

Laboratory Chemical Laboratory, Small Arms Factory, Kalpi Road, Kanpur, Uttar Pradesh

Accreditation Standard ISO/IEC 17025: 2005

Discipline Chemical Testing **Issue Date** 02.11.2014

Certificate Number T-1106 **Valid Until** 01.11.2016

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
I. METALS & ALLOYS				
1.	Plain Carbon Steel	C	IS 228 (Part 1): 1987 (RA 2002) By Strohlein Apparatus	0.08 % to 1.00 %
		Mn	IS 228 (Part 2): 1987 (RA 2002)	0.10 % to 1.50 %
		S	IS 228 (Part 9): 1987 (RA 1999)	0.005 % to 0.06 %
		P	IS 228 (Part 3): 1987 (RA 1999)	0.005 % to 0.06 %
2.	Low Alloy Steel	C	IS 228 (Part 1): 1987 (RA 2002)	0.08 % to 1.00 %
		Mn	IS 228 (Part 2): 1987 (RA 2002)	0.10 % to 1.50 %
		S	IS 228 (Part 9): 1987 (RA 1999)	0.005 % to 0.06 %
		P	IS 228 (Part 3): 1987 (RA 1999)	0.005 % to 0.06 %
		Cr	IS 228 (Part 6): 1987 (RA 2002)	0.019 % to 4.00 %
		Ni	IS 228 (Part 5): 1987 (RA 2002)	0.03 % to 5.00 %
3.	Stainless Steel (Ferritic & Martensitic)	Mo	IS 228 (Part 7): 1990	0.01 % to 1.00 %
		C	IS 228 (Part 1): 1987 (RA 2002)	0.03 % to 1.00 %
		Mn	IS 228 (Part 2): 1987 (RA 2002)	0.10 % to 1.52 %
		S	IS 228 (Part 9): 1987 (RA 1999)	0.005 % to 0.06 %

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	Stainless Steel (Ferritic & Martensitic)	P	IS 228 (Part 3): 1987 (RA 1999)	0.005 % to 0.06 %
		Cr	IS 228 (Part 6): 1987 (RA 2002)	10.00 % to 16.00 %
		Ni	IS 228 (Part 5): 1987 (RA 2002)	0.50 % to 4.00 %
		Mo	IS 228 (Part 7): 1990	0.10 % to 1.00 %
4.	Carbon Steel	C	ASTM E 415, Rev. 2014 (By AES Method)	0.08 % to 1.00 %
		Mn		0.10 % to 1.50 %
		S		0.005 % to 0.06 %
		P		0.005 % to 0.06 %
5.	Low Alloy Steel	C	ASTM E 415, Rev.2014 (By AES Method)	0.08 % to 1.00 %
		Mn		0.10 % to 1.50 %
		S		0.005 % to 0.06 %
		P		0.005 % to 0.06 %
		Cr		0.019 % to 4.00 %
		Ni		0.03 % to 5.00 %
		Mo		0.01 % to 1.00 %
Si	0.03 % to 2.00 %			

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
6.	Stainless Steel (Ferritic & Martensitic)	C	ASTM E 1086, Rev. 2014 (By AES Method)	0.05 % to 1.00 %
		Mn		0.10 % to 1.50 %
		S		0.005 % to 0.06 %
		P		0.005 % to 0.06 %
		Cr		10.00 % to 18.00 %
		Ni		0.50 % to 4.00 %
		Mo		0.10 % to 1.0 %
7.	High Speed Steel	C	ASTM E 1086, Rev. 2014 (By AES Method)	0.05 % to 1.00 %
		Mn		0.10 % to 1.50 %
		S		0.005 % to 0.06 %
		P		0.005 % to 0.06 %
		Cr		3.50 % to 5.00 %
		V		1.00 % to 2.00 %
		W		1.00 % to 21.00 %
Mo	0.50 % to 10.00 %			
		Si		0.15 % to 0.40 %

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