

MV "Zea"	INITIAL SURVEY		FINAL SURVEY	
	Inner roads 8.3		Inner roads P.1	
	18.11.2025 - 18:45 h		21.12.2025 - 04:40 h	
	0.20 m. waves		0.10 m. waves	
IMO NO. 9628087      FLAG: Panamanian      BUILD: 2013	Wind force 02		Wind force 01	
<b>DRAUGHT SURVEY CERTIFICATE</b>	Ebb tide, , 1 knot		No tide flow	
<b>PGUA/DS/361/25</b>	Weather: Overcast		Weather: Starry	
DRAUGHT	INITIAL		FINAL	
Forward port	5.2700 m		13.1900 m	
Forward starboard	5.1600 m		13.2300 m	
Forward mean	5.2150 m		13.2100 m	
Stem correction	-0.0170 m		-0.0004 m	
<b>Draught forward (corrected to fore perpendicular)</b>	<b>5.1980 m</b>		<b>13.2096 m</b>	
Midship port	6.1600 m		13.2400 m	
Midship starboard	5.9100 m		13.3700 m	
Midship mean	6.0350 m		13.3050 m	
Midship correction	-0.0034 m		-0.0001 m	
<b>Draught midship (corrected to midship perpendicular)</b>	<b>6.0316 m</b>		<b>13.3049 m</b>	
Aft port	7.0100 m		13.2000 m	
Aft starboard	7.0000 m		13.3000 m	
Aft mean	7.0050 m		13.2500 m	
Stern correction	0.0839 m		0.0019 m	
<b>Draught after (corrected to after perpendicular)</b>	<b>7.0889 m</b>		<b>13.2519 m</b>	
Kell correction	0.0000 m		0.0000 m	
Waterplane coefficient correction for hull deflexion	0.0120 m		-0.0111 m	
<b>Means of means corrected for deflexion:</b>	<b>6.0715 m</b>		<b>13.2752 m</b>	
<b>True trim</b>	<b>BY STERN</b>	<b>1.89 m</b>	<b>BY STERN</b>	<b>0.04 m</b>
<b>Heel (angle &amp; in cm)</b>	<b>P 0.44 °</b>	<b>25.00 cm</b>	<b>S 0.23 °</b>	<b>13.00 cm</b>
<b>Hull deflexion:</b>	<b>HOGGING</b>	<b>11.19 cm</b>	<b>SAGGING</b>	<b>7.41 cm</b>
DISPLACEMENTS	INITIAL		FINAL	
Displacement in salt water	37,265.7 t		86,049.2 t	
First trim correction	-449.6 t		2.9 t	
Second trim correction	19.8 t		0.0 t	
Displacement corrected for trim	36,835.9 t		86,052.1 t	
Water density	1.02000		1.02050	
Displacement corrected for density	36,656.2 t		85,674.3 t	
Deductibles (fresh water, oils, etc.)	22,671.0 t		1,528.4 t	
Displacement corrected for deductibles	<b>13,985.2 t</b>		<b>84,146.0 t</b>	
Light Ship	<b>13,433.0 t</b>			
Calculated constant	<b>575.0 t</b>			
Anchor + chain	22.8 t		22.8 t	
<b>Total cargo loaded on board as per draught survey</b>			<b>70160.7 t</b>	
<b>Loading terminals: CT, IT, RO, BT, .</b>	<b>TPC</b>	<b>64.5 t/cm</b>	<b>TPC</b>	<b>70.8 t/cm</b>
<b>Cargo: Maize in bulk</b>	<b>MTC +0.5</b>	<b>946.2 t*cm</b>	<b>MTC +0.5</b>	<b>1235.5 t*cm</b>
<b>Paranaguá, Brazil. December 21st, 2025.</b>	<b>MTC -0.5</b>	<b>921.4 t*cm</b>	<b>MTC -0.5</b>	<b>1214.7 t*cm</b>
<b>Total cargo loaded on board as per shore scales</b>			<b>69,809.800 t</b>	
<b>Total cargo loaded on board as per draught survey</b>			<b>70,160.744 t</b>	
<b>Surplus</b>	<b>350.944 t</b>		<b>0.50 %</b>	

Remarks: 1) Due to huge hull deflexion in hogging on initial draft survey and sagging on final draft survey, it was applied the waterplane area coefficient correction for the deflexion formula as per UN/ECE/Energy/19/1992. 2) According to the Master/Chief Officer usual constant would amount to 600 t.

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Master/Ch.Off: 70,149.000 t      339.200 t      0.49 %  
 Owners P&I: 70,149.700 t      339.900 t      0.49 %