P/N	Program	Program Type	Tank Size (ID)	QTY Delivered	Propellant	PMD Type	PMD Designed By	NOTES, PAPERS	NOTES
P/N 80212	Classified	Classified	22.14 Ø x 32 L	5	Hydrazine	Vane			
P/N 80213	Classified	Classified	13.33 Ø	5		Vane			
P/N 80229	Classified	Classified	22.14 Ø	13	Hydrazine	Vane			
P/N 80277	INSAT	Indian communications satellite	32.84 Ø	7	MMH & NTO	Sponge, Vane			
P/N 80281	Classified	Classified	22.14 Ø x 32 L	52	Hydrazine	Vane	Jaekle involved in analysis		
P/N 80283			32.84 Ø	1	MMH & NTO	Sponge, Vane			
P/N 80292	INSAT	Indian communications satellite	7.25 Ø	4		Liner			3000
P/N 80296	Satcom K	Commercial satellite	19.03 Ø	14	Hydrazine	Vanes			
P/N 80301	Arabsat, INSAT-1D	GEO Commercial	34.25 Ø	9	MMH & NTO	Sponge, Trap, Vane			

P/N	Program	Program Type	Tank Size (ID)	QTY Delivered	Propellant	PMD Type	PMD Designed By	NOTES, PAPERS	NOTES
P/N 80304	G-STAR, DBS, BS- III, S3000	Commercial satellite	19.03 Ø	57	hydrazine	Vanes			
P/N 80310	Eurostar	Commercial	23 Ø x 40 L	2	MMH & NTO	Sponge, Trap, Vane	Jaekle involved in analysis		111
P/N 80313	Satcom K, ACTS	Commercial satellite	22.14 Ø	18	Hydrazine	Vane			
P/N 80317	Classified	Classified	27.68 Ø x 48 L	5	Hydrazine	Gallery			Breadbasket PMD
P/N 80324	MILSTAR	Communications	32.84 Ø	15	MMH & NTO	Gallery, Trap	PMD designed by Jaekle		
P/N 80334	InMarSat	Commercial	23 Ø x 33 L	16	MMH & NTO	Sponge, Trap, Vane	Jaekle involved in analysis		
P/N 80338	GOES	Environmental satellite	40.44 Ø	11		Gallery	Jaekle involved in analysis		

P/N	Program	Program Type	Tank Size (ID)	QTY Delivered	Propellant	PMD Type	PMD Designed By	NOTES, PAPERS	NOTES
P/N 80339	S5000	GEO Commercial	31.06 Ø	17		Trap, Vane			
P/N 80340	S5000	GEO Commercial	38.97 Ø	5		Gallery	Jaekle involved in analysis		
P/N 80350	HS 601	GEO Commercial	35 Ø	209	MMH or NTO	Sponge, Trap, Vane	PMD designed by Jaekle	AIAA 96-2748	
P/N 80352	Mars Observer, Telstar, S7000	Mars exploration	42 Ø	15		Gallery	Jaekle involved in analysis		
P/N 80353	Mars Observer	Mars exploration	19.03 Ø	4		Gallery, Vane	Jaekle involved in analysis		
P/N 80356	Classified	Classified	28 Ø x 48.5 L	7	Hydrazine	Vane	PMD designed by Jaekle		
P/N 80360	GGS		22.14 Ø	12	Hydrazine	Vane			
P/N 80363				4	MMH or NTO			AIAA 95-2527	
P/N 80364	InMarSat-3, InMarSat-5	Commercial satellite	22.14 Ø	20	Hydrazine	Vane			
P/N 80366	N-Star	GEO Commercial	48.9 Ø	7	MMH or NTO	Gallery, Trap	Jaekle involved in analysis	AIAA 95-2527	

P/N	Program	Program Type	Tank Size (ID)	QTY Delivered	Propellant	PMD Type	PMD Designed By	NOTES, PAPERS	NOTES
P/N 80367	IntelSat 7A	GEO Commercial	48.9 Ø x 59.7 L	4	MMH or NTO	Gallery, Trap	Jaekle involved in analysis	AIAA 95-2527	
P/N 80373	S7000	GEO Commercial	34 Ø	37		Gallery, Trap, Vane	Jaekle involved in analysis		
P/N 80375	IRIDIUM	LEO constellation	24.6 Ø x 29 L	103	Hydrazine	Vane	PMD designed by Jaekle	AIAA 95-2529	
P/N 80379	NEAR	Asteroid exploration	19.06 Ø	2	NTO	Vortex Suppressor		AIAA 95-2528	37
P/N 80380	ТЕМРО	GEO Commercial	48.9 Ø	46	MMH or NTO	Sponge, Trap, Vane	PMD designed by Jaekle	AIAA 96-2749	
P/N 80387	P-81	Classified	22.21 Ø x 29.5 L	19	Hydrazine	Vane		AIAA 97-2813	
P/N 80390	A2100AX	GEO Commercial	21.75 Ø x 65 L	12	Oxidizer	Vane	Jaekle involved in analysis		
P/N 80391	A2100 AX	GEO Commercial	35 Ø x 108.8 L	32	Hydrazine	Sump, Vane	Jaekle involved in analysis		

P/N	Program	Program Type	Tank Size (ID)	QTY Delivered	Propellant	PMD Type	PMD Designed By	NOTES, PAPERS	NOTES
P/N 80393	Chandra	Space telescope	Supplied by cust.	4		Vane, Sponge	PMD designed by Jaekle	AIAA 97-2812	2
P/N 80394	A2100A	GEO Commercial	21.75 Ø x 48 L	4	Oxidizer	Vane	Jaekle involved in analysis		
P/N 80395	A2100 A	GEO Commercial	35 Ø x 80 L	16	Hydrazine	Sump, Vane	Jaekle involved in analysis		
P/N 80398	Classified	Classified	28.6 Ø x 54.9 L	25	Hydrazine	Gallery	PMD designed by Jaekle	AIAA 98-3200	
P/N 80399	HS 601HP	GEO Commercial	35 Ø x 46.4 L	22	MMH or NTO	Sponge, Trap, Vane	PMD designed by Jaekle	AIAA 98-3199	
P/N 80403	TEMPO, Extended	GEO Commercial	48.9 Ø x 59 L	32	MMH or NTO	Sponge, Trap, Vane	PMD designed by Jaekle		
P/N 80404	ICM	State Station Interim Control Module	Supplied by NRL	6		Gallery, Trap	PMD designed by Jaekle		
P/N 80405	A2100AX	GEO Commercial	21.75 Ø x 65 L	58	Oxidizer	Sump, Vane	Jaekle involved in analysis		

P/N	Program	Program Type	Tank Size (ID)	QTY Delivered	Propellant	PMD Type	PMD Designed By	NOTES, PAPERS	NOTES
P/N 80406	A2100A	GEO Commercial	21.75 Ø x 48 L	28	Oxidizer	Sump, Vane	Jaekle involved in analysis		
P/N 80411	ETS 8	Engineering test satellite	48.9 Ø x 63 L	5	MMH or NTO	Sponge, Trap, Vane	PMD designed by Jaekle	AIAA 2001- 3826	
P/N 80415	HS 601	GEO Commercial	35 Ø	32	MMH or NTO	Sponge, Trap, Vane	PMD designed by Jaekle	PMD with higher flow rate	
P/N 80420	BSAT, Star 1	GEO Commercial	22.14 Ø x 31.41 L	6	Hydrazine	Vane, Trap	PMD designed by Jaekle	AIAA 2000- 3444	
P/N 80421	ORBCOM	Commercial	5.0 Ø	10		U-Vane	PMD designed by Jaekle		
P/N 80422		Commercial	48.9 Ø x 63 L	2	MMH or NTO	Sponge, Trap, Vane, Slosh Control Device	PMD designed by Jaekle		
P/N 80425	Star-2 Fuel (Qual)	GEO Commercial	35 Ø x 76 L	1	Hydrazine	Sponge, Vane	PMD designed by Jaekle	AIAA 2003- 4606	
P/N 80426	Star-2	GEO Commercial	22.14 Ø x 42 L	32	NTO	Vane, Sponge	PMD designed by Jaekle	AIAA 2001- 3825	

P/N	Program	Program Type	Tank Size (ID)	QTY Delivered	Propellant	PMD Type	PMD Designed By	NOTES, PAPERS	NOTES
P/N 80430	DS1000	Proprietary	40.44 Ø	17	Hydrazine	Vane, Sponge	PMD designed by Jaekle	AIAA 2003- 4604	
P/N 80432	Star-2 Fuel (Flight)	GEO Commercial	35 Ø x 76 L	6	Hydrazine	Sponge, Vane	PMD designed by Jaekle	AIAA 2003- 4606	
P/N 80433-1	MESSENGER	Mercury explorer	22.14 Ø x 39.175 L	4	MMH & NTO	Baffles & Vortex Suppressor	Baffles analyzed by Jaekle	AIAA 2002- 4139	
P/N 80434	Astrolink	GEO Commercial	35 Ø x 133 L	6	Hydrazine	Sponge, Trap, slosh Control device	PMD designed by Jaekle	AIAA 2004- 3505	
P/N 80435	Astrolink	GEO Commercial	21.75 Ø x 83.2 L	12	Oxidizer	Sponge, Trap, slosh Control device	PMD designed by Jaekle	AIAA 2005- 3734	
P/N 80441	TEMPO, Extended	GEO Commercial	48.9 Ø x 59 L	52	MMH or NTO	Sponge, Trap, Vane, Slosh Control Device	PMD designed by Jaekle		
P/N 80442	TEMPO, Extended	GEO Commercial	48.9 Ø x 63 L	46	MMH or NTO	Sponge, Trap, Vane, Slosh Control Device	PMD designed by Jaekle		
P/N 80449	MER, Mars Explorer Reconnaissance	Mars exploration		7	Hydrazine	Sponge,	PMD designed by Jaekle	AIAA 2002- 4137	

P/N	Program	Program Type	Tank Size (ID)	QTY Delivered	Propellant	PMD Type	PMD Designed By	NOTES, PAPERS	NOTES
P/N 80454	Orbital Express	Propellant transfer experiment	16.5 Ø	2	Hydrazine	Vanes	PMD designed by Jaekle	AIAA 2008- 5105	
P/N 80462	NFIRE		24.6 Ø x 29 L	1	Hydrazine	Vane	PMD designed by Jaekle		
P/N 80466	GLAST	Space observatory	40.44 Ø	1	Hydrazine	Vane, Sponge	PMD designed by Jaekle		
P/N 80470	DS1000	Proprietary	40.44 Ø x 49 long		Hydrazine	Vanes, Sponge	PMD designed by Jaekle		
P/N 80472	Classified	Classified	40 Ø	3	MMH or NTO	Spong, Trap, Vanes	PMD designed by Jaekle		
P/N 80474	MITEX	Classified	29.8 Ø	5	MMH or NTO	Sponge	PMD designed by Jaekle	AIAA 2007- 5559	
P/N 80480	Wild Geese (MiTex)	Classified	19.03 Ø	1	Hydrazine	Vanes, Sponge	PMD designed by Jaekle		
P/N 80481	Classified (MiTex)	Classified	13.33 Ø	1	NTO	Vanes & Sponge	PMD designed by Jaekle		

P/N	Program	Program Type	Tank Size (ID)	QTY Delivered	Propellant	PMD Type	PMD Designed By	NOTES, PAPERS	NOTES
P/N 80484	SDO	Solar Dynamics Observatory	1070 mm (42 in)	2	Hydrazine	Sponge	PMD designed by Jaekle	AIAA 2008- 4942	
P/N 80501	ТЕМРО	GEO Commercial	48.9 Ø	20	MMH or NTO	Sponge, Trap, Vane, Slosh Control Device	PMD designed by Jaekle		
P/N 80502	ТЕМРО	GEO Commercial	48.9 Ø	4	MMH or NTO	Sponge, Trap, Vane, Slosh Control Device	PMD designed by Jaekle		
P/N 80506	702B	GEO Commercial	27.0 Ø	32	Hydrazine or NTO	Sponge, Vanes	PMD designed by Jaekle		
P/N 80507	702B	GEO Commercial	46.0 Ø	7	Hydrazine or NTO	Sponge, Vanes	PMD designed by Jaekle	SP 2016_3124654	
P/N 80511	DS1000	Proprietary	1030 mm (40.7 in) ellipsoid	4	Hydrazine	Sponge, Vanes	PMD designed by Jaekle		
P/N 80517	LS 1300	GEO Commercial	48.9 Ø	8	MMH or NTO	Sponge, Trap, Vane, Slosh Control Device			
P/N 80519	NPOESS		50.0 Ø	Job Terminated		Gallery, Trap	PMD designed by Jaekle		
P/N 80520	Classified	Classified	45.9" Ø x 59" long	2	Hydrazine	Sponge, Gallery	PMD designed by Jaekle	SP 2016_3124654	

P/N	Program	Program Type	Tank Size (ID)	QTY Delivered	Propellant	PMD Type	PMD Designed By	NOTES, PAPERS	NOTES
P/N 80527	CRS	State Station Resupply	29.5" Ø x 43.7" long	17	Hydrazine or NTO	Sponge, Trap, Vanes	PMD designed by Jaekle		
P/N 80535	Himawari		48.9 Ø	4	MMH or NTO	Sponge, Trap, Vane	PMD designed by Jaekle		
P/N 80540	LADEE	Lunar science mission	15.4" Ø	4	MMH or NTO	Sponge, Vanes	PMD designed by Jaekle		
P/N 80545	JWST	Space telescope	26.6" Ø x 40.7" long	1	Hydrazine	Sponge	PMD designed by Jaekle		
P/N 80546	JWST	Space telescope	26.6" Ø x 29" long	1	Oxidizer	Sponge	PMD designed by Jaekle		
P/N 80560	GOES	Environmental satellite	36 Ø x 133 L	2	Hydrazine	Customer-supplied PMD			
P/N 80561	GOES	Environmental satellite	21.75 Ø x 83.2 L	4	Oxidizer	Customer-supplied PMD			
P/N 80563	Star 3	GEO Commercial	50.55" Ø x 65" long	2	Hydrazine	Sponge, Trap, Vanes	PMD designed by Jaekle		
P/N 80564	Star 3	GEO Commercial	50.55" Ø x 37.7" long	3	Oxidizer	Sponge, Trap, Vanes	PMD designed by Jaekle		
P/N 80568	SkySat	Commercial satellite constellation	5.0 Ø x 13.9 L	42	LMP-103s	U-Vane	PMD designed by Jaekle	Shortened 80422, SP2014 2978323	
P/N 80570	A2100 TR	GEO Commercial	46.0 Ø		Hydrazine	Sponge, Vane	PMD designed by Jaekle	TR Fuel Tank, SP 2016_3124654	

P/N	Program	Program Type	Tank Size (ID)	QTY Delivered	Propellant	PMD Type	PMD Designed By	NOTES, PAPERS	NOTES
P/N 80571	A2100 TR	GEO Commercial	46.0 Ø		Oxidizer	Sponge, Vane	PMD designed by Jaekle	TR Ox Tank, SP 2016_3124654	
P/N 80576	702 MP Extended	GEO Commercial	46.0 Ø	3	Hydrazine or NTO	Sponge, Vane	PMD designed by Jaekle	Stretching the 80507, SP 2016_3124654	
P/N 80577	AMP-G	Classified	28.6 Ø x 54.9 L		Hydrazine and NTO	Gallery	PMD designed by Jaekle	New 80398 shell with new PMD	
P/N 80585	Google X	Lunar lander	29.8 Ø	1	Hydrazine	Sponge, Trap	PMD designed by Jaekle	80474 shell with modified 80435 PMD	
P/N 80587	MSP III	Classified	26.6" Ø x 40.7" long		Hydrazine	Sponge, vanes	PMD designed by Jaekle	Using 80545 shell	
P/N 80589	CRS-2	State Station Resupply	29.5" Ø x 43.7" long		Hydrazine and NTO	Sponge, Trap, Vanes	PMD designed by Jaekle	Same shell as 80527, different PMD	
P/N 80592	Emirates Mars Mission (HOPE)	Mars exploration	46.0 Ø		Hydrazine	Sponge, Vane	PMD designed by Jaekle	80507 shell & PMD	
P/N 80599	Google X	Lunar lander	22.21 Ø x 24 L		Hydrazine or NTO	Sponge, Trap	PMD designed by Jaekle	80387 shell modified	