



## INSERT BUSHING CAT IV INSPECTION REPORT

<b>Customer:</b>	Zhongman Petroleum Engineering Technology Service (Hong Kong) Co. Limited Iraq Branch	<b>Date Of Service:</b>	21.05.2024
<b>Type Of Inspection:</b>	CAT III INSPECTION	<b>Report No:</b>	QC-ZPEC-05-24-0161-04/03
<b>Rig &amp; Location:</b>	ZPEC Rig 25	<b>Specification:</b>	API RP 7L

<b>S/No:</b>	6608
<b>Inspection Frequency:</b>	6 Months
<b>Equipment Name</b>	2 3/8" – 8 5/8" INSERT BUSHING
<b>Specification:</b>	API RP 7L CAT IV

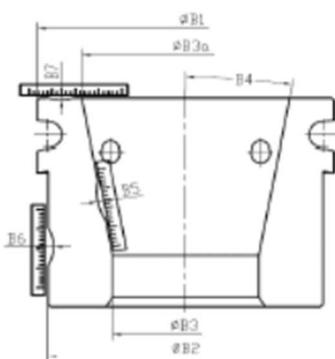
### PROCEDURE

**\*\* Visual and MPI Was Carried Out on the Available Critical of the INSERT BUSHING and Found Satisfactory for Further Use.**

**\*\* CAT IV Inspection Was Carried Out on INSERT BUSHING and Found Accepted at The Time of Inspection.**

Insert bushing found stripped down / disassemble condition for inspection. CAT IV Full inspection.  
 Insert bushing Inspection Was Conducted as Per API Standard.

- Removed both half of the drilling bowls outside of Insert bushing using proper lifting chain sling
- Visually inspected the inner and outer surface areas of the bushing for any burrs and panned-over edges
- Cleaned the inside taper of the insert bushing from any abrasive materials
- Hold a straight edge against the tapered area to measure the taper length as per OEM recommendations
- Measured the taper angel and throat diameter and compare with OEM recommendations
- Performed MPI on the recess and load bearing areas of the drilling bowls
- After completing the inspection, Lubricated the back of the drilling bowls before assembling the Insert bushing
- Inserted the drilling bowls inside the Insert bushing using the proper lifting chain sling
- Observed the height of the set slips in the Insert bushing and ensure that it is not riding low in it.
- Prepare and submit the inspection report

补芯内衬 Insert Bushing	6608 (2 3/8"-8 5/8")		上部外径最小值B1(min)	510mm	
				下部外径最小值B2(min)	475mm
				锥孔上部直径最大值B3a(max)	374mm
				锥孔下部直径最大值B3(max)	285mm
				锥孔角度B4(degree)	$9^{\circ}27'45'' \pm 2'30''$
				锥面最大磨损B5(max)	3mm
				下部外壁最大磨损B6(max)	3mm
				上平面最大磨损B7(max)	3mm

<b>ASNT Level II Inspector Name:</b>	<b>Authenticating This Report:</b>	<b>Signature &amp; Stamp:</b>	<b>Date of Next Through Examination:</b>
Khaled Mahmoud	Mohamed Abdalla		20.11.2024

REV: 01 Dated: 20 June 2022





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Measures	Actual Dim.	OEM Specification
Minimum upper outer diameter B1:	525 mm	(Min)510 mm
Minimum lower outer diameter B2:	480 mm	(Min)475 mm
Minimum diameter of the upper part of the taper hole B3a:	365 mm	(Max)374 mm
Maximum diameter of the lower part of the taper hole B3:	2605 mm	(Max)265 mm
Maximum wear of cone surface B5:	1mm	(Max) 3 mm
Maximum wear of the lower outer wall B6:	1mm	(Max) 3 mm
Maximum wear on upper plane B7:	2 mm	(Max) 3 mm



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