

Smeal

Bid Weight Report

Fire Department		Dealership	
Atlantic Coast Fire Trucks		Atlantic Coast Fire Trucks	
City, State		Apparatus Type	
Murrells Inlet	South Carolina	Side Mount Pumper	
Bid Number		Chassis	
0020559-01		Metro Star	

Weight Distribution			
Gross Vehicle Weight	43200 lbs.	Water Tank	1000 US Gallons Water
Rear Axle Weight	24600 lbs.	Foam	20 US Gallons Foam
Front Axle Weight	18600 lbs.	Foam	0 US Gallons Foam
Load Percent Rear	56.94 %	Number of Seats	6
Load Percent Front	43.06 %	Loose Equipment	
Left Rear Weight	12168 lbs.	Allowance	2000 lbs.
Right Rear Weight	11970 lbs.		
Rear Left / Right Differential	0.82 % This Value Must Be 7% or Less		
Left Front Weight	9196 lbs.		
Right Front Weight	9000 lbs.		
Front Left / Right Differential	1.08 % This Value Must Be 7% or Less		
ESC Required	NO	Brake System ABS/ATC Single Axle	

The weight estimates on this sheet are based on bid information or sales information available at the date shown on this form. Changes in the content of this information will affect the overall weight of the finished apparatus. Dealers should identify compliance to state, regional or local regulations.

20000	FRONT	OK	TOO SMALL	INCREASE TO	
			TOO LARGE	DECREASE TO	
27000	REAR	OK	TOO SMALL	INCREASE TO	
			TOO LARGE	DECREASE TO	

DATE: 9/24/2019

APPROVED _____

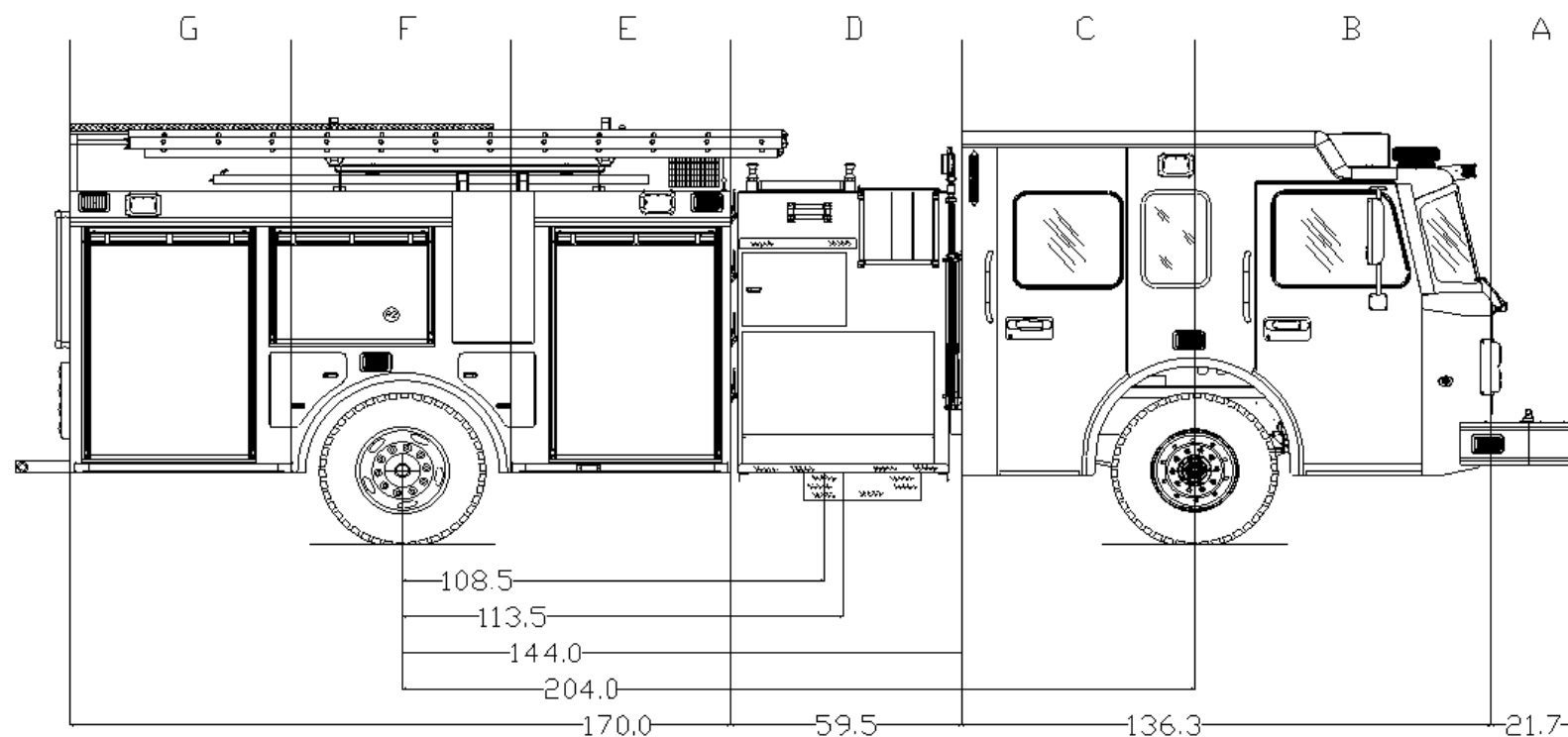
Department	City	State	Dealership
Atlantic Coast Fire Trucks	Murrells Inlet	South Carolina	Atlantic Coast Fire Trucks
Bid Number	0020559-01		
Author	RLL		
Date	9/24/2019		
File	E:\BIDS\WeightFile\BidWeight\20000\20500-20599\20559\0020559-01 ACFT 2020 Demo.xlsm]BIG ITEM		
Side Mount Pumper	Metro Star		

Results		GVW	Rear GAW	Front GAW	LEFT REAR	RIGHT REAR	LEFT FRONT	RIGHT FRONT	Apparatus CG
Total Options (pg. 2)		5123	2829	2294	1449.8	1379.2	1145	1149	From Ground
Totals Big Items		37212	21310	15902	10719	10591	8051	7851	55.77
Totals		42335	24139	18196	12168	11970	9196	9000	From Frame
		ADJ. CHASSIS WT.			0	0	0	0	15.14
Approximate Weight Distribution		43200	24600	18600	Total Left Rear= 12168		DIFF.		Max CG 80 % of Rear Track Width From Ground
Recommended Minimum GVWR		47000	27000	20000	Total Right Rear= 11970		198		
Bid Axle Size		47000	27000	20000	PERCENT DIFF. REAR=			0.82	57.60
Engineering Approval			OK	OK	Total Left Front= 9196		DIFF.		Estimated Frame Height
			REAR WIDTH	FRONT WIDTH	Total Right Front= 9000		196		
			72	85	PERCENT DIFF. FRONT=			1.08	40.63

Option #	Size	Qty		CG Left/Right (inches)	L _c (inches)	Rear _A	Front _A	LEFT REAR	RIGHT REAR	LEFT FRONT	RIGHT FRONT	VERTICAL CG (inches) From Ground	
1			Metro Star	18320	-0.7	154.1	4480.0	13840.0	2282.3	2197.7	7030.7	6809.3	42.3
2			Side Mount Pumper										
3	1000		US Gals Water + 30 Foam	9718	0.3	13.3	9085.1	632.8	4510.1	4575.0	314.5	318.3	67.5
4			Pump	2200	-0.1	108.5	1029.9	1170.1	516.9	513.0	586.9	583.2	50.0
5			1/8" Aluminum Body & Sub	3884	-3.1	-0.4	3891.9	-7.6	2113.2	1778.7	-4.1	-3.5	56.7
6	5	1000 ft	Supply Hose	1150	5.6	-34.5	1344.5	-194.5	567.7	776.8	-84.4	-110.1	95.9
7			1/8" Aluminum Pump Module	629	-0.1	113.5	279.0	349.9	139.9	139.1	175.4	174.5	55.0
8			Equipment Rack	300	41.0	23.3	265.7	34.3	-18.5	284.2	0.6	33.7	80.0
9			Harrison 8 kW	330	-3.5	91.0	182.9	147.1	100.4	82.5	79.7	67.5	88.2
10			Shelves and Trays	301	-6.5	-3.8	306.6	-5.7	180.8	125.8	-3.3	-2.4	49.6
11													
12	2.5	500 ft	Supply Hose	380	-16.8	-34.5	444.3	-64.3	325.8	118.5	-44.8	-19.4	94.0
13													

NOTE: EMFD 10" Raised Roof 450HP Cummins L9 - EPA 2017 Allison 3000 EVS

					Drawing Data								
					CG	Center of Gravity	C _L	136.3					
Data Collection Form					R _A	Rear Axle	WB	204.0					
Smeal Holding, LLC.					F _A	Front Axle	B _L	170.0					
Bid Weight Estimator Data					LC	Load Center	D _L	59.5					
Weight(20000)20500-20599(20559)(0020559-01 ACFT 2020 Demo					WB	Wheel Base	CA	144.0					
Option #	Size	Qty	ITEM DESCRIPTION	WEIGHT (lbs.)	CG Left/Right (inches)	ZONE	R _A	F _A	LEFT REAR	RIGHT REAR	LEFT FRONT	RIGHT FRONT	Vertical CG (inches) From Ground
Personnel													
	300	2	Front Firefighters	600		B	-112.2	712.2	-56.1	-56.1	356.1	356.1	62.6
	300	4	Rear Firefighters	1200		C	176.5	1023.5	88.2	88.2	511.8	511.8	62.6
Hose													
	2.5	200	Preconnect	152		D	66.9	85.1	33.4	33.4	42.6	42.6	87.8
	1.75	200	Preconnect	100		D	44.0	56.0	22.0	22.0	28.0	28.0	87.8
	1.75	200	Preconnect	100		D	44.0	56.0	22.0	22.0	28.0	28.0	87.8
	1.75	150	Bumper / Trash	75		A	-32.0	107.0	-16.0	-16.0	53.5	53.5	27.7
	5	25	Running Board Hose	29	44.0	D	12.8	16.2	-1.4	14.2	-0.3	16.5	17.0
		2	Hard Suction (6" x 10')	152		F	152.4	-0.4	76.2	76.2	-0.2	-0.2	85.8
Ladder													
	10'	1	585-A	16	30.6	F	16.0	0.0	1.2	14.8	0.0	0.0	104.1
	14'	1	775-A	28	41.5	F	28.1	-0.1	-2.1	30.2	0.0	-0.1	114.2
	24'	1	900-A	72	41.5	F	72.2	-0.2	-5.5	77.7	0.0	-0.2	111.1
	10'	1	Pike Pole	7	39.4	F	7.0	0.0	-0.3	7.4	0.0	0.0	102.2
	10'	1	Pike Pole	7	42.4	F	7.0	0.0	-0.6	7.6	0.0	0.0	102.2
	10'	1	Pike Pole	7	45.3	F	7.0	0.0	-0.9	7.9	0.0	0.0	102.2
Mounted Equipment													
			Kwik Raze Lights	35		D	15.4	19.6	7.7	7.7	9.8	9.8	87.6
			Electric Cord Reel	130	23.6	D	57.2	72.8	9.9	47.3	16.2	56.6	88.2
			Booster Reel	200	-17.8	D	88.0	112.0	65.7	22.2	79.5	32.5	90.9
			Deluge (3 inch)	75		D	33.0	42.0	16.5	16.5	21.0	21.0	80.6
			Rear Discharge (2.5 inch)	100	-15.3	F	100.2	-0.2	71.4	28.8	-0.2	-0.1	71.1
			Front Discharge (1.5 inch)	10		A	-4.3	14.3	-2.1	-2.1	7.1	7.1	49.6
			Wheel Well Compartment	38		F	38.1	-0.1	19.0	19.0	0.0	0.0	42.8
			Wheel Well Compartment	38		E	27.5	10.5	13.8	13.8	5.2	5.2	42.8
			Wheel Well Compartment	38	44.0	G	48.6	-10.6	-5.4	54.1	0.2	-10.8	42.8
			Running Board Hose Well	15	44.0	D	6.6	8.4	-0.7	7.3	-0.1	8.5	17.0
			T-Brite Hose Bed Cover	179		F	179.3	-0.4	89.7	89.7	-0.2	-0.2	115.1
			T-Brite Crosslay Cover	20		D	8.8	11.2	4.4	4.4	5.6	5.6	98.3
Equipment Allowances													
			NFPA Equipment allowance	0	0.0	D	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			NFPA Equipment allowance	619	-4.4	E	448.6	170.4	251.6	197.0	94.0	76.4	58.6
			NFPA Equipment allowance	330	-13.8	F	330.6	-0.8	228.7	101.9	-0.5	-0.3	75.3
			NFPA Equipment allowance	751	-2.9	G	961.7	-210.5	519.7	442.0	-112.5	-98.0	54.9
Misc.													
				5122.9			2829.0	2293.9					



Atlantic Coast Fire Trucks

Estimated in service weights.

BID 0020559-01

Date 9/24/2019

Weights

Left Front	9,380 lbs.	Right Front	9,180 lbs.	Total Weight Front	18,560 lbs.	L / R Weight Difference	1.08 %
Left Rear	12,411 lbs.	Right Rear	12,209 lbs.	Total Weight Rear	24,620 lbs.	L / R Weight Difference	0.82 %
Left Side Weight	21,791 lbs.	Right Side Weight	21,389 lbs.	Total Apparatus Weight	43,180 lbs.	Total L / R Weight Difference	0.93 %

Apparatus CG

CG From Rear Axle	87.68 inches	CG Left Side / Right Side	-0.36 inches	CG Vertical From Ground	55.77 inches
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