WHAT IS THE IGF CODE AND HOW DOES IT AFFECT ME?
The IMO has adopted a mandatory safety code for ships using gases or other low-flashpoint fuels. The International Code of Safety for Ships using Gases or other Low-flashpoint Fuels (IGF Code) provides an international standard for ships, other than vessels covered by the IGC Code, operating with gas or low-flashpoint liquids as fuel. The code provides mandatory criteria for the arrangement and installation of machinery, equipment and systems for vessels operating with gas or low-flashpoint liquids as fuel to minimize the risk to the ship, its crew and the environment.
The Code is based upon industry best working practices to include sound naval architectural and engineering principles and the best understanding available of current operational experience, field data as well as research and development. Due to the rapidly evolving new fuels technology, the Organization will periodically review the Code, taking into account both experience and technical developments.

The Code addresses all areas that need special consideration for the use of gas or low-flashpoint liquids as fuel, including the need for additional crew training for personnel who have not been exposed to these types of fuel through previous work onboard ships covered by the IGC Code.

The IGF Code was developed using a goal-based approach. Therefore, goals and functional requirements were specified for each section of the code forming the basis for the design, construction and operation. In this respect the goal of the Code is to provide criteria for the arrangement and installation of machinery for propulsion and auxiliary purposes, using IGF Code low-flashpoint fuel, which will have an equivalent level of integrity in terms of safety, reliability and dependability as that which can be achieved with new and comparable conventional oil fuelled main and auxiliary machinery.
In addition to providing a cleaner, safe environment, how does the code affect individual seafarers?

Training Requirements
To ensure safety onboard and in the ports where ships operating with low flashpoint fuels call, SOLAS and the STCW Code have been amended to require additional training.

The code mandates minimum requirements for training and qualifications for masters, officers, ratings and other personnel on ships subject to the IGF Code.

Basic training for personnel sailing on ships subject to the IGF Code

Seafarers responsible for designated safety duties associated with the care, use or emergency response to fuel onboard ships subject to the IGF code shall hold a certificate in basic training for service on ships subject to the IGF Code.

Every candidate for certification in basic training for service on ships subject to the IGF Code shall:

1. have successfully completed the approved basic training required by regulation V/3, paragraph 5 of the STCW Convention, in accordance with their capacity, duties and responsibilities as set out in STCW Code table A-V/3-1; and

2. be required to provide evidence that the mandated standard of competence has been achieved in accordance with the methods and the criteria for evaluating competence tabulated in columns 3 and 4 of STCW Code table A-V/3-1.
Advanced training for ships subject to the IGF Code

Masters, engineering officers and all personnel with immediate responsibility for the care and use of fuels and fuel systems on ships subject to the IGF Code shall hold a certificate in advanced training for service on ships subject to the IGF Code.

Every candidate for certification in advanced training for service on ships subject to the IGF Code shall:

1. have successfully completed the approved advanced training required by regulation V/3, paragraph 7 of the STCW Convention in accordance with their capacity, duties and responsibilities as set out in STCW Code table A-V/3-2; and

2. provide evidence that the required standard of competence has been achieved in accordance with the methods and the criteria for evaluating competence tabulated in columns 3 and 4 of STCW Code table A-V/3-2; or

have received appropriate training and certification according to the requirements for service on liquefied gas tankers as set out in STCW Code regulation V/3, paragraph 8.

Training Requirement Exemptions

If an administration considers a ship’s size (typically less than 500 gross tonnage, except for passenger ships) and the length or character of its voyage are such to render the application of the full training requirements unreasonable or impracticable, it may exempt the seafarers on such a ship or class of ships from some of the requirements, bearing in mind the safety of people on board, the ship and property along with the protection of the marine environment.
### What else is included in the IGF Code?

<table>
<thead>
<tr>
<th>Design consideration</th>
<th>Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESD-protected machinery spaces</td>
<td>Fire safety &amp; protection</td>
</tr>
<tr>
<td>Location and protection of fuel piping</td>
<td>Explosion prevention</td>
</tr>
<tr>
<td>Fuel preparation room design</td>
<td>Control, monitoring and safety systems</td>
</tr>
<tr>
<td>Bilge systems &amp; drip trays</td>
<td>Engine design specifics</td>
</tr>
<tr>
<td>Arrangement of entrances and other openings in enclosed spaces</td>
<td>Main and Auxiliary boilers</td>
</tr>
<tr>
<td>Airlocks</td>
<td>Gas turbines</td>
</tr>
<tr>
<td>Liquefied gas fuel containment</td>
<td>Electrical Installations</td>
</tr>
<tr>
<td>Pressure relief systems</td>
<td>Welding and non-destructive testing of fuel systems</td>
</tr>
<tr>
<td>Loading limits for LG fuel tanks</td>
<td>Drills and emergency Exercises</td>
</tr>
<tr>
<td>Maintenance of fuel storage condition</td>
<td>Operations</td>
</tr>
<tr>
<td>Atmospheric control within the fuel containment system</td>
<td>Enclosed space entry</td>
</tr>
<tr>
<td>Inerting of tanks</td>
<td>Inerting and purging fuel systems</td>
</tr>
<tr>
<td>Bunkering manifolds and operations</td>
<td>Maintenance</td>
</tr>
<tr>
<td>Fuel distribution outside of machinery spaces</td>
<td>Hot work on or near fuel systems</td>
</tr>
<tr>
<td>Ventilation and leak detection</td>
<td>Bunker deliveries</td>
</tr>
</tbody>
</table>
While the information in this booklet has been developed using the best information that is currently available, it is intended purely as information to be used at the user’s risk. No responsibility is accepted by ITF or by any person, firm, corporation or organization who or which has been in any way concerned with the furnishing or supply of information, compilation, publication or authorized translation of this information, directly or indirectly from using the information herein or for any omission or for any consequences whatsoever resulting directly or indirectly from using the information herein even if caused by want of due diligence or reasonable care.

Sources:
International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended.
International Code of Safety for Ships Using Gases or other Low-Flashpoint fuels (IGF Code).
International Transport Workers’ Federation
49-60 Borough Road, London, SE1 1DR
Tel: +44 (0) 20 7403 2733
Fax: +44 (0) 20 7357 7871
www.itfglobal.org

American Maritime Officers Union
601 South Federal Highway, Dania Beach, Florida 30004
+1 954 921-2221
www.amo-union.org

STAR Center
2 West Dixie Highway, Dania Beach, Florida 30004
+1 954 920-3222
www.star-center.com