4.0	50.0	2.0
S23-1685500-113.0	L23-113	168	55	113.0	60°	20.0	4.0	50.0	2.0