



**BHARAT HEAVY ELECTRICAL LIMITED
BHOPAL, MADHYA PRADESH**

Technical Cum PQC Annexure-I to PI Rev.01

Vendor Name		Mobile No	
Vendor Address		Landline No.	
Contact Person Name		Email Id	

SPECIFICATION CUM COMPLIANCE CERTIFICATE OF BRAZED CARBIDE TIPPED GUNDRILL

NOTE:-

1	Vendor must submit complete information from clause No.1 to 7.2, The offer meeting this clause would only be processed.
2	The offer and all documents enclosed with offer should be in <u>English language</u> only.
3	The information provided by vendor in specification cum compliance certificate will supersede any other information provided by vendor .
4	Deviations in technical/ NIT conditions are not acceptable.

SCOPE: SUPPLY OF BRAZED CARBIDE THROUGH COOLANT GUN DRILL & THEIR ACCESSORIES

S.No.	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / CONFIRMED BY	OFFERED	REMARKS
1	Supply and proving of brazed carbide tipped through coolant gun drill diameter 12.76 mm x 600 mm over all length for hole dia 12.76 mm +0.05-0.00 .should work cutting speed between 80 to 120 mm/min, feed 0.10 to 0.15 mm/min and tool life 60 to 80 meters .the identification mark (drill size) should be permanently marked at suitable place.	Vendor to Confirm		
2	MACHINE TECHNICAL DATA :			
2.1	Tube plate(Material grade : SA182 F 316L) to be drilled through in horizontal LEHR make deep hole drilling machine, has a thickness of 280.00 mm, using neat type cutting oil with a pressure of 45 bar @ 1500 rpm.	Vendor to note		
3	TECHNICAL DETAIL :			
3.1	Drilling hole diameter	Vendor to note		
3.2	Drill diameter	Vendor to confirm		
3.3	Over all Length of the drill	Vendor to confirm		
3.4	Driver	Vendor to confirm		

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3.5	Effective hole depth	: 280.00 mm	Vendor to confirm		
3.6	Hole tolerance	Between H7-H8	Vendor to specify and confirm		
3.7	Hole surface quality(Min)	: 3.2 Ra	Vendor to specify and confirm		
3.8	Hole concentricity	:0.1 mm (Max.)	Vendor to confirm		
3.9	Hole straightness	:0.05 mm (Max.)	Vendor to confirm		
4	Single piece carbide head length(mm)	:40.0 mm (Min.)	Vendor to confirm		
4.1	Carbide head regrounding length(mm)	:30.0 mm (Min.)	Vendor to confirm		
4.2	Carbide head profile	: E	Vendor to confirm		
4.3	Carbide head coating	: TiALN nano	Vendor to confirm		
4.4	Carbide head "V" angle(Degree)	: 120	Vendor to confirm.		
4.5	Carbide head "V" point grinding	: Chip breaker	Vendor to confirm		
4.6	Guide bush	: as per drg.B/STM//1542	Vendor to confirm		
5	OPERATION DETAIL:				
5.1	Cutting Speed Vc(m/min)	: 80-120 (Min.)	Vendor to specify and confirm		
5.2	Feed f(mm/Rev.)	: 0.10-0.15	Vendor to specify and confirm		
5.3	Cutting fluid	: Neat type oil	Vendor to note		
5.4	Spindle Speed	: 1500 RPM	Vendor to note		
6	SCOPE OF SUPPLY:-				
6.1	Brazed carbide tipped gun drill for hole dia. 12.76 (driver as per drg. Hph/1005 rev.00)	30 NO	Vendor to confirm		
6.2	Guide bush as per drg.no. B/stm/1542 rev.00	8 NO	Vendor to confirm		
6.3	Documents to be furnished along with supply-Test & Guarantee Certificates - 2 Sets		Vendor to confirm		
7	SUPPLY & PROVING OF THE EQUIPMENT				
7.1	Supplier will be solely responsible for the supply, commissioning and proving the gun drill at BHEL works. Actual job shall be proved at Bhopal in all respect for accuracy and performance during commissioning.				
7.2	Delivery Period (In weeks) - Our preferred delivery is within 8 weeks				

Prepared by:




12/01/2020

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 Dy. Manager (Production)
 HCM Division

Vendor Signature with Official Stamp