


## MASTER BUSHING CAT IV INSPECTION CERTIFICATE

Customer:	DAQING DRILLING COMPANY	Date of Service:	23-MAY-2024	
Well No:	---	Next inspection	22-NOV-2024	
Type Of Inspection:	CAT IV	Location:	DQ-038	
Report No.:	QC-DQ-05-24-0164-01	Speciation:	API RP 7L	

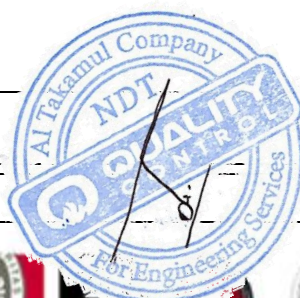
### PROCEDURE

**The Rig was Equipped with Master Bushing the following specification:**


S/N:	JF01
Inspection Frequency :	6 Month
Next Inspection Date :	23-Nov-2024
Equipment Name :	MASTER BUSHING
Specification :	API RP 7L CAT IV

**-The products have been examined and found them conformable to relevant  
Quality standards and delivery is thus permitted**

Inspector:	Jaafar Badr	Supervisor:	Mohammed Abdullah
Customer Reprehensive	:		



## MASTER BUSHING CAT IV INSPECTION CERTIFICATE

Customer:	DAQING DRILLING COMPANY	Date of Service:	23-MAY-2024	
Well No:	---	Next inspection	22-NOV-2024	
Type Of Inspection:	CAT IV	Location:	DQ-038	
Report No.:	QC-DQ-05-24-0164-01	Speciation:	API RP 7L	

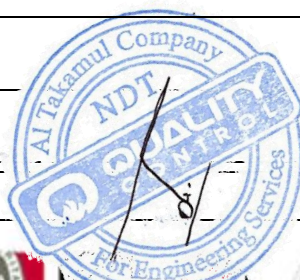
### PROCEDURE

**Master Bushing found stripped down / disassemble condition for inspection. CAT IV Full inspection.**


**Master Bushing Inspection Was Conducted As Per API Standard.**

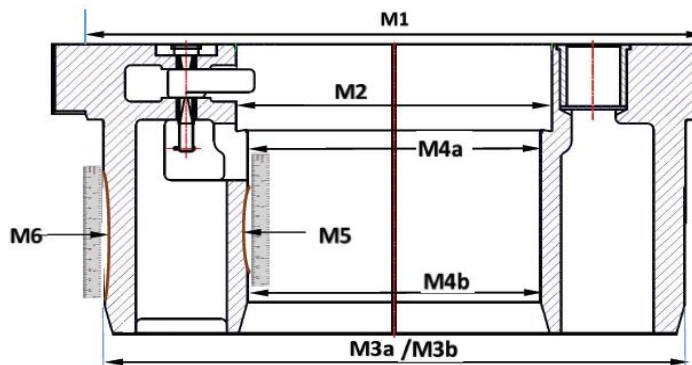
- Removed both halves of the drilling bowls outside of the master bushing using the proper lifting chain sling
- Visually inspected the inner and outer surface areas of the bowl for any burrs and panned-over edges
- Cleaned the inside taper of the insert bowls from any abrasive materials
- Hold a straight edge against the tapered area to measure the taper length as per OEM recommendations
- Measured the taper angle 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 master bushing
- Inserted the drilling bowls inside the master bushing using the proper lifting chain sling
- Observed the height of the set slips in the master bushing and ensure that it is not riding low in it.
- Prepare and submit the inspection report

Inspector:	Jaafar Badr	Supervisor:	Mohammed Abdullah
Customer Reprehensive	:		



## MASTER BUSHING CAT IV INSPECTION CERTIFICATE

Customer:	DAQING DRILLING COMPANY	Date of Service:	23-MAY-2024	
Well No:	---	Next inspection	22-NOV-2024	
Type Of Inspection:	CAT IV	Location:	DQ-038	
Report No.:	QC-DQ-05-24-0164-01	Speciation:	API RP 7L	



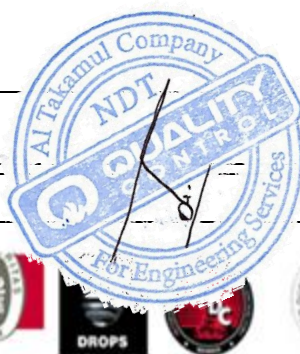
Master Bushing Parameters	OEM Nominal Specification	The maximum allowable tolerance
Master Bushing Upper Section OD M1:	1014.25 mm – 1015 mm	1005 mm or less than 1005 mm, Reject
Master Bushing Upper Section ID M2:	520.7 mm – 520.95	527 mm or more than 527 mm, Reject
Master Bushing Lower Section OD M3a/ M3b:	954.62 mm – 955 mm	945 mm or less than 945 mm, Reject
Master Bushing Lower Section OD M4a/ M4b:	482.6 mm – 482.85 mm	489 mm or more than 489 mm, Reject
The Wear on the outer wall of Master Bushing M5:	-----	More than 3 mm, Reject
The Wear on the outer wall of Master Bushing M6:	-----	More than 3 mm, Reject

### PROCEDURE


**\*\* Visual and MPI Was Carried Out On the Available Critical Areas of the Master Bushing and Found Satisfactory for Further Use.**

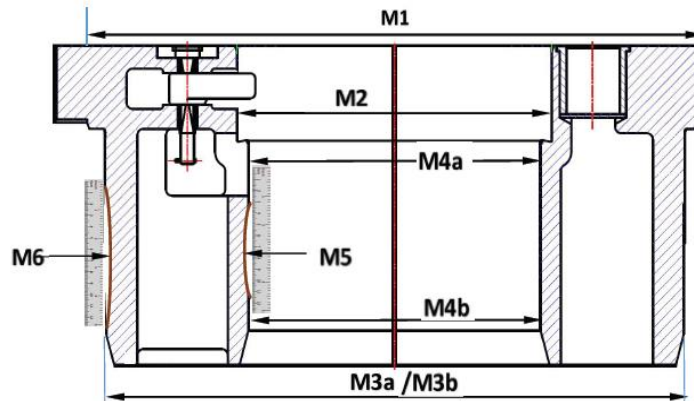
**\*\* CAT IV Inspection Was Carried Out On Master Bushing and Found Accepted at The Time of Inspection.**

Inspector:	Jaafar Badr	Supervisor:	Mohammed Abdullah
Customer Reprehensive	:		



## MASTER BUSHING CAT IV INSPECTION CERTIFICATE

Customer:	DAQING DRILLING COMPANY	Date of Service:	23-MAY-2024	
Well No:	---	Next inspection	22-NOV-2024	
Type Of Inspection:	CAT IV	Location:	DQ-038	
Report No.:	QC-DQ-05-24-0164-01	Speciation:	API RP 7L	



Measures	Actual Dim.	OEM Requirement	Results
Master Bushing Upper Section OD M1:	1013.50 mm	1005 mm or less than 1005 mm, Reject	Accept
Master Bushing Upper Section ID M2:	521 mm	527 mm or more than 527 mm, Reject	Accept
Master Bushing Lower Section OD M3a/ M3b:	953 mm	945 mm or less than 945 mm, Reject	Accept
Master Bushing Lower Section OD M4a/ M4b:	483 mm	489 mm or more than 489 mm, Reject	Accept
The Wear on the outer wall of Master Bushing M5:	0.6	More than 3 mm, Reject	Accept
The Wear on the outer wall of Master Bushing M6:	0.8	More than 3 mm, Reject	Accept

### PROCEDURE

**\*\* Visual and MPI Was Carried Out On the Available Critical Areas of the Master Bushing and Found Satisfactory for Further Use.**


**\*\* CAT IV Inspection Was Carried Out On Master Bushing and Found Accepted at The Time of Inspection.**

Inspector:	Jaafar Badr	Supervisor:	Mohammed Abdullah
Customer Reprehensive	:		





## MASTER BUSHING CAT IV INSPECTION CERTIFICATE

Customer:	DAQING DRILLING COMPANY	Date of Service:	23-MAY-2024	
Well No:	---	Next inspection	22-NOV-2024	
Type Of Inspection:	CAT IV	Location:	DQ-038	
Report No.:	QC-DQ-05-24-0164-01	Speciation:	API RP 7L	

### PICTORIAL



*Pic(01)*



*Pic(02)*

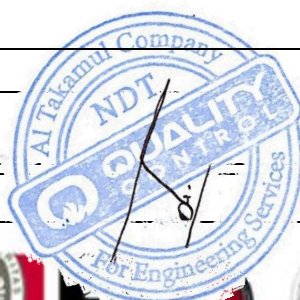


*Pic(03)*




*Pic(04)*

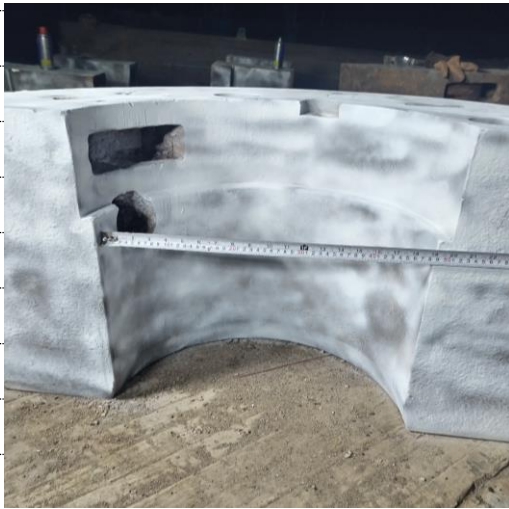
Inspector:	Jaafar Badr	Supervisor:	Mohammed Abdullah
Customer Reprehensive	:		



## MASTER BUSHING CAT IV INSPECTION CERTIFICATE

Customer:	DAQING DRILLING COMPANY	Date of Service:	23-MAY-2024	
Well No:	---	Next inspection	22-NOV-2024	
Type Of Inspection:	CAT IV	Location:	DQ-038	
Report No.:	QC-DQ-05-24-0164-01	Speciation:	API RP 7L	

### PICTORIAL



*Pic(05)*



*Pic(06)*

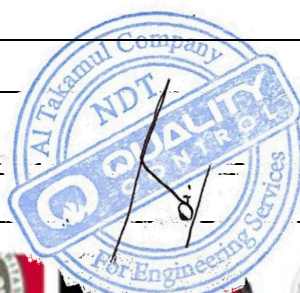


*Pic(07)*




*Pic(08)*

Inspector:	Jaafar Badr	Supervisor:	Mohammed Abdullah
Customer Reprehensive	:		



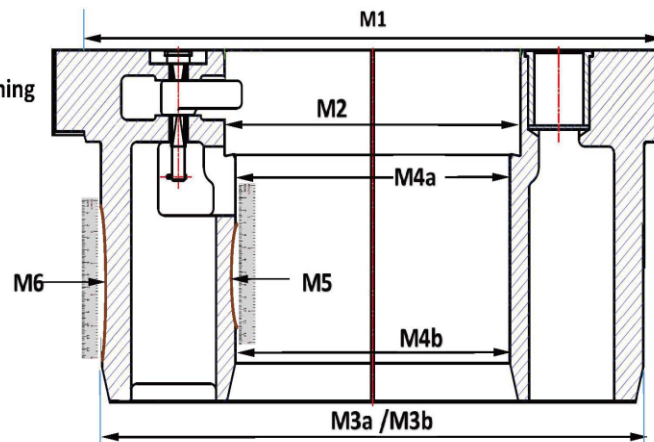


## MASTER BUSHING CAT IV INSPECTION CERTIFICATE

Customer:	DAQING DRILLING COMPANY	Date of Service:	23-MAY-2024	
Well No:	---	Next inspection	22-NOV-2024	
Type Of Inspection:	CAT IV	Location:	DQ-038	
Report No.:	QC-DQ-05-24-0164-01	Speciation:	API RP 7L	

### 二、主补芯磨损允量推荐

The allowable wear tolerance for Master Bushing



主补芯检测项点 Master bushing parameters	制造规范 OEM Specification	测量工具 Measuring tool	磨损量推荐 The maximum allowable tolerance
主补芯上沿外径 M1 Master bushing upper section OD M1	Φ 1014.24-1015mm	卷尺 tape	小于 1005mm 报废 Less than 1005mm, Reject
主补芯上沿内径 M2 Master bushing upper section ID M2	Φ 520.7-520.95mm	卷尺 tape	大于 527mm 报废 More than 527mm, Reject
主补芯下本体外径 M3a / M3b Master Bushing lower section OD M3a / M3b	Φ 954.62-955.0mm	卷尺 tape	小于 945mm 报废 Less than 945mm, Reject
主补芯下本体内径 M4a / M4b Master Bushing lower section ID M4a / M4b	Φ 482.6-482.85mm	卷尺 tape	大于 489mm 报废 More than 489mm, Reject
主补芯本体外壁磨损量(补芯高度范围内环形凹陷) M5 The wear on the outer wall of master bushing M5	-----	钢板尺 steel rulers	大于 3mm 报废 More than 3mm, Reject
主补芯本体外壁磨损量 M6 The wear on the outer wall of master bushing M6	-----	钢板尺 steel rulers	大于 3mm 报废 More than 3mm, Reject

Inspector:	Jaafar Badr	Supervisor:	Mohammed Abdullah
Customer Reprehensive	:		

