



IRS Inspection Services

(A Department of Indian Register of Shipping)

Sai Infotech Building, 4th Floor, Block No, 409, Patel Chowk, R. B Mehta Marg,

Opp. Ghatkopar Railway Station, Ghatkopar (E), Mumbai - 400 077.

Tel : 672 12 300 / 672 12 319 / 672 12 320 ★ Fax No : 672 12 315

★ e-mail : industrial_services@irsclass.org ★ Website : www.irsclass.org

Our Ref.: IS/Finishvel Furniture /SB/ 200912 2722

9th December 2009

Finishvel Furniture India Ltd
Finishvel building
Opp.ansa industrial estate
Saki vihar road
Mumbai -400072

Kind Attn: Mr. Shailesh Kurade

Dear Sir,

Subject: Design approval of 3-tier bunk beds for naval ships

We refer to your letter no Nil of 7/12/09 ,regarding Design approval of bunk beds for naval ships and would like to inform as follows .

The drawings have been examined for the following design parameters:

- Loads on each bunk
 - Uniformly distributed load of 150 Kg
 - Concentrated load of 100 Kg
- Accelerations due to following motions
 - Roll angle of 35 Degree
 - Pitch Angle of 10 degree
- Minimum dimension of ships considered for calculation of acceleration values
 - Length - 44.0m
 - Breadth - 6.5m
 - Block coefficient -0.51
 - Speed - 40 Knots

We enclose herewith Five copies of the following drawings

<u>Drawing Title</u>	<u>Drawing No.</u>
Bed Assly.3-Tier (Sheet 1 of 2)	IRS-101 Revision 04
Bed Part Details (Sheet 2 of 2)	IRS-101 Revision 04

The scantling and arrangement as shown in the above drawings and amended there on would be approved provided the work is carried out to the satisfaction of attending Engineer and the code & specifications in all other respects are complied with..

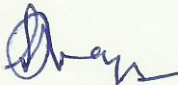
With regards to the comments "SEE LETTER" we would like to advise as follows.

- Following requirements as specified in the "Guideline specification for implementation habitability upgradation issued by Directorate of Naval Architect needs to adhered to
 - Bunks to be manufactured of CRCA steel with powder coating.
 - All edges need to be smooth without any sharp corner
 - Minimum sheet thickness of 1.2 mm to be used for all sheet metal furniture.
 - Metric fasteners to be used for securing the beds.
- The Material of construction of Bunk beds shall be a structural steel material having minimum yield strength of 235N/mm².
- Adequate under deck stiffening in way of the legs of beds needs to provided to avoid any local deflection of the deck structure

Thanking you.

Yours faithfully,

For IRS Inspection Services



(S A Deogekar)
Associate Vice President

Encl. : As above.