

DET NORSKE VERITAS
TELEFAX/FACSIMILE



DATE: 2001-05-16	OUR REF: MTP378/JIMAR/263.1-J-1827
TO: DNV Rio de Janeiro	
ATT.: F. Assis	
FAX. NO: +55 21 507 2579	YOUR REF:
FROM: John-Inge Marthinussen MTP378	
NO. OF PAGES (incl.this): 1	
COPIED TO: MTP 378 / Lasse Nerhamo	
PLEASE COPY TO:	

DET NORSKE VERITAS AS
Maritime Technology and
Production Centre
Systems & Components
Veritasveien 1
1322 Høvik
Norway
Tel: +47 67 57 99 00
Fax: +47 67 57 99 11
http://www.dnv.com
Org. No: NO 945 748 931 MVA

If not received properly, please call +47 67 57 98 16

→ Assis
AP 18/5

APPROVAL FOR REPAIR WELDING OF SHAFTS

Reference is made to letter SIO-0369/cn from DNV Rio de Janeiro dated 27-04-01.

We have evaluated the welding procedure specification (WPS) and corresponding welding procedure qualification records (PQR) for repair welding of shafts in material AISI 1045 or equivalent. The results from welding procedure qualification testing are found acceptable, hence the WPS may be approved for repair welding on this type of material.

However, the use of this WPS for repair on tail shafts, intermediate shafts, crank shafts or rudder stocks need to be accepted on a case by case basis. In general we can say that shafts or stocks made in material AISI 1045 or equivalent are not intended for, nor suitable for welding due to the very high carbon content. Repair by welding therefore need to be carefully considered depending on the actual stresses and loading conditions of the components in question. Repair welding will only be considered where the actual local fatigue stresses are much lower than the maximum allowable fatigue stresses according to our Rules, which means that the local fatigue stresses should be in the range of 50% of the maximum allowed or lower.

Regarding validity of welding procedures and qualification of welders reference is made to DNV Rules Pt.2 Ch.3 Sec.2.

After repair the welded area is to be checked 100% by MP/PT (and UT if relevant) by personnel certified for the specific NDT method.

Yours faithfully,
for DET NORSKE VERITAS AS

John Olav Nøkleby
John Olav Nøkleby
Head of Section
Material and Production Technology

John Inge Marthinussen
John Inge Marthinussen
Surveyor



TRUE COPY
OF ORIGINAL

5/5

Eduardo Fimenta
E. DUARDO FIMENTA

2001-12-10
DNV Rio