

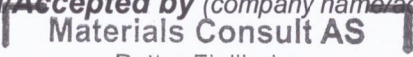
 König + Co. GmbH	<b>QTR</b> <b>Qualification Test Record</b> <b>NORSOK M-650</b>				QTR. No.: Kö98083QTR
					Rev. No.:2
Manufacturer name/address/ Web page:	König + Co. GmbH, Obere Industriestraße 24 – 26, D-57250 Netphen www.koenig-co.de				
Reference standard	NORSOK M-650, Edition 4, September 2011				
Material designation and MDS No.:	ASTM A240 S31254/ASTM A403 S31254, NORSOK M-630 Ed. 6, MDS R13, Rev. 5				
Manufacturing summary doc. No.:	Kö-5MS				Rev. No.:2
Products and manufacturing process(es):	Heads made of plates, material: ASTM A240 S31254 without welding seams. <b>Forming Process:</b> Hot forming				
Mandatory conditions and sub-contractors:	Heat treatment after forming is necessary and will be carried out by own furnaces: Furnace No. 348 or No. 788 Manufacturer for starting material is Outokumpu, Plant Degerfors, Böhler Austria and other NORSOK M-650 qualified manufacturers.				
Other information:	<ul style="list-style-type: none"> <li>- Pickling will be done by own facilities.</li> <li>- Furnace No.348: Temperature uniformity survey done in 2016</li> <li>- Furnace No.788: Temperature uniformity survey done in 2017</li> <li>- Furnace No.348: Verification of heat treatment procedure done in 2012.</li> <li>- Furnace No.788: Verification of heat treatment procedure done in 2015.</li> <li>- As the water quench tank at furnace No.348 is limited in size, the water temperature before any quenching operation begins shall not exceed 35 °C.</li> <li>- Maximum weight for furnace No. 348 is 1.000 Kg</li> <li>- As review shows that König has had continuous production of actual material with satisfactory results the last 5 years. Qualifying Company accept that König can get a 5 years renewal of their NORSOK M-650 Ed. 4 qualification without any new mechanical testing</li> </ul>				
Qualification expires:	August 2022				
<b>Tested and Qualified Thickness and Weight</b>					
Products and manufacturing process(es):	Test record No.	Tested thickness (mm)	Qualified thickness (mm)	Test piece weight (kg)	Qualified weight (kg)
Hot formed heads	98083	20 mm	25 mm	47 kg	N.A.
<b>Qualification/Acceptance signatures</b>					
<b>Manufacturer:</b>	Prepared by/Date: Heupel/ 27.11.2017 	Checked by/Date: Haustein/ 27.11.2017 			
<p>The manufacturer and this QTR are evaluated and found to be in compliance with the requirements of NORSOK M-650 for supply of the above listed products and materials.</p> <p>This acceptance does not exempt any purchaser from his responsibility to ensure that this qualification is valid for his products within the essential variables of NORSOK M-650.</p>					
<b>Qualified/Accepted by</b> (company name/address):  Petter Fjellheim N-7058 Jakobsli, Trondheim +47 97189307			Signature/Date: 27.11.2017 