



# Indian Register of Shipping

CERTIFICATE NO: 2019TAC061

## TYPE APPROVAL CERTIFICATE

*This is to certify that the product is in accordance with the applicable rules/standards/codes as described below.  
The product is considered to be suitable for use in marine applications and is retained in the list of approved products.*

<b>MANUFACTURER</b>	<b>Ghatge Patil Industries Ltd.</b>
<b>REGISTERED OFFICE &amp; WORKS</b>	Uchgaon, Kolhapur-416 005 Maharashtra
<b>PRODUCT NAME</b>	<b>REDUCTION GEARING</b>
<b>MODEL NO. / TRADE NAME</b>	HG 13
<b>PRODUCT DESCRIPTION</b>	Application: Marine Propulsion Input Coupling Type: Flexible Coupling Overall Ratio: 4.08, 4.50, 5.29 Power Rating: 191.28 kW @ 2000 rpm
<b>APPLICABLE RULES/STANDARDS/CODES</b>	IRS Rules and Regulations for the Construction & Classification of Steel Ships – July 2018
<b>CONDITIONS OF APPROVAL</b>	See Annexure I
<b>VALIDITY</b>	The Certificate is valid until 11/12/2023

ISSUE DATE: 22/10/2019

PLACE: MUMBAI

Vitthal S Shetake

Senior Surveyor

**Previous Certificate No : 2018TAC069 dated : 21/12/2018**

This Certificate is issued upon the following terms and conditions as laid down in the Society's Regulations:-

Whilst Indian Register of Shipping, a Classification Society, along with its subsidiaries and associates (hereinafter referred to as the Society) and its Board/Committees use their best endeavors to ensure that the functions of the Society are properly carried out, in providing services, information or advice neither the Society nor any of its servants or agents warrants the accuracy of any information or advice supplied. Except as set out herein neither the Society nor any of its servants or agents (on behalf of each of whom the Society has agreed this clause) shall be liable for any loss damage or expense whatever sustained by any person due to any act or omission or error of whatsoever nature and however caused of the Society, its servants or agents or due to any inaccuracy of whatsoever nature and howsoever caused in any information or advice given in any way whatsoever by or on behalf of the Society, even if held to amount to a breach of warranty.

Nevertheless, if any person uses services of the Society, or relies on any information or advice given by or on behalf of the Society and suffers loss damage or expenses thereby which is proved to have been due to any negligent act omission or error of the Society, its servants or agents or any negligent inaccuracy in information or advice given by or on behalf of the Society then the Society will pay compensation to such person for his proved loss up to but not exceeding the amount of the fee charged by the Society for that particular service, information or advice.

Any notice of claim for loss, damage or expense, as referred to above, shall be made in writing to the Society's Head Office within six months of the date when the service, information or advice was first provided, failing which all the rights to any such claim shall be forfeited and the Society shall be relieved and discharged from all liabilities.

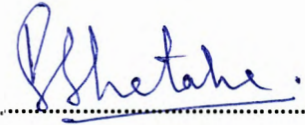
## ANNEXURE I

(TO CERTIFICATE NO. 2019TAC061 DATED 22/10/2019)

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### CONDITIONS OF APPROVAL

1. The scope of type approval certificate covers approval of plans and type testing of a representative sample in accordance with Pt. 4, Ch. 4, Section 5 of Rules & Regulations of Indian Register of Shipping.
2. Every reduction gear for use on vessels classed or intended to be classed with IRS is to be manufactured under the supervision and tested to the satisfaction of the Surveyors in accordance with Pt. 4, Ch. 4, Section 5 of Rules & Regulations of Indian Register of Shipping.
3. The reduction gear has to satisfy the mandatory & general requirements detailed in Design Approval Document E-72211-94234 dated 26-10-2018.
4. Flexible hoses are to be of short joining lengths and are to be of approved type.
5. Viscosity of the lubricating oil is not to be less than 99.45 mm<sup>2</sup>/s @ 40°C.
6. Any changes to the approved design parameters or construction are to be intimated and approved by IRS.



**Vitthal Shetake**  
**Senior Surveyor**