

DRAFT: IoH Engineering Matrix

IoH Category	Photo	Vehicle ID	Vehicle Make	EMPTY CONFIGURATION					FULLY-LOADED CONFIGURATION							
				Gross Weight	Meets FBF?	Controlling Element for FBF	BRIDGE Impact	PAVEMENT Impact	Gross Weight	Meets FBF?	Controlling Element for FBF	BRIDGE Impact	PAVEMENT Impact			
I		T1	John Deere 8430	Total = 30,240 lbs	YES	Axle 2 = 17,300 lbs	LOW	LOW	Total = 30,240 lbs	YES	Axle 2 = 17,300 lbs	LOW	LOW			
				Axle 1 = 12,900										87% of FBF	Axle 1 = 12,900	87% of FBF
				Axle 2 = 17,300 lbs											Axle 2 = 17,300 lbs	
I		T2	M. Ferguson 8470	Total = 21,780 lbs	YES	Axle 2 = 12,700 lbs	LOW	LOW	Total = 21,780 lbs	YES	Axle 2 = 12,700 lbs	LOW	LOW			
				Axle 1 = 9,080 lbs										64% of FBF	Axle 1 = 9,080 lbs	64% of FBF
				Axle 2 = 12,700 lbs											Axle 2 = 12,700 lbs	
I		T6	John Deere 8230	Total = 30,820 lbs	YES	Axle 2 = 17,600 lbs	LOW	LOW	Total = 30,820 lbs	YES	Axle 2 = 17,600 lbs	LOW	LOW			
				Axle 1 = 13,220 lbs										88% of FBF	Axle 1 = 13,220 lbs	88% of FBF
				Axle 2 = 17,600 lbs											Axle 2 = 17,600 lbs	
I		T7	Case IH 275	Total = 32,900 lbs	YES	Axle 2 = 19,020 lbs	LOW	LOW	Total = 32,900 lbs	YES	Axle 2 = 19,020 lbs	LOW	LOW			
				Axle 1 = 13,880 lbs										95% of FBF	Axle 1 = 13,880 lbs	95% of FBF
				Axle 2 = 19,020 lbs											Axle 2 = 19,020 lbs	
I		G1	Case IH 9330	Total = 27,400 lbs	YES	Axle 2 = 14,800 lbs	LOW	LOW	Total = 27,400 lbs	YES	Axle 2 = 14,800 lbs	LOW	LOW			
				Axle 1 = 12,600 lbs										74% of FBF	Axle 1 = 12,600 lbs	74% of FBF
				Axle 2 = 14,800 lbs											Axle 2 = 14,800 lbs	
I		T8	Case IH Steiger 485	Total = 53,430 lbs	NO	Axle 2 = 26,950 lbs	MEDIUM	HIGH	Total = 53,430 lbs	NO	Axle 2 = 26,950 lbs	MEDIUM	HIGH			
				Axle 1 = 26,480 lbs										135% of FBF	Axle 1 = 26,480 lbs	132% of FBF
				Axle 2 = 26,950 lbs											Axle 2 = 26,950 lbs	
II		N/A	John Deere Forage Harvester	Total = 36,538 lbs	NO	Axle 1 = 21,923 lbs	LOW	MEDIUM	Total = 45,718 lbs	NO	Axle 2 = 27,431 lbs	MEDIUM	MEDIUM			
				Axle 2 = 19,923 lbs										110% of FBF	Axle 2 = 19,923 lbs	137% of FBF
				Axle 1 = 14,615 lbs											Axle 1 = 14,615 lbs	
II		S3	AGCO Terragator 8204	Total = 31,600 lbs	YES	Axle 2 = 17,860 lbs	LOW	LOW	Total = 49,000 lbs	NO	Axle 2 = 29,000 lbs	MEDIUM	HIGH			
				Axle 1 = 13,920 lbs										89% of FBF	Axle 1 = 13,920 lbs	145% of FBF
				Axle 2 = 17,860 lbs											Axle 2 = 17,860 lbs	
II		R4	AGCO Terragator 9203	Total = 37,540 lbs	NO	Axle 2 = 23,840 lbs	LOW	HIGH	Total = 58,000 lbs	NO	Axle 2 = 41,200 lbs	MEDIUM	HIGH			
				Axle 1 = 13,700 lbs										119% of FBF	Axle 1 = 13,700 lbs	206% of FBF
				Axle 2 = 23,840 lbs											Axle 2 = 23,840 lbs	
II		R5	AGCO Terragator 8144	Total = 31,730 lbs	YES	Axle 2 = 16,440 lbs	LOW	LOW	Total = 47,100 lbs	NO	Axle 2 = 30,700 lbs	MEDIUM	HIGH			
				Axle 1 = 15,290 lbs										82% of FBF	Axle 1 = 15,290 lbs	153% of FBF
				Axle 2 = 16,440 lbs											Axle 2 = 16,440 lbs	
II		R6	AGCO Terragator 3104	Total = 42,050 lbs	NO	Axle 1 = 24,150 lbs	LOW	HIGH	Total = 74,700 lbs	NO	Axle 2 = 48,700 lbs	HIGH	VERY HIGH			
				Axle 2 = 24,150 lbs										121% of FBF	Axle 2 = 24,150 lbs	244% of FBF
				Axle 1 = 17,900 lbs											Axle 1 = 17,900 lbs	
III		S4	Homemade	Total = 27,860 lbs	YES	Total = 27,860 lbs	LOW	LOW	Total = 65,000 lbs	NO	Tandem = 49,000 lbs	MEDIUM	MEDIUM			
				Axle 1 = 12,680 lbs										70% of FBF	Axle 1 = 12,680 lbs	144% of FBF
				Axle 2 = 6,480 lbs											Axle 2 = 6,480 lbs	
III		S5	Homemade	Total = 28,100 lbs	YES	Total = 28,100 lbs	LOW	LOW	Total = 62,300 lbs	NO	Tandem = 43,000 lbs	MEDIUM	LOW			
				Axle 1 = 12,700 lbs										70% of FBF	Axle 1 = 12,700 lbs	126% of FBF
				Axle 2 = 8,320 lbs											Axle 2 = 8,320 lbs	
IV		T1	John Deere 8430 w/Houle Tank	Total = 44,500 lbs	YES	Axle 2 = 17,300 lbs	LOW	LOW	Total = 81,000 lbs	NO	Axle 2 = 25,000 lbs	HIGH	MEDIUM			
				Axle 1 = 12,940 lbs										87% of FBF	Axle 1 = 12,940 lbs	125% of FBF
				Axle 2 = 17,200 lbs											Axle 2 = 17,200 lbs	
IV		T2	M. Ferguson 8470 w/Husky Tank	Total = 30,780 lbs	YES	Axle 2 = 12,700 lbs	LOW	LOW	Total = 63,900 lbs	NO	Tandem = 36,600 lbs	MEDIUM	LOW			
				Axle 1 = 9,080 lbs										64% of FBF	Axle 1 = 9,080 lbs	108% of FBF
				Axle 2 = 12,700 lbs											Axle 2 = 12,700 lbs	
IV		T6	John Deere 8230 w/Husky Tank	Total = 45,840 lbs	YES	Axle 2 = 17,600 lbs	LOW	LOW	Total = 89,700 lbs	NO	Tandem = 55,000 lbs	HIGH	HIGH			
				Axle 1 = 13,220 lbs										88% of FBF	Axle 1 = 13,220 lbs	162% of FBF
				Axle 2 = 17,600 lbs											Axle 2 = 17,600 lbs	
IV		T7	Case IH 275 w/Houle Tank	Total = 58,540 lbs	YES	Axle 2 = 19,020 lbs	LOW	MEDIUM	Total = 105,900 lbs	NO	Tridem = 71,000 lbs	HIGH	HIGH			
				Axle 1 = 19,020 lbs										95% of FBF	Axle 1 = 19,020 lbs	169% of FBF
				Axle 2 = 19,500 lbs											Axle 2 = 19,500 lbs	
IV		T8	Case IH 485 w/Houle Tank	Total = 78,230 lbs	NO	Axle 2 = 26,950 lbs	MEDIUM	HIGH	Total = 134,000 lbs	NO	Quad = 96,900 lbs	HIGH	HIGH			
				Axle 1 = 26,480 lbs										132% of FBF	Axle 1 = 26,480 lbs	181% of FBF
				Axle 2 = 26,950 lbs											Axle 2 = 26,950 lbs	
IV		G1	Case IH 9330 w/Parker 938 Cart	Total = 37,900 lbs	YES	Axle 2 = 14,800 lbs	LOW	LOW	Total = 87,400 lbs	NO	Axle 2 = 49,000 lbs	HIGH	HIGH			
				Axle 1 = 12,600 lbs										74% of FBF	Axle 1 = 12,600 lbs	245% of FBF
				Axle 2 = 14,800 lbs											Axle 2 = 14,800 lbs	

Last Updated: July 8, 2013