(bya)	QTR				QTR No: HW-QTR-D44-01
T WA	Qualification Test Record				Rev No: 1
Henry Williams	NORSOK M-650				
Manufacturer	Henry Willia	ms Ltd			
Name/Address/	Dodsworth Street				
Web Page:	Darlington				
	County Durham				
	DL1 2NJ				
	www.hwilliams.co.uk				
Reference Standard	NORSOK ME	550 Rev 4 – Qualifica	tion of Manufacture	rs of Special Mater	ials
Material designation and	NORSOK ME	30 Rev 6 – MDS-D4	4 Rev 5 – ASTM A18	2 F51 – UNS	
MDS No:	S31803				
Manufacturing Summary Doc. No.	MS01 Rev. No. 2				
Products and	Upset & Closed Die Forgings				
manufacturing process(es)	Upset & Closed Die Hammer Forging				
Mandatory conditions and	Con Mech Heat Treatment (Henry Williams Group) Procedure No. 464 Rev 6				
sub-contractors	Temperature Range: 1080°C +10C/- 10C				
	Material Suppliers : Outo Kumpu (Degerfors); Valbruna; Aceralava, Sandvik, Cogne				
	Final machining and marking performed externally by agreement. Therefore, pickling is not				
	within the scope of this QTR				
Other Information	For the purposes of this QTR the Heat Treatment Maximum Load Qualified Weight is: 2.1				
Qualification Expires	Tonne March 2021				
Quantication Expires			Th.1.1	A/_:_La	
	leste	a ana Qualified	Thickness and	weight	
Products and	Test Record	Test thickness	Qualified Thickness	<b>Test Piece Weight</b>	Qualified Weight
manufacturing	No:	(mm)	(mm)	(Kg)	(Kg)
process(es)			100	F4 F	400.0
Closed DieForging: TYPE		98	108	61.6	123.2
Q FF VALVE BODY					
FORGING					
Upset Forging: TYPE Q		100	110	36.8	73.6
FS VALVE BODY		100	110	50.0	75.0
FORGING					
	Qu	alification / Acc	ceptance signat	ures	1
Manufacturer:		Date: 4 <sup>th</sup> May 2017	Checked by / Date: 4		
	Mike Wilson, Oil, Gas & Energy		Mark Rigg, Quality Manager		
	Business Manager M. W.		Henry Williams Ltd		
	Henry Williams Ltd 18.5.17			. 17	
The manufacturer and th					ORSOK M-650 for the
This assentance december			ed products and mater		valid for his mandaret
This acceptance does not	100		onsibility to ensure tha riables of NORSOK M-6		valid for his products
Qualified / Accepted by (			Signature / Date	,30	
quantico / Accepted by (	rombany main	c / audi C33/			
			PARKER HANNIFIN 18 MAY . 17		
			20.22	2.00.00	0