



IMOS V.5

Integrated Maritime Operations System

Multi-Grade Guide

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Introduction to Multi-Grade Bunkers

To meet requirements for low sulfur fuels in environmentally restricted regions, IMOS supports tracking multiple fuel types, or grades. In addition to Intermediate Fuel Oil (IFO) and Marine Diesel Oil (MDO), you can extend the list of fuel types and configure your vessels to use them. IMOS maintains pricing, speed-consumption, ROB, and stemming data independently for each bunker grade. With Multi-Grade Bunkers, IMOS also supports tracking nonfuel vessel liquids, such hydraulic fluid and lubricating oils.

The IMOS Distances database includes an accurate geographic representation of low-sulfur regions. This information enables the Voyage Estimator to automatically project accurate cost estimates based on the consumption of low-sulfur and/or full-sulfur fuels.

This document describes the changes to the forms and functions of IMOS related to Multi-Grade Bunkers.

The primary tasks affected by Multi-Grade Bunkers include:

- Defining Fuel/Lube Types, on page 7
- Configuring Vessels to Use Grades, on page 7
- Estimating a Voyage, on page 13
- Fixing a Voyage, on page 16
- Managing a Voyage, on page 17
- Bunker Planning and Invoicing, on page 18
- Time Chartering, on page 23

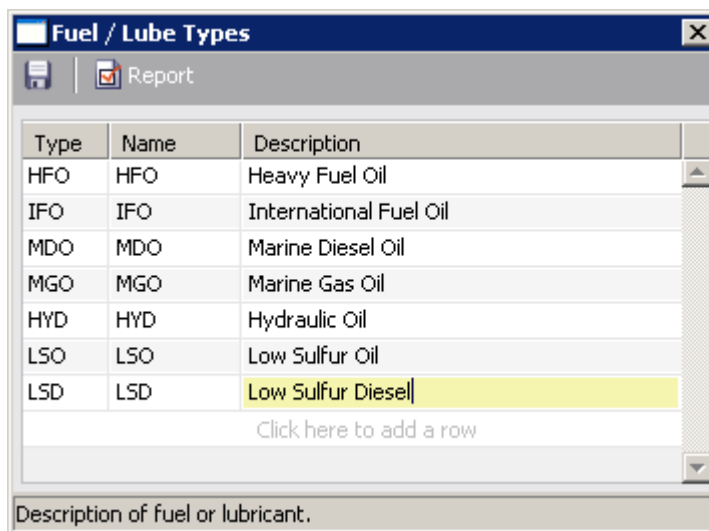
Data Center

To configure multiple grades of fuel in IMOS, click the **Data Center** tab to begin in the Data Center. Define all the fuel/lube types you will use and then configure your vessels to use them.

Defining Fuel/Lube Types

The first step in using multiple grades of fuel is to define the fuel and lubricant types.


1. In the Data Center Term Lists table, under Other, click **Fuel/Lube Types**.



Type	Name	Description
HFO	HFO	Heavy Fuel Oil
IFO	IFO	International Fuel Oil
MDO	MDO	Marine Diesel Oil
MGO	MGO	Marine Gas Oil
HYD	HYD	Hydraulic Oil
LSO	LSO	Low Sulfur Oil
LSD	LSD	Low Sulfur Diesel

Click here to add a row

Description of fuel or lubricant.




2. In the Fuel/Lube Types form, complete the fields:
 - **Type:** Three characters representing the type of fuel or lubricant.
 - **Name:** Up to seven characters representing the name of the fuel or lubricant. The name defaults to the same value as the Type, but you can change it.
 - **Description:** A description of the fuel or lubricant.
3. To save the information, click .

Configuring Vessels to Use Grades

General Vessel Information

After defining fuel and lube types, you can configure your vessels to use the different types on the General Vessel Information form. If multiple vessels use the same configuration of grades, you can configure one vessel and then copy it to configure the other, similar vessels.

1. In the Data Center, click **Vessels**.
2. In the Vessels list, do one of the following:

- To update an existing vessel, click its name.
- To add a new vessel, click  and complete at least the following required fields:
 - **Vessel Code:** A unique, four-digit code.
 - **Type Code:** Code for the vessel type: B = Bulk; L = LNG Carrier; T = Tanker.
 - **Speed Laden:** Vessel speed when fully laden.
 - **Vessel Name:** Name of the vessel.
 - **Vessel Type:** Vessel type.
 - **Vessel DWT:** Deadweight of the vessel, in metric tons.
- To copy the data from an existing vessel, click either  or a vessel name to open the General Vessel Information form. Click  and retrieve the information for the vessel you want to copy. Complete at least the required fields listed above.

In Port Consumption: Click to add a fuel type.

Speed Consumption: Click to add a speed.

General Vessel Information

Vessel Code: SAME Vessel Name: AMERICAN EAGLE Vessel DWT: 75,000.00 MT

Type Code: T Year Built: SW Summer Draft: 14.35 M

Ownership: OV Vessel Type: MMTA TPC: 67.00

IMO Number: Fleet: Capacity: 86,350 M3

Daily Cost: 25,000.00 Trade Area: Capacity: 543,126 Bbl

Speed Laden: 15.50 Vessel Owner:

Ballast: 16.00 Class Society:

In Port Consumption Table (Per Day)

Type	Name	Unit	Capacity	Margin	Loading	Dischg	Idle	Hotel	Heat	Clean	G
IFO	IFO	MT	2,300.00	0.00	12.00	24.00	7.50	0.00	28.00	8.50	G
MDO	MDO	MT	110.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G
LSO	LSO	MT	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	L
HYD	HYD	MT	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	G

[Click here to add a row](#)

Speed Consumption Table (Per Day)

Speed	IFO (L)	IFO (B)	MDO (L)	MDO (B)	LSO (L)	LSO (B)	HYD (L)	HYD (B)
15.50	27.00	26.00	0.00	0.00	27.00	25.00	0.00	0.00
16.00	28.00	27.00	0.00	0.00	29.00	27.00	0.00	0.00

[Click here to add a row](#)


Canal Cost: Panama: 100,000.00 Ballast: 150,000.00 Laden: 150,000.00 Variables And Safety Margins: Constants: 0.00 MT

Suez: 100,000.00 Fresh Water: 0.00 MT

Magellan: 100,000.00 Others: 0.00 MT

Bosphorus: 100,000.00 Total: 0.00 MT

3. In the General Vessel Information form, add any relevant information, including the multi-grade fields:
 - **In Port Consumption Table:** Click in the last row of the table to add a fuel type row and complete the fields:
 - **Type:** Press **Enter** to open the Fuel Type selection list, select a fuel type, and click **OK**.
 - **Name:** The name defaults to the same value as the Type.

- **Unit:** Press **Enter** to open the Units selection list, select a unit of measure, and click **OK**.
 - **Capacity:** Fuel capacity of the vessel.
 - **Margin:** Safety margin of fuel held.
 - **Loading:** Loading fuel consumption.
 - **Dischg:** Discharge fuel consumption.
 - **Idle:** Idling fuel consumption.
 - **Hotel:** Hotel fuel consumption.
 - **Heat:** Heating fuel consumption.
 - **Clean:** Cleaning fuel consumption.
 - **G (Grade):** G = General purpose, which doesn't alternate. H = High sulfur; L = Low sulfur. High- and Low-sulfur grades alternate with each other.
 - **Speed Consumption Table:** If necessary, click in the last row of the table to add a speed row so the table includes consumption amounts for all of the vessel's normal operating speeds. Complete the fields:
 - **Speed:** A normal operating speed for the vessel.
 - For each fuel type:
 - **Fuel (L):** Fuel consumption when laden at the listed speed.
 - **Fuel (B):** Fuel consumption when in ballast at the listed speed.
4. To save the information, click .

Unit Information

The Unit Information form includes most of the same Bunker Information and the same Speed Consumption table as the General Vessel Information form.

Bunker Information:
Click to add a fuel type. →

Speed Consumption:
Click to add a speed. →

The screenshot shows the 'Unit Information' window with the following sections:

- Form Fields:** Unit Code, Unit Name, Ownership, Total BBLs (0.00), Type Code, Vessel Type, Vetted Date, Vetted checkbox, Daily Cost (0.00), Service Area, Fleet, and Unit Owner.
- Boat Table:** Columns: Boat Name, In (GMT), In Lub, Out (GMT), Out Lub. Includes a 'Click here to add a row' button.
- Barge Table:** Columns: Barge Name, In (GMT), Out (GMT). Includes 'Laden Speed: 0.00' and 'Ballast Speed: 0.00' fields. Includes a 'Click here to add a row' button.
- Bunker Information Table:** Columns: Type, Name, Unit, Capacity, Loading, Discharge, Idle, Hotel, Heat, Clean. Includes a 'Click here to add a row' button.
- Speed Consumption Table:** Column: Speed. Includes a 'Click here to add a row' button.
- Fuel type:** A text field at the bottom.

Boat Information

The Boat Information form also includes separate information for each fuel type in Bunker Information.

Bunker
Information:
Click to add a
fuel type. →

Boat Information									
Boat Code:		Service Area:		Daily Cost:	0.00				
Ownership:		Vessel Type:		Speed Laden:	0.00				
Official No:		Fleet:		Speed Ballast:	0.00				
Year Built:		Phone No:		Horsepower:	0.00				
		Fax No:		Registered Tons:	0.00				
				Tow Capacity (BBLs):	0.00				
Boat Name	Owner	Eff Date		Lub (Gal/day):	0.00				
Click here to add a row									
				<input type="checkbox"/> Vetted	Date:		/	/	
				L x W x H (Ft):	0.00	0.00	0.00		
Bunker Information									
Type	Name	Unit	Capacity	Loading	Discharge	Idle	Avg Cons Gal/Hour		
			0.00	0.00	0.00	0.00	0.00		
Click here to add a row									
Remarks:									
Fuel type.									

Inland Barge Information

The Inland Barge Information form lists capacities by fuel type.

Capacity:
Click to add a
fuel type.

Inland Barge Information

Barge Code:
 Service Area:
 Vetted Date:

Barge Name	Owner	Eff Date
Click here to add a row		

Ownership:
 Official No:
 Year Built:
 Daily Cost:
 OPA Date:
 Calibrated BBLs:
 Registered Tons:
 Heating (Gal/Hr):

Tanker
 Vapor
 Heat
 Steam

Fuel Type	Capacity
Click here to add a row	

Hull Type:
 Hull Arrangement:
 L x W x H (Ft):

Dock Exceptions:

Port	Berth	Reason
Click here to add a row		

Barge Notes:

Barge service area.

Chartering

You can specify prices for different fuels for IMOS to use in calculating estimates. The Voyage Estimator also uses data from IMOS Distances to recognize low-sulfur zones and use the correct grade in consumption figures.

Estimating a Voyage

When you estimate the cost of a voyage, you can specify prices for different fuels to use in the calculations. The Estimator also recognizes when a vessel is in a Low Sulfur zone and calculates fuel consumption accordingly.

When you begin creating an estimate in the Column view, you can specify all the fuel prices per metric ton to be used in the calculation.

Estimate Id:	MG-1
Vessel:	AMERICAN EAGLE
DlyCost/Addr:	25,000.00 0.00
Spd Laden/Bal:	15.50 16.00
Cargo:	CRUDE OIL
Charterer:	ACME
Quantity/Units:	50,000 MT
Ballast Port:	
Load Port:	QUOIN ISLAND
Disch Port:	STOCKHOLM
Reposition Port:	
Freight Type:	F USD
Freight Rate:	20.33
Commission %:	2.000
Ballast Bonus:	0
IFO/MDO Pr/MT	350.00 700.00
LSD/HVD Pr/MT	600.00 10.00
Days Port/Sail:	3.87 18.60
Days Total:	22.46
Commence On:	10/05/07 04:55
Complete On:	10/27/07 16:02
Gross Income:	1,016,367
Net Income:	996,040
Port Disb USD:	150,000
Voy Expenses:	911,406
Profit Total USD:	84,634
Profit Daily:	3,768
T/C Equiv:	28,768
Last Update:	adm 11/13/2007
Remark:	

← Fuel Prices/MT

The Details view shows the information for all the fuels in a table: fuel type; price; and ballast, laden, loading, discharging, and idling consumption.

The screenshot displays the 'Details' view of an estimate. It includes several key sections:

- VESSEL INFORMATION:** Shows vessel name 'AMERICAN EAGLE', deadweight of 75,000 MT, and other specifications.
- FUEL TABLE:** A table listing fuel types and their associated costs and consumption rates.

FUEL	PRICE	BLST	LADEN	LOAD	DISCH	IDLE
IFO	350.00	27.00	27.00			
MDO	700.00			12.00	12.00	
LSO	600.00	27.00	27.00			
HVO	10.00					
- Draft/Restrictions View tab:** A tab for entering specific draft and restriction data.
- VOYAGE ITINERARY:** A table showing the route and cargo details.

Port	Berth	F	Draft Basis	Draft	Cargo	L/D Qty	API	SG	MaxLift	Bldr Arr	LS SDay	LS PDay
QUOIN ISLAND	QUAY	L	m.ss		NO NAME	50,000		1.08	74,463	536.51	0.00	0.00
SUEZ CANAL	TRANSIT	I	m.ss	16.00				1.08	74,671	329.25	0.00	0.00
STOCKHOLM	QUAY	D	m.ss		NO NAME	50,000		1.08	74,980	20.00	0.00	0.00
- ESTIMATE SUMMARY:** A summary of financial data including freight, demurrage, gross income, and net income.

The Voyage Itinerary has different views located on tabs. Click the **Draft/Restrictions View** tab to enter Low Sulfur Sea Days and Low Sulfur Port Days for the estimate.

Vessel Details for Estimate

You can adjust information about the vessel for this voyage on the Vessel Details for Estimate form by clicking the [Vessel](#) link.

The 'Vessel Details' form provides a comprehensive overview of vessel specifications and costs:

- Vessel Name:** AMERICAN EAGLE
- Daily Cost:** 25,000
- Vessel DWT:** 75,000
- Summer Draft:** 14.35
- Winter Draft:** 0.00
- TPC:** 67.00
- Weather Factor (%):** 0.00
- Total Vars:** 0
- Canal Costs (USD):**

	Ballast	Laden
Panama:	100,000	150,000
Suez:	100,000	150,000
Magellan:	100,000	150,000
Bosporus:	100,000	150,000
- Bunker Data and Consumption Rates:**

Name	Price	Ballast	Laden	Load	Disch	Idle	Margin	Capacity
IFO	300.00	27.00	27.00	12.00	24.00	7.50	0.00	2,300.00
MDO	30.00	0.00	0.00	0.00	0.00	0.00	0.00	110.00
LSO	0.00	27.00	27.00	0.00	0.00	0.00	0.00	1,000.00
- Contract Type:** OVOV

Ballasting Cost Details and Repositioning Cost Details

Ballasting Cost Details (click the [Ballast port](#) link) and Repositioning Cost Details (click the [Reposition port](#) link) also include information for the fuel types separately.

Ballasting Cost Details

From: BOSTON Miles: 378
To: NEW YORK Speed: 16.0

Fuel Type	Sea Days	Sea Cons	Idle Days	Idle Cons	Ttl Cons	Ttl Cost
IFO	0.98	27.00	0.00	7.50	26.58	7,973.44
MDO	0.98	0.00	0.00	0.00	0.00	0.00
LSO	0.98	27.00	0.00	0.00	26.58	0.00
Total Cost:						7,973.44

Vessel Cost: 24,609.38 = 25,000.00 \$/Day * 0.98 Days
Other Cost: 0
Total: 32,582.81

Repositioning Cost Details

From: SUEZ CANAL Miles: 7,734
To: COOKTOWN Speed: 16.0

Fuel Type	Sea Days	Sea Cons	Idle Days	Idle Cons	Ttl Cons	Ttl Cost
IFO	20.14	27.00	0.00	7.50	543.80	53,139.06
MDO	20.14	0.00	0.00	0.00	0.00	0.00
LSO	20.14	27.00	0.00	0.00	543.80	0.00
Total Cost:						53,139.06

Vessel Cost: 503,515.63 = 25,000.00 \$/Day * 20.14 Days
Other Cost: 0
Total: 666,654.69

Bunker Planning

On the Options menu, click **Bunker Planning** to work with bunkers for the estimate.

Bunker Planning: Estimate MG-1

IFO MDO LSO HYD
Init Quantity: 0.00 Init Price: 350.00

Port Name	Sea Cons	ROB Arr	Port Cons	Receive	Price	ROB Dpt
QUOIN ISLAND	0.00	502.11	0.00			502.11
SUEZ CANAL	193.86	308.25	0.00			308.25
STOCKHOLM	308.25	0.00	0.00			0.00
Totals:		502.11	0.00	0.00		

Each fuel type has a tab with its information. You can enter an initial quantity and price and update the amounts.

Fixing a Voyage

When you fix a voyage, the Fixture Note also includes the tabbed views on the bottom. Not only does it look similar to the Voyage Estimate, but the data is also integrated between them.

The screenshot displays the 'Fixture Note' application window. The top section, 'FIXTURE INFORMATION', contains fields for Fixture No. (20070016), Date (11/15/2007), C/P Form, C/P Date, St: Scheduled, Performing Vessel (AMERICAN EAGLE), Voyage No. (701), Commence (10/05/07 04:55), Voy Est Id (MS-1), Ovr Type (OWOV), and Ballast Bonus (0.00). Below this is the 'CP Terms Details' table:

N	Cargo	C/P Qty	Unit	Opt %	Opt Type	T	Frt Rate	Lumpsum	Charterer	Curr	ExchRate
1	CRUDE OIL	50,000	MT	0	NOOPT	F	26.0000	25,000.00	ACME	USD	1.000000

The 'Itinerary' section is shown in 'Cargo View' mode, with a total cargo quantity of 50,000. The table below details the voyage route:

Port	Miles	Spd	Sday	XS	F	Cargo	L/D Qty	L/D Rate	Terms	PDay	XP	PortExp	OEsp#t	Dem	St
QUOIN ISLAND	16.0				L	CRUDE OIL	50,000	25,000.00	SHINC	2.00				..	
SUEZ CANAL	2,671	15.5	7.18		I				SHINC			150,000		..	
STOCKHOLM	4,247	15.5	11.42		D	CRUDE OIL	50,000	25,000.00	SHINC	2.00				..	

The bottom of the window shows summary totals: 6,918 Miles, 18.60 Spd, 0.0 Sday, 4.00 PDay, 0.0 XP, 150,000 PortExp, 0 OEsp#t, and 0.00 Dem.

Operations

Managing a Voyage

After you schedule the voyage, you can see that the Voyage Profit/Loss includes the costs for the various types of fuel. The costs are also included in the Profit & Loss reports and tracked throughout the voyage.

The Voyage Manager and Fixture Note are closely integrated: When you add something to the Voyage Manager in Operations, it is also added to the Fixture Note, and vice versa. You can add or change information in either place, and IMOS keeps it all synchronized.

Bunker Calc Method (for page 26)

Costs for fuel types

The screenshot displays the 'Voyage Management' window for voyage 'SAME-701'. Key details include Vessel: AMERICAN EAGLE, Voyage No: 701, and Commencing/Completing dates. A table lists ports: QUOIN ISLAND, SUEZ CANAL, and STOCKHOLM with associated metrics like Miles, DTToGo, Speed, and Arrival/Departure times. Below this is a 'Voyage Profit / Loss' table with columns for Description, Estimated, Actual, Posted, and Variance. A 'Voyage Information' section provides summary statistics like duration and fuel costs.

Port Name	F	Miles	DTToGo	Speed	W.F.	B/L	Arrival	Departure	P Days	Id No	St
QUOIN ISLAND	L	0	2,671	16.00	0.00	B	10/05/07 04:55	10/07/07 04:55	2.00000	400	..
SUEZ CANAL	I	2,671	4,247	15.50	0.00	L	10/14/07 03:51	10/14/07 03:51	0.00000	500	..
STOCKHOLM	D	4,247	0	0.00	0.00	L	10/25/07 13:51	10/27/07 13:51	2.00000	600	..

Description	Estimated	Actual	Posted	Variance
Total Freight	1,016,368	1,300,000	0	283,632
Demurrage	0	0	0	0
Freight Commission	20,327	26,000	0	5,673
IFO Cost	175,740	148,816	0	-26,924
MDO Cost	24,080	19,200	0	-4,880
LSO Cost	301,268	0	0	-301,268
HYD Cost	0	0	0	0
Port Disbursements	150,000	150,000	0	0
Total Daily Expenses	561,586	559,310	0	-2,276

Profit/Loss:	-216,633	396,674	0	613,307
T/C Equivalent:	15,356	42,730	0	27,374

Bunker Planning and Invoicing

Bunkers for Voyage

To work with bunkers for a voyage, click  in the Voyage Manager.

Type	Init Qty	Init Prc	Sea Cons	Port Cons	Received	Last Prc	End Qty	End Prc
IFO	2,500.00	300.00	496.05	0.00	0.00	0.00	2,003.95	300.00
MDO	900.00	400.00	0.00	48.00	0.00	0.00	852.00	400.00
LSO	1,500.00	500.00	0.00	0.00	0.00	0.00	1,500.00	500.00
HYD	0.25	800.00	0.00	0.00	0.00	0.00	0.25	800.00

S	Reference Port	IFO	MDO	LSO	HYD

Surveyor	Port	Inv No	Inv Date	Curr	Amount

Starting Lube (Ltr): Received: Ending Lube:

The Bunkers for Voyage form has the same fuel tabs for doing bunker planning, reporting bunkers received, and prices. The Summary tab shows overall information for the vessel.

Initial Bunkers

When you create a voyage from scratch, you can also enter quantities and prices for the different fuel types on the Initial Bunkers form.

Type	Qty (MT)	Price
IFO	0.000	0.00
MDO	0.000	0.00
LSO	0.000	0.00
	0.000	0.00

Lube Oil (Ltr): 0.00

Fuel type.

Bunker Inquiry

Multiple grades can also be captured in bunker inquiries and price binding.

Multiple grades →

Vessel: VICTORY ADAM Voyage: 5014 Window From: Bunker Type: IFO Req Qty: 500.000

Port: ALGECIRAS ETA: 11/12/2005 Window To: Bunker Type: MDO Req Qty: 75.099

Inspector: Delivery: 11/12/2005

----- Base Rate ----- Barging -----

Vendor	IFO	MDO		Rate	Cost	Other	P Cost	Sub Ttl	Tax %	Total
PENINSULA	294.0000	635.0000	0.0000	0.0000	0	0	0	195,375	0.00	195,375

Click here to add a row

Port name.

Bunker Invoice

When a vendor charges different prices for different amounts of the same type of fuel, with the price going down after a certain quantity, line items can be broken down into those subprices. That means that you can include more than one price for the same grade on the same invoice, rather than having to create separate invoices for the different prices.

The screenshot shows the 'Bunker Invoice' window. It contains various input fields for Vessel, Voyage No, Port, Berth, Invoice No, Terms (Days), Account No, Vendor, Currency (USD), Exchange Rate (0.0000), Invoice Date, Broker, Delivery Date, Paying Co, Remittance Bank, and Due Date. Below these fields is a table with the following columns: Type, Inv Qty, Opr Qty, Basic Prc, Barging Prc, Other Prc, Oth Cost, Sales Tax, and Total Cost. The first row in the table has values: Type (empty), Inv Qty (0.000), Opr Qty (0.000), Basic Prc (0.0000), Barging Prc (0.0000), Other Prc (0.0000), Oth Cost (0.00), Sales Tax (0.00), and Total Cost (0.00). An arrow labeled 'Invoice Quantity' points to the 'Inv Qty' cell. Below the table is a 'Total Cost' summary row and a 'Grand Total' row. At the bottom, there are checkboxes for 'Actual' and 'Port Charges', and input fields for 'GST %' (0.00) and 'PST %' (0.00). A 'Fuel type.' label is at the very bottom.

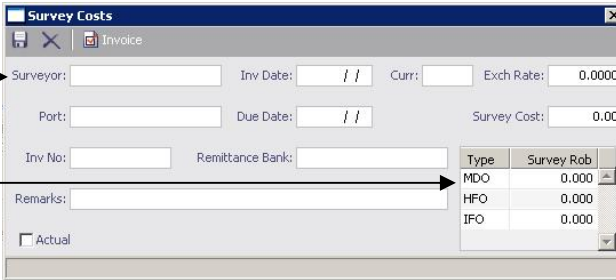
On the Bunker Invoice, right-click the Invoice Quantity and click **Base Price Breakdown**.

The screenshot shows the 'Price Breakdown For' dialog box. It has a table with two columns: 'Quantity Up To' and 'Price'. The first row has values: Quantity Up To (0.000) and Price (0.00). Below the table is a 'Click here to add a row' button. The dialog box has a close button (X) in the top right corner.

On the Price Breakdown For form, enter the **Quantity Up To** which you pay the first price and the **Price**. For each additional level, enter the **Quantity Up To** which you pay the price and the **Price**.

Survey Costs

To enter survey costs, on the Bunkers for Voyage form, click .




The screenshot shows the 'Survey Costs' form with the following fields and annotations:

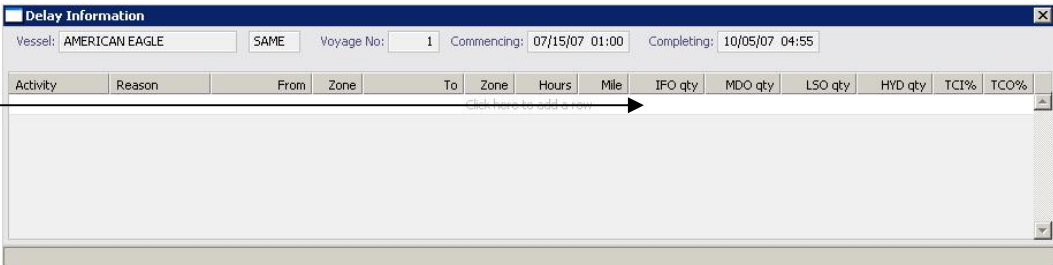
- Surveyor**: An arrow points to the 'Surveyor:' text box.
- Fuel Types**: An arrow points to the 'Type' column of the table.

Type	Survey Rob
MDO	0.000
HFO	0.000
IFO	0.000

Enter the surveyor, invoice date, and banking details, and it creates the payable. These costs become a line item on the Bunkers form and are included in the P&L and in reporting.

Delay Information

The Delay Information form differentiates between the different types of fuel. Click  in the Voyage Manager.



The screenshot shows the 'Delay Information' form with the following fields and annotation:

- Fuel Types**: An arrow points to the 'IFO qty' column of the table.

Activity	Reason	From	Zone	To	Zone	Hours	Mile	IFO qty	MDO qty	LSO qty	HYD qty	TCI%	TCO%
Click here to add a row.													

Extra Information For Activity Report

The Extra Information For Activity Report form also differentiates between the different types of fuel. In the Voyage Manager, right-click a port name and click **Activity Reports**. On the Activity Reports for Voyage form, right-click a report line and click **Bunker/Technical/Weather/Remarks**.

Fuel Types →

Extra Information For Report D On 04/03/08 16:29							
Type	Last ROB	Received	ROB	Actual Cons	CP Cons	Difference	
MDO	95.000	0.000	0.000	95.000	0.000	-95.000	▲
HFO	200.000	0.000	0.000	200.000	0.000	-200.000	
IFO	0.000	0.000	0.000	0.000	0.000	0.000	▼

DETAILS FOR: MDO			
Propulsion:	95.000	Tank Clean:	0.000
IGS:	0.000	Adjustment:	0.000
Load/Disc:	0.000	Deballast:	0.000
Generator:	0.000	Others:	0.000
Cargo Heat:	0.000	Maneuver:	0.000

AVERAGE:		Directn	Degree	Height
Beaufort Force:	0	Wind:	0.0	
Sea Force:	0	Sea:	0.0	0.00 Ft
Swell Force:	0	Swell:	0.0	0.00 Ft

AT TIME OF REPORT:	
Air Temp:	Barometric Pressure:
Sea Temp:	Barometric Movement:
Cargo Temp:	0.00
Remarks:	

Since Last Report		Since Last Port	
Hours:	0.00	0.00	0.00
Observed Dist:	0	0	0
Eng(Log) Dist:	0.00	0.00	0.00
Slippage (%):	0.00	0.00	0.00
Revs Counter:	0	0	0
Total Revs:	0	0	0
Average RPM:	0.00	0.00	0.00
Avg Steam Speed:	0.00	0.00	0.00
Average BHP:	0	0	0
Generator 1 Hrs:	0.00	0.00	0.00
Generator 2 Hrs:	0.00	0.00	0.00
Generator 3 Hrs:	0.00	0.00	0.00
DWT:	0.00	FWD Draft:	0.00
MaxLD Indicator:	0.00	AFT Draft:	0.00
Heading:	0	Mean Draft:	0.00

Time Chartering

The Bunker Section in the Time Charter In Manager and Time Charter Out Manager has columns for the quantities and prices of all the fuel types that are configured for the vessel in the Data Center.

Time Charter In Manager

Bunker Section

Description	IFO qty	IFO prc	MDO qty	MDO prc	LSO qty	LSO prc
Purchased By Charterer						
CP Delivery						
Actual Delivery						
Delivery Difference						
CP Redelivery						
Purchase For Owner						
Project Redelivery						
Redelivery Difference						

Time Charter Billing: Prepaid Fuels

IMOS includes support for payments for prepaid fuels, when you buy only the bunkers you estimate you'll need, paying for consumption, rather than paying for inventory on redelivery. To select prepaid amounts, in the Operations Center, under Time Charter, click **Billing**.

Time Charter Billing (Doc #: 3000001)

Vessel: CARINA | Chartered By: | Period From: | To: | Special Bill

TC Code: ESMA-00002 | TC Date: // | Days: 0.000000

CP Delivery: 01/02/08 00:00 | Issue Date: 01/01/2008 | Daily Rate: 0.0000

CP Redelivery: 05/31/08 00:00 | Invoice No: 3000001 | Exchange Rate: 1.000000 | Currency: USD

Reference: | Due Date: // | VAT / GST %: 0.00

Terms: | Contact Name: | Remittance Bank: | PST %: 0.00

Code	Description	Voy	From	Days Qty	To	Amount	Amt (USD)	Tax %
IFODL	IFO Cost On Delivery	0		400.000000		240,000.00	240,000.00	0.00

Actual | Net Amount: 240,000.00 | 240,000.00

On the Time Charter Billing form, click Create / Add Details

Item Select

Time Charter Hire | Additional TC Hire

Broker Commission(s) | Hire Adjustment

Address Commission | Misc Adjustments 0

Gratuities For Period | Voyage Expenses 0

Repr. Exp. / Allowances | Hire Adjustment On Delivery

Victualling | Hire Adjustment On Redelivery

Lashing And Stowage | ILOHC

| Intermediate HC

| Ballast Bonus

Description	IFO	MDO	MGO
Pre-paid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost On Delivery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adj On Delivery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost On Redelivery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Purchased For Owner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adj On Redelivery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Off Hire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Off Hire Adj	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Off Hire | Off Hire | Off Hire Adj

Voy	Description	Amount	T	S
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Expenses Rebill | OK

On the Item Select form, select the check boxes for the fuels you want to prepay and click **OK**.

On the Time Charter Billing form, in the Days|Qty column, enter the amount of bunkers that you want to prepay.

IMOS reverses the prepaid amount from the Bunkers on Redelivery.

Other Information: Speed Consumption Table

To work with the Speed Consumption Table on the Other Information form, click



in the Time Charter Manager. Consumption is differentiated by fuel type.

Speed Consumption: Click to add a speed. →

Other Information					
Lashing And Stowage (30 Days):	0.00	Victualling (30 Days):	0.00	Repr. Exp. / Allowances (30 Days):	0.00
Lashing And Stowage Monthly:	0.00	Victualling Monthly:	0.00	Repr. Exp. / Allowances Monthly:	0.00
Fuel Generator / Day:	0.00	Diesel Generator / Day:	0.00	Beaufort:	0
Speed Consumption Table (Per Day)				Job COA No:	
Speed	IFO (L)	IFO (B)	MDO (L)	MDO (B)	
13.00	17.00	0.00	1.30	0.00	
13.50	0.00	17.00	0.00	1.30	
Click here to add a row					
Description					
Other Comments					
Increment					
Cargos					
Pumping					
Heat/Clean					
Delivery					
Delivery Fuel/Price					
Redelivery					
Redelivery Fuel/Price					
Clean/Dirty					
Off Hire					
On Hire					
Drydocking					
Trade Limit					
Lay OP					
Ship Ship					
Next Employment					
Next Cargo					

Time Charter Out Manager

Rather than using the Tramp or Average methods to calculate bunker prices for ballasting and repositioning costs, you can use FIFO on a Time Charter Out and calculate the costs based on the inventory prices used in the Voyage Manager. (Enter the Bunker Calculation Method in the Voyage Manager; see page 17.)

Purchased by Charterer →

The screenshot shows the 'Time Charter Out Manager' application window. The 'Bunker Section' is expanded, showing a list of options. The option 'Purchased by Charterer' is highlighted, and an arrow points from the text 'Purchased by Charterer' on the left to this option. Other options in the list include 'Last ROB From Operation', 'CP Delivery', 'Actual Delivery', 'Delivery Difference', 'CP Redelivery', and 'Purchase For Owner'. Below the list are three checkboxes: 'Bunker On Owner', 'Bunker Rebillable', and 'Bunker Purchase Paid By Owner'. The 'Remarks' field is empty.

The line item Purchased by Charterer applies to bunkers purchased before the vessel is delivered. As you stem the bunkers on the previous voyage, you can indicate how much was prepurchased by the charterer before the vessel is delivered; that amount will be deducted from the price at which you sell the bunkers on delivery. Quantities remaining on board are synchronized with the voyage.

You can also indicate that bunkers on the charterer's account are being paid on a consumption basis (see page 23) and select the following bunker purchase options:

- **Bunker On Owner:** For the time charter contract, the owner will pay for bunkers, rather than the charterer.
- **Bunker Rebillable:** Bunkers are on the owner's account, but some are rebillable to the charterer.
- **Bunker Purchase Paid By Owner:** Bunkers are purchased on the owner's account.

IMOS tracks the difference between bunker inventory price and sale price and does a different FIFO calculation to adjust the Profit & Loss for money made or lost on the purchase and sale of bunkers in the time charter.