



Lloyd's Register EMEA

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ZOLLERN Vertriebs GmbH + Co. KG
Attn. Mr Lucassen
Heustrasse 1

D-88518 Herbertingen

Date 26 July 2004

Your ref --
Our ref HMD 0210342/
13189-04/OS/BHS

Dear Sirs,

**THE LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002.
GEARBOX ZHP
TYPE APPROVAL CERTIFICATE NO. 04/20025**

Reference is made to your Request for Lloyd's Register Type Approval dated 17 March 2004 as well as to the subsequent correspondence.

Enclosed please find original of Type Approval Certificate No. 04/20025, pertaining Design Appraisal Document No. HMD 13189-04, Issue No. 0 dated 26 July 2004 and Machinery General Design Appraisal Document No.: ENG 61457, Issue No. 4 dated 21 June 2004.

You will find the List Entry in Lloyd's Register web site www.lr.org/ under **Rules and Standards** click on **Approvals**, then under **Supporting Services** click on **Type Approval**, after that under **Useful Links** click on **Approval database on ClassDirect/Live/Contents/Index/** and then select the hyper-linked **Type Approval Product List** or <http://www.cd.live.lr.org/information/510tapub>

On the first occasion you log onto the site you will be requested to complete a dialogue box with the following information:

Contact Name , Company Name, E-Mail Address

Our invoice for the services rendered will follow in due course.

Yours faithfully,

B. Heppel-Shrestha

Bozena Heppel-Shrestha
Administrative Assistant
Lloyd's Register EMEA

Encls.

c.c. Lloyd's Register Stuttgart (STU0401295)

+ copy of Cert. and DAD

Type Approval Certificate

This is to certify that the undernoted products have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to:

PRODUCER ZOLLERN Vertriebs GmbH + Co. KG
Heustrasse 1
D-88518 Herbertingen
Germany

DESCRIPTION Gearbox

TYPE ZHP

APPLICATION Winch, Freefall Winch, Slewing and Planetary Gears

STANDARD DIN 3990 - F.E.M. 1.001 3rd Edition - "Rules for the design of hoisting appliances"

RATINGS	Type	Design	Ratio Output Stage	Nom. Torque (Nm)	Max. Torque (Nm)
	Winch	EG 4.13 to 4.40	4.333:1	1,900 to 1,800,000	3,000 to 2,400,000
	Freefall Winch	EG 6.16 to 6.36	4.333:1	2,300 to 388,000	2,800 to 621,000
	Slewing/Planetary	DW 3.13 to 3.40 PG 5.13 to 5.40	4.333:1	1,900 to 1,800,000	3,000 to 2,400,000
	Slewing/Planetary	DW 3.13 to 3.34 PG 5.13 to 5.34	5.000:1	1,870 to 300,000	2,800 to 450,000
	Planetary-Industrial Application	PG 5.15 to 5.40	5.000:1	1,700 to 600,000	-

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The Design Appraisal Document No. HMD 13189-04, Issue No. 0 dated 26.07.04 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 04/20025
Issue Date 26 July 2004
Expiry Date 25 July 2009
Sheet 1 of 1


Olaf Schmidt
Hamburg Plan Approval Centre
Lloyd's Register EMEA

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