



NABL

National Accreditation Board for Testing and Calibration Laboratories

Department of Science & Technology, India

CERTIFICATE OF ACCREDITATION

STEWART SURVEYORS & ASSAYERS PVT. LTD.

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2005

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

25-12-40, Ground & 2nd Floor, PVR Chambers, Godeyvari Street, Visakhapatnam

in the field of

CHEMICAL TESTING

(You may also visit NABL website www.nabl-india.org to view the scope of accreditation)

Certificate Number T-2185

Issue Date 09/03/2012



Valid Until 08/03/2014

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the additional requirements of NABL.

Signed for and on behalf of NABL

Iti Saxena
Convenor

Anil Relia
Director

Dr. T. Ramasami
Chairman



NABL

Department of Science & Technology, India

SCOPE OF ACCREDITATION

Laboratory	Stewart Surveyors & Assayers Pvt. Ltd., 25-12-40, Ground & 2nd Floor, PVR Chambers, Godeyvari Steet, Visakhapatnam		
Accreditation Standard	ISO/IEC 17025: 2005		
Field	Chemical Testing	Issue Date	09.03.2012
Certificate Number	T-2185	Valid Until	08.03.2014
Last Amended on	-	Page	1 of 3

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
1.	IRON ORE	Moisture	IS 1493: Part 1:1981, Rfmd. 2006 ISO 3087 : 1998 IMSBC Code – 2009, Apdx.- 2	1 – 15 %
		Silica	IS 1493: Part 1:1981, Rfmd. 2006 ISO 2598 -1 : 1992	0.3 – 10 %
		Total Iron	IS 1493: Part 1:1981, Rfmd. 2006 ISO 2597 -1 : 2006	35 – 70 %
		Alumina	IS 1493: Part 1:1981, Rfmd. 2006 ISO 6830 : 1986	0.3 – 10 %
		Phosphorus	IS 1493 : 1959, Rfmd. 2006/ Chemical & Instrumental Analysis, IBM ISO 2599 : 2003	0.01 – 0.2 %
		Sulphur	IS 1493 : 1959, Rfmd. 2006 ISO 4689 : 1986 ASTM E 1915-09	0.004 – 0.3 %
		Loss of Ignition	Chemical & Instrumental Analysis, Indian Bureau of Mines (IBM)	0.5 – 10 %
		Flow Moisture Point (FMP)&Transportable Moisture Limit (TML)	IMSBC Code – 2009, Apdx.- 2 (By Flow Table method)	5 – 20 %
		Angle of Repose	IMSBC Code – 2009, Apdx.- 2 (By Tilting Box method)	30 – 45 degree

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Last Amended on	-	Page	2 of 3

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
2.	SILICO MANGANESE	Silicon	IS 1559 : 1961, Rfmd. 2007	10 – 25 %
		Manganese	IS 1559 : 1961, Rfmd. 2007	50 – 75 %
		Phosphorus	IS 1559 : 1961, Rfmd. 2007/ SSAPL/VSP/IHM/SiMn/03 (In-house Validated Method)	0.05 – 0.5 %
		Sulphur	ASTM E 1019-11	0.005 – 0.05 %
		Carbon	ASTM E 1019-11	0.05 – 3.5 %
3.	FERRO CHROMIUM	Silicon	IS 13452 (Part 1):1992, Rfmd. 2007	1 – 10 %
		HCFC	IS 13452 (Part 2):1992, Rfmd. 2007	0.2–6 %
		LCFC	IS 13452 (Part 2):1992, Rfmd. 2007	0.2–6 %
		Chromium	IS 13452 (Part 5):2003, Rfmd. 2009	50 – 70 %
		HCFC	IS 1559 : 1961, Rfmd 2007	55 – 85 %
		LCFC	IS 13452 (Part 6):1997, Rfmd. 2007	55 – 85 %
		Phosphorus	IS 13452 (Part 7):2003, Rfmd. 2009//	0.01 – 0.06 %
		HCFC	SSAPL/VSP/IHM/HCFC/01	
		LCFC	SSAPL/VSP/IHM/LCFC/05 (In-house Validated Method)	
		Sulphur	ASTM E 1019-11	0.005 – 0.5 %
HCFC / LCFC	ASTM E 1019-11	0.005 – 0.5 %		
Carbon	ASTM E 1019-11	4 – 10 %		
HCFC / LCFC	ASTM E 1019-11	0.05 – 0.4 %		

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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
4.	FERRO MANGANESE	Silicon	IS 1559: 1961, Rfmd 2007	0.2 – 4 %
		Manganese	IS 1559: 1961, Rfmd 2007	55 – 90 %
		Phosphorus	IS 1559: 1961, Rfmd 2007/ SSAPL/VSP/IHM/FeMn/04 (In-house Validated Method)	0.05 – 0.5 %
		Sulphur	ASTM E 1019-11	0.005 – 0.1 %
		Carbon	ASTM E 1019-11	4 – 8 %
5.	FERROSILICON	Silicon	IS1559 (Part 1): 1988, Rfmd. 2009	60 – 80 %
		Aluminium	IS 1559 (Part 5): 2003, Rfmd. 2009	0.05 – 1.75 %
		Phosphorus	IS1559 (Part 4):1982, Rfmd. 2007/ SSAPL/VSP/IHM/FeSi/02 (In-house Validated Method)	0.005 – 0.05 %
		Sulphur	ASTM E 1019-11	0.003 – 0.1 %
	Carbon	ASTM E 1019-11	0.03 – 1 %	

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for its facilities at

Kakani Towers, 4th Floor, New No. 34, Old No. 15, Khader Nawaz Khan Road, Chennai

in the field of

CHEMICAL TESTING

(You may also visit NABL website www.nabl-india.org to view the scope of accreditation)

Certificate Number T-2143

Issue Date 03/02/2012



Valid Until 02/02/2014

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the additional requirements of NABL.

Signed for and on behalf of NABL

Iiti Saxena
Convenor

Anil Relia
Director

Dr. T. Ramasami
Chairman



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Department of Science & Technology, India

SCOPE OF ACCREDITATION

Laboratory	Stewart Surveyors & Assayers Pvt. Ltd., Kakani Towers, 4 th Floor, New No. 34, Old No. 15, Khader Nawaz Khan Road, Chennai		
Accreditation Standard	ISO/IEC 17025:2005		
Field	Chemical Testing	Issue Date	03.02.2012
Certificate Number	T-2143	Valid Until	02.02.2014
Last Amended on	-	Page	1 of 3

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
1.	IRON ORE	Silica	IS 1493 : Part 1:1981, Reaffirmed 2006 ISO 2598 -1 : 1992	0.3 - 30 %
		Total Iron	IS 1493 : Part 1:1981, Reaffirmed 2006 ISO 2597 -1 : 2006	25 - 70 %
		Alumina	IS 1493 : Part 1:1981, Reaffirmed 2006 ISO 6830 : 1986	0.3 - 10 %
		Phosphorus	IS 1493 : 1959, Reaffirmed 2006 ISO 2599 : 2003	0.01 - 0.25 %
		Sulphur	IS 1493 : 1959, Reaffirmed 2006 ISO 4689 : 1986	0.004 - 0.3 %
		Loss on Ignition	Chemical & Instrumental Analysis of Ores, IBM	0.5 - 10 %
		Flow Moisture Point (FMP) & Transportable Moisture Limit (TML)	IMSBC Code – 2009, Apdx. - 2 (By Flow Table method)	5 - 20 %
2.	COAL / COKE	Moisture	IS 1350 (Part 1):1984, Reaffirmed 2007/ ASTM D3173-11	0.1 - 25 %

Ali Saxena

Convenor



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Accreditation Standard	ISO/IEC 17025:2005		
Field	Chemical Testing	Issue Date	03.02.2012
Certificate Number	T-2143	Valid Until	02.02.2014
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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
		Volatile Matter	IS 1350 (Part 1):1984, Reaffirmed 2007/ ASTM D3175-11	0.1 - 50 %
		Ash	IS 1350 (Part 1):1984, Reaffirmed 2007/ ASTM D3174-11	0.1 - 60 %
		Fixed Carbon	IS 1350 (Part 1):1984, Reaffirmed 2007/ ASTM D3172-07a	Calculated Value (By Difference)
		Gross Calorific Value	IS 1350 (Part 2):1970, Reaffirmed 2009/ ASTM D5865-10a	1000 - 9000 kcal/kg
		Total Sulphur	IS 1350 (Part 3):1969, Reaffirmed 2005 ASTM D3177-02 (2007) Method B	0.01- 5 %
AT SSAPL – CHENNAI PORT LABORATORY				
1.	IRON ORE	Moisture	IS 1493 : Part 1:1981, Reaffirmed 2006 ISO 3087 : 1998 IMSBC Code – 2009, Apdx.- 2	1 -15 %
		Angle of Repose	IMSBC Code – 2009, Apdx. - 2 (By Tilting Box method)	30 – 45 degree

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SCOPE OF ACCREDITATION

Laboratory Stewart Surveyors & Assayers Pvt. Ltd., Kakani Towers, 4th Floor,
New No. 34, Old No. 15, Khader Nawaz Khan Road, Chennai

Accreditation Standard ISO/IEC 17025:2005

Field Chemical Testing **Issue Date** 03.02.2012

Certificate Number T-2143 **Valid Until** 02.02.2014

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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
2.	COAL / COKE	Total Moisture	IS 1350 (Part 1):1984, Reaffirmed 2007 / ASTM D 3302 / D3302M-10	0.5- 50 %
		Hardgrove Grindability Index	IS 4433 – 1979, Reaffirmed 2005 ASTM D 409 / D409M-11	30- 75

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Office No.8, 2nd Floor, Plot No. 588, Ward No. 12C, Gandhidham

in the field of

CHEMICAL TESTING

(You may also visit NABL website www.nabl-india.org to view the scope of accreditation)

Certificate Number T-2133

Issue Date 03/02/2012



Valid Until 02/02/2014

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the additional requirements of NABL.

Signed for and on behalf of NABL

John Varughese

Convenor

Anil Relia

Director

Dr. T. Ramasami

Chairman



NABL

Department of Science & Technology, India

SCOPE OF ACCREDITATION

Laboratory	Stewart Surveyors & Assayers Pvt. Ltd., Office No. 8, 2nd Floor, Plot No. 588, Ward No. 12 C, Gandhidham		
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Field	Chemical Testing	Issue Date	03.02.2012
Certificate Number	T-2133	Valid Until	02.02.2014
Last Amended on	-	Page	1 of 1

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
1.	COAL	Total Moisture	IS 1350 (Part 1):1984, RA 2007 / ASTM D 3302 / D3302M-10	1% - 40 % 1% - 40 %
		Moisture	IS 1350 (Part 1):1984, RA 2007 / ASTM D3173-11	1% - 25 % 1% - 25 %
		Volatile Matter	IS 1350 (Part 1):1984, RA 2007 / ASTM D3175-11	10 % - 50 % 10 % - 50 %
		Ash	IS 1350 (Part 1):1984, RA 2007 / ASTM D3174-11	1 % - 60 % 1 % - 60 %
		Fixed Carbon	IS 1350 (Part 1):1984, RA 2007/ ASTM D3172-07a (By Calculation)	Calculated Value By Difference
		Gross Calorific Value	IS 1350 (Part 2):1970, RA 2009 / ASTM D5865-10a	1000 - 9000 kcal/kg 1000 - 9000 kcal/kg
		Total Sulphur	IS 1350 (Part 3) :1969, RA 2005 ASTM D 3177-02 (Rpv. 2007) Method B	0.05 % - 5 % 0.05 % - 5 %
		Phosphorus	IS 1350 (Part 5): 1979, RA 2009	0.005 % - 1 %
		Hardgrove Grindability Index	IS 4433 : 1979, RA 2005 ASTM D 409/D409M-11	40 - 75 40 - 75

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