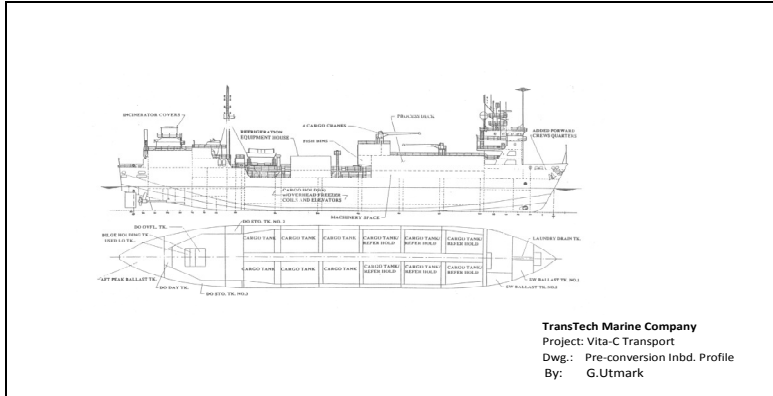


Vita-C Transport

TransTech designed Vita-C Transport around a surplus U.S. flag fish-processing vessel. Special deep tanks for juice in bulk, conversion of the 'tween deck to a garage for ro-ro cargo and loading containers on the weather deck increased load factors on all voyage legs, including the U.S. coastwise (Jones Act) trade. This enabled lowering the cost of shipping orange juice to North America so it could be more competitive with larger suppliers.

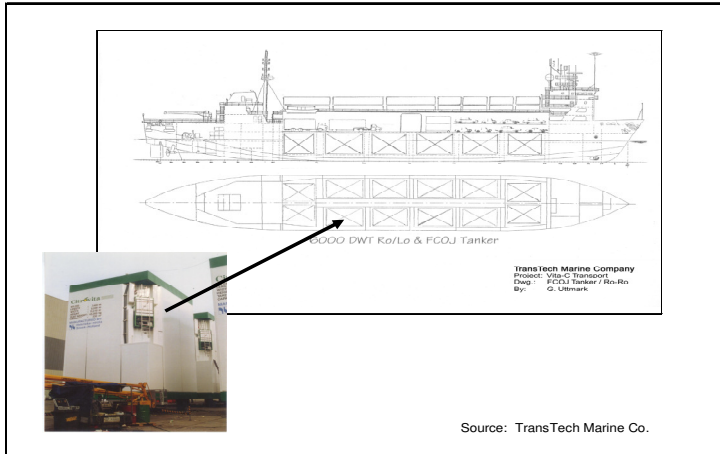
MAIN PARTICULARS

LOA	369.0 ft.
LBP	345.0 ft.
Beam	60.0 ft.
Depth	31.0 ft.
Draft - light	17.3 ft.
Draft - full	23.5 ft.
Light ship	3480 LT
Total DWT	7300 LT
Displacement	10780 LT
Prime Mover:	2 geared diesels
Total BHP	2250
RM	1225
Manufacturer	Caterpillar
Model	D399FA - V 16
Reduction Gear:	2
Gear ratio	5.07:1
Manufacturer	Caterpillar
Model	7271
Propellers:	2 nickel bronze
Blades	4
Pitch (Fixed)	87.5 in.
Diameter	102.0 in.
Manufacturer	Columbia Bronze
Shafts	8.0 in. diam. forged steel
Bow Thruster:	1
Blades	4
CP	CP
Motor Power	400 HP General Electric
Manufacturer	Bird-Johnson
Gensets:	2 850 Kw AC Cat. SR4
Powered by	D399 Caterpillars
Genset	1 155 Kw AC Cat. SR4
Powered by	Cat. model 3306
Emergency genset	275 Kw AC Cat. - SR4
Powered by	Cat. model 3408
Hull:	
Framing	Double chine
Deck stringer	7/16 in.
Shell plating	5/8 in.
Tank top plating	3/4 in.
Keel	3/4 in.
Side longitudinals	3" x 2" x 5/16" angle
Side shell web frames	15.3 lb. plate - upper 20.4 lb. plate - lower

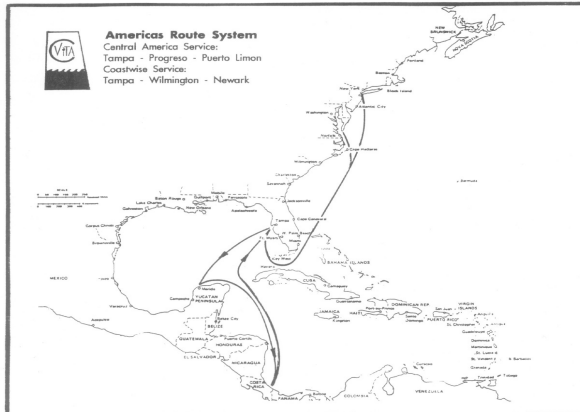


WORK SCOPE

- Remove fish processing equipment in two-level shelter deck structures between frames 23 and 49 and between frames 59 and 93. Remove intermediate deck in both shelter deck structures.
- Remove fishery and refrigeration equipment in twelve cargo tanks.
- Remove centerline cofferdam between frames 30 and 31 and between frames 55 and 59. Enclose centerline cofferdam at frames 31 and 55 and make resulting transverse bulkheads watertight at frames 31 and 55.
- Remove two incinerators, forced draft fans and deck house enclosure structure between frames 75 and 92.
- Extend shelter deck structure between frames 49 and 48 and between frames 53 and 55. Full breadth shelter deck structure to be recessed in way of lifeboats port and starboard (frames 53 to 55).
- Add centerline pillars between main deck and weather deck full length of shelter deck structure (frames 23 and 93).
- Make twelve openings in weather deck and main deck, each approx. 26' x 20' to receive twelve free-standing rectangular cargo tanks of approx. 26' x 20' x 37' height and 500 tons weight when full. Reinforce tank top as necessary. Install watertight / weathertight gasket around tank at main deck. Fit weather deck with watertight access covers.
- Convert space created by removal of incineration equipment between frames 75 and 92 to break bulk cargo hold. Relocate two pedestal cranes from frame 42 to frame 81 P/S to handle break bulk cargo. Erect coaming around hatch. Fit with gullion covers strengthened for stowage of twenty foot containers on top.



Item	Quantity	Unit	Rate	Amount	Notes
TRANS TECH SHIP COST ESTIMATION					
Summary Sheet					
Owner	Trans Tech	Ship	100%	100%	
Year	2000	Year	2000	Year	2000
Cost Basis	100%	Cost	100%	Cost	100%
TOTAL DIRECT COST: \$7,800,000					
TOTAL SHIP COST: \$8,100,000					
TOTAL PROJECT COST: \$8,500,000					



TransTech Marine Co. ARR.