Laboratory	Mukand Test Labs, Mukand Ltd., Thane-Belapur Road, Post Kalwe, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Certificate Number	TC-6992	Page 1 of 3	
Validity	05.03.2018 to 04.03.2020	Last Amended on	

SI.	Product /	Specific Test	Test Method Specification	Range of Testing /
	Material of Test	Performed	against which tests are	Limits of Detection
			performed	

MECHANICAL TESTING

BAR	MILL TEST LAB			
I.	MECHANICAL PROPERTIES OF MATERIALS			
1.	Wire Rods, Wires, Bars & Bright Bars of Stainless Steel, Carbon	Brinell Hardness Testing	ASTM E-10 IS 1500-1	50 HBW to 400 HBW, 5/750 50 HBW to 400 HBW, 10/3000
	Steel and Alloy Steel	Rockwell Hardness Testing Tensile testing	ASTM A-370 ASTM E-18 ASTM A-370 ISO 6892-1	55 HRBW to 100 HRBW 20 HRC to 65 HRC
		Yield Strength Ultimate tensile Strength % Elongation % Reduction Area	IS 1608	170 N/mm ² to 1300 N/mm ² 320 N/mm ² to 1500 N/mm ² 1 %to 80% 1% to 85 % (40 kN to 1000 kN)
		Izod Impact Test Charpy Impact Test	IS 1598 IS 1757 (Part 1)	0 to 169 J (27°C ± 2°C) 10 J to 240 J (23°C ± 5°C)
11.	METALLOGRAPH	Y TEST		
1.	Wire Rods, Wires, Bars & Bright Bars of Stainless Steel, Carbon Steel and Alloy Steel	Grain Size No. (Comparison Method) Non-metallic inclusion rating in steel (Method A) Depth of Decarburization	ASTM E112 IS 4748 ASTM E-45, Method A ISO 4967 IS 4163 ASTM E 1077 Microscopic Method	Grain size No.1 to 10 Type A, B, C, D Type A, B, C, D, DS 0.01 mm to 1 mm

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Acc	reditation Standa	rd ISO/IEC 17025: 20	005		
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Vali	dity	05.03.2018 to 04.0	03.2020 La	Last Amended on	
SI.	Product / Material of Test	Specific Test Performed	Test Method Specifica against which tests ar performed		
BRIC	GHT BAR DEPARTM	IENT TEST LAB			
I.	MECHANICAL PR	OPERTIES OF MATERIA	ALS		
1.	Wire Rods, Wires, Bars & Bright Bars of	Brinell Hardness Testing	ASTM E-10 IS 1500-1	50 HBW to 400 HBW, 5/ 750	
	Stainless Steel, Carbon Steel and Alloy Steel	Tensile testing Ultimate tensile Strength % Elongation % Reduction Area	ASTM A-370 ISO 6892-1 IS 1608	320 N/mm ² to 1500 N/mm ² 1% to 80 % 1% to 85 % (8 kN to 400 kN)	
WIR	E ROD MILL TEST I	<u>_AB</u>			
I.	MECHANICAL PR	OPERTIES OF MATERIA	LS		
1.	Wire Rods, Wires, Bars & Bright Bars of	Rockwell Hardness Testing	ASTM A-370 ASTM E-18	55 HRBW to 100 HRBW 20 HRC to 65 HRC	
	Stainless Steel, Carbon Steel and Alloy Steel	Tensile testing Ultimate tensile Strength % Elongation % Reduction Area	ASTM A-370 ISO 6892-1 IS 1608	320 N/mm ² to 1500 N/mm ² 1% to 80 % 1 % to 85 %	
II.	METALLOGRAPH	Y TEST			
1.	Wire Rods, Wires, Bars & Bright Bars of Stainless Steel, Carbon Steel	Grain Size No. (Comparison Method) Depth of Decarburization	ASTM E112 IS 4748 ASTM E 1077 Microscopic Method	Grain size No. 1 to 10 0.01 mm to 1 mm	
	and Alloy Steel				

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		Question Denne of Testion /	

SI.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection	
<u>R&</u> C	<u>) TEST LAB</u>				
I.	. MECHANICAL PROPERTIES OF MATERIALS				
1.	Wire Rods, Wires, Bars & Bright Bars of Stainless Steel, Carbon Steel and Alloy Steel	Brinell Hardness Testing	ASTM E-10 IS 1500-1	50 HBW to 400 HBW, 5/750	
II.	I. METALLOGRAPHY TEST				
1.	Wire Rods, Wires, Bars & Bright Bars of Stainless Steel, Carbon Steel and Alloy Steel	Grain Size No. (Comparison Method) Non-metallic inclusion rating in steel (Method A)	ASTM E112 IS 4748 ASTM E-45, Method A ISO 4967 IS 4163	Grain size No. 1 to 10 Type A, B, C, D Type A, B, C, D, DS	