

NABL Accredited Lab testing facilities for Vendors for availing spare capacity.

Testing Facility (e.g. Chemical, Mechanical, etc.,)	Products/ Materials for Tests	Specific tests performed	Range of Testing/ Limits of detection	Test Method / Standard against which tests are performed
Chemical	a) TUNGSTENPOWDER	Al	10 – 100 mg/kg / 10 mg/kg	In-house validated method based on AAS Technique - QAL / HAPP / WI No.01 Issue No.3.0 Rev: 0.0 Dated 21.05.2010
		Cu	5 – 100 mg/kg / 5 mg/kg	---do---
		Ca	10 – 200 mg/kg / 10 mg/kg	---do---
		Mn	5 – 100 mg/kg / 5 mg/kg	---do---
		Mg	5 – 100 mg/kg / 5 mg/kg	---do---
		Na	5 – 100 mg/kg / 5 mg/kg	---do---
		K	5 – 100 mg/kg / 5 mg/kg	---do---
		As	10 – 100 mg/kg / 10 mg/kg	---do---
		Si	10 – 100 mg/kg / 10 mg/kg	---do---
		Sn	10 – 100 mg/kg / 10 mg/kg	---do---
		Bi	10 – 100 mg/kg / 10 mg/kg	---do---
		C	10 – 200 mg/kg / 10 mg/kg	In-house validated method based on Infrared Cell Method - QAL / HAPP / WI No.03 Issue No.3.0 Rev: 0.0 Dated 21.05.2010
		S	10 – 100 mg/kg / 10 mg/kg	---do---
		O ₂	100 – 2000 mg/kg / 100 mg/kg	---do---
		N ₂	10 – 200 mg/kg / 10 mg/kg	In-house validated method based on Thermal Conductivity Cell Method - QAL / HAPP / WI No.03 Issue No.3.0 Rev: 0.0 Dated 21.05.2010

Testing Facility (e.g. Chemical, Mechanical, etc.,)	Products/ Materials for Tests	Specific tests performed	Range of Testing/ Limits of detection	Test Method / Standard against which tests are performed
Chemical	b) NICKEL POWDER	Sn	10 – 100 mg/kg / 10 mg/kg	In-house validated method based on AAS Technique - QAL / HAPP / WI No.01 Issue No.3.0 Rev: 0.0 Dated 21.05.2010
		Sb	10 – 100 mg/kg / 10 mg/kg	---do---
		C	10 – 3000 mg/kg / 10 mg/kg	In-house validated method based on Infrared Cell Method - QAL / HAPP / WI No.03 Issue No.3.0 Rev: 0.0 Dated 21.05.2010
		S	10 – 100 mg/kg / 10 mg/kg	---do---
		O ₂	100 – 3000 mg/kg / 100 mg/kg	---do---
		N ₂	10 – 200 mg/kg / 10 mg/kg	In-house validated method based on Thermal Conductivity Cell Method - QAL / HAPP / WI No.03 Issue No.3.0 Rev: 0.0 Dated 21.05.2010

Testing Facility (e.g. Chemical, Mechanical, etc.,)	Products/ Materials for Tests	Specific tests performed	Range of Testing/ Limits of detection	Test Method / Standard against which tests are performed
Chemical	c) MOLYBDENUM POWDER	Ca	10 – 200 mg/kg / 10 mg/kg	In-house validated method based on AAS Technique - QAL / HAPP / WI No.01 Issue No.3.0 Rev: 0.0 Dated 21.05.2010
		Cr	10 – 100 mg/kg / 10 mg/kg	---do---
		Pb	10 – 100 mg/kg / 10 mg/kg	---do---
		Sn	10 – 100 mg/kg / 10 mg/kg	---do---
		Ti	10 – 100 mg/kg / 10 mg/kg	---do---
		C	10 – 200 mg/kg / 10 mg/kg	In-house validated method based on Infrared Cell Method - QAL / HAPP / WI No.03 Issue No.3.0 Rev: 0.0 Dated 21.05.2010
		S	10 – 100 mg/kg / 10 mg/kg	---do---
		O ₂	100 – 2000 mg/kg / 100 mg/kg	---do---
		N ₂	10 – 200 mg/kg / 10 mg/kg	In-house validated method based on Thermal Conductivity Cell Method - QAL / HAPP / WI No.03 Issue No.3.0, Dated 21.05.2010

Testing Facility (e.g. Chemical, Mechanical, etc.,)	Products/ Materials for Tests	Specific tests performed	Range of Testing/ Limits of detection	Test Method / Standard against which tests are performed
Chemical	d) IRON POWDER	Mn	5 – 100 mg/kg / 5 mg/kg	In-house validated method based on AAS Technique - QAL / HAPP / WI No.01 Issue No.3.0 Rev: 0.0 Dated 21.05.2010
		Cr	10 – 100 mg/kg / 10 mg/kg	---do---
		Ni	5 – 100 mg/kg / 5 mg/kg	---do---
		Mo	10 – 100 mg/kg / 10 mg/kg	---do---
		Cu	5 – 100 mg/kg / 5 mg/kg	---do---
		Pb	10 – 100 mg/kg / 10 mg/kg	---do---
		Zn	10 – 100 mg/kg / 10 mg/kg	---do---
		Si	10 – 100 mg/kg / 10 mg/kg	---do---
		As	10 – 100 mg/kg / 10 mg/kg	---do---
		C	10 – 500 mg/kg / 10 mg/kg	In-house validated method based on Infrared Cell Method - QAL / HAPP / WI No.03 Issue No.3.0 Rev: 0.0 Dated 21.05.2010
		S	10 – 100 mg/kg / 10 mg/kg	---do---
		O ₂	100 – 3000 mg/kg / 100 mg/kg	---do---
		N ₂	10 – 200 mg/kg / 10 mg/kg	In-house validated method based on Thermal Conductivity Cell Method - QAL / HAPP / WI No.03 Issue No.3.0 Rev: 0.0 Dated 21.05.2010

Testing Facility (e.g. Chemical, Mechanical, etc.,)	Products/ Materials for Tests	Specific tests performed	Range of Testing/ Limits of detection	Test Method / Standard against which tests are performed
Chemical	e) COBALT POWDER	Al	10 – 100 mg/kg / 10 mg/kg	In-house validated method based on AAS Technique - QAL / HAPP / WI No.01 Issue No.3.0 Rev: 0.0 Dated 21.05.2010
		Cu	5 – 100 mg/kg / 5 mg/kg	---do---
		Ca	10 – 200 mg/kg / 10 mg/kg	---do---
		Mn	10 – 100 mg/kg / 10 mg/kg	---do---
		Mg	5 – 100 mg/kg / 5 mg/kg	---do---
		Na	5 – 100 mg/kg / 5 mg/kg	---do---
		Pb	10 – 100 mg/kg / 10 mg/kg	---do---
		Zn	10 – 100 mg/kg / 10 mg/kg	---do---
		Ag	10 – 100 mg/kg / 10 mg/kg	---do---
		Cr	10 – 100 mg/kg / 10 mg/kg	---do---
		Sn	10 – 100 mg/kg / 10 mg/kg	---do---
		C	10 – 500 mg/kg / 10 mg/kg	In-house validated method based on Infrared Cell Method - QAL / HAPP / WI No.03 Issue No.3.0 Rev: 0.0 Dated 21.05.2010
		S	10 – 100 mg/kg / 10 mg/kg	---do---
		O ₂	100 – 6000 mg/kg / 100 mg/kg	---do---
		N ₂	10 – 200 mg/kg / 10 mg/kg	In-house validated method based on Thermal Conductivity Cell Method - QAL / HAPP / WI No.03 Issue No.3.0 Rev: 0.0 Dated 21.05.2010

Testing Facility (e.g. Chemical, Mechanical, etc.,)	Products/ Materials for Tests	Specific tests performed	Range of Testing/ Limits of detection	Test Method / Standard against which tests are performed
Chemical	f) TUNGSTEN BLENDED POWDER	Ni	0.1 – 10 % / 0.1 %	In-house validated method based on AAS Technique - QAL / HAPP / WI No.02 Issue No.3.0 Rev: 0.0 Dated 21.05.2010
		Fe	0.1 – 10 % / 0.1 %	---do---
		Co	0.05 – 3 % / 0.05 %	---do---
		Mo	0.05 – 2 % / 0.05 %	---do---
		O ₂	100 – 2000 mg/kg / 100 mg/kg	In-house validated method based on Infrared Cell Method - QAL / HAPP / WI No.03 Issue No.3.0 Rev: 0.0 Dated 21.05.2010

Testing Facility (e.g. Chemical, Mechanical, etc.,)	Products/ Materials for Tests	Specific tests performed	Range of Testing/ Limits of detection	Test Method / Standard against which tests are performed
Chemical	g) STEEL ALLOYS	C	0.05 – 1.5 % / 0.05 %	1. In-house validated method based on Infrared Cell Method - QAL / HAPP / WI No.03 Issue No.3.0 Rev: 0.0 Dated 21.05.2010 2. ASTM – E 1019 - 2011
		S	0.003 – 0.05 % / 0.003 %	---do---
		Ni	0.005 – 5.0 % / 0.005 %	1. In-house validated method based on AAS Technique - QAL / HAPP / WI No.01 Issue No.3.0 Rev: 0.0 Dated 21.05.2010 2. IS 12122-1987 (Ra 2010)
		Si	0.05 – 2.0 % / 0.05 %	In-house validated method based on AAS Technique - QAL / HAPP / WI No.01 Issue No.3.0 Rev: 0.0 Dated 21.05.2010
		Cr	0.005 – 15.0 % / 0.005 %	---do---
		Al	0.03 – 0.50 % / 0.03 %	---do---
		Cu	0.005 – 5.0 % / 0.005 %	---do---
		Mo	0.05 – 3.0 % / 0.05 %	1. In-house validated method based on AAS Technique - QAL / HAPP / WI No.01 Issue No.3.0 Rev: 0.0 Dated 21.05.2010 2. IS 12042-1987 (Ra 2010)
		Mn	0.10 – 2.0 % / 0.10 %	1. In-house validated method based on AAS Technique - QAL / HAPP / WI No.01 Issue No.3.0 Rev: 0.0 Dated 21.05.2010 2. IS 12046-1987 (Ra 2010)

Testing Facility (e.g. Chemical, Mechanical, etc.,)	Products/ Materials for Tests	Specific tests performed	Range of Testing/ Limits of detection	Test Method / Standard against which tests are performed
Mechanical	a) STEEL PRODUCT	Brinell Hardness	230 to 310 HBW 10/3000	IS 1500:2005
		Rockwell Hardness 'C' scale	20 to 40 HRC	IS 1586:2000
		Charpy V' Notch	2 to 300 Joules (20 Deg to 27 Deg C)	IS 1757:1988

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Mechanical	b) STEEL PRODUCT & ALUMINIUM PRODUCT	Tensile Test, Yield Strength, 0.2 % Proof Stress, % Elongation & % of Reduction Area	0.1 N to 250 KN Grip Round: 5mm to 25 mm Flat: 2mm to 30mm	IS 1608 :2005