

**Westinghouse Electric Co., LLC
Columbia S.C.**

**Inspection report
30B cylinder containing Uranium Hexafluoride
MFR SERIAL NR 20 920-063, STOOMWEZEN REC. NR 4010401,
URENCO NR 1629/000535**

**Issued by
Carolina Materials Testing Company, Inc.
Irmo S.C.**

Carolina Materials Testing Company, Inc.
Soils, Foundations, Materials
and Non-Destructive Testing

Telephone: 803-407-3336

Fax: 803-749-1718

CYLINDER #

MFR SERIAL NR 20 920-063

DATE 5/15/2012

STOOMWEZEN REC. NR 4010401

URENCO NR 1629/000535

MODEL 30 B, YEAR BUILT 2000 (No month stamp on plate, as required by ANSI 14.1)

LAST RECERTIFICATION: 9/2010

Reason for inspection:

Cylinder received without U stamp of compliance to Boiler Pressure Vessel Code.

Inspection:

This inspection was performed to determine if this cylinder was built and maintained to standards set forth in ANSI N14.1 to the extent that the cylinder can be inspected while it is full. This inspection was limited to external visual inspection at a rate not less than 75% and 31 ultrasonic thickness tests with readings and location shown on Figure 1.

Thickness measurement criteria are set by ANSI N14.1 sec 6.3.2 Periodic Inspection and Test. At the lowest reading of .510 inches the cylinder walls are 163% of the required minimum .3125 inches. Extensive visual inspection revealed no indication the welds of this cylinder and its means and method of fabrication are not the quality prescribed in ANSI N14.1

The nominal diameter, nominal length, minimum volume requirement, and wall thickness meet the requirements of ANSI N14.1-2001.

This cylinder is fitted with a Descote valve, serial # 01126. Five threads are exposed, indicating 9 threads are engaged.

The back plug is stamped "11." Four threads are exposed, indicating seven threads are engaged.

Inspection Conclusion:

As per American National standards ANSI N14.1-2001. (Cylinders currently in service and not in accordance with this standard are acceptable for continued use, provided that they are inspected, tested, and maintained so to comply with the intent of this standard and are used within their original limitations.)

This cylinder shows no indication of external degradation below the established industrial standards. Visual inspection finds all welds to meet code requirements. An inspection of the overall appearance shows no construction or craftsmanship discrepancies to indicate this cylinder does not meet the intent of this standard.

This cylinder was manufactured by DEPLAATIJZERINDUSTRI B.V. NL. This manufacturer is certified to manufacture U stamped UF6 cylinders for URENCO. Hundreds of cylinders manufactured by DEPLAATIJZER INDUSTRI B.V. NL have been recertified at Westinghouse's Columbia plant with no problems observed.

Thank you for the opportunity to be of service. If you have any questions or comments, please call at 803-407-3336 (office) or 803-479-9570 (mobile).

Sincerely,

Carolina Materials Testing Company, INC.



Jack Shah
President

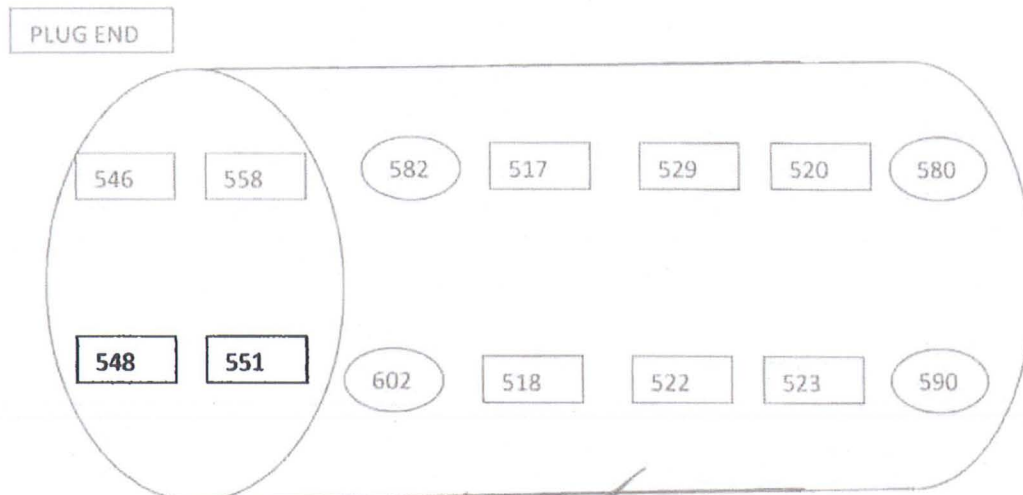
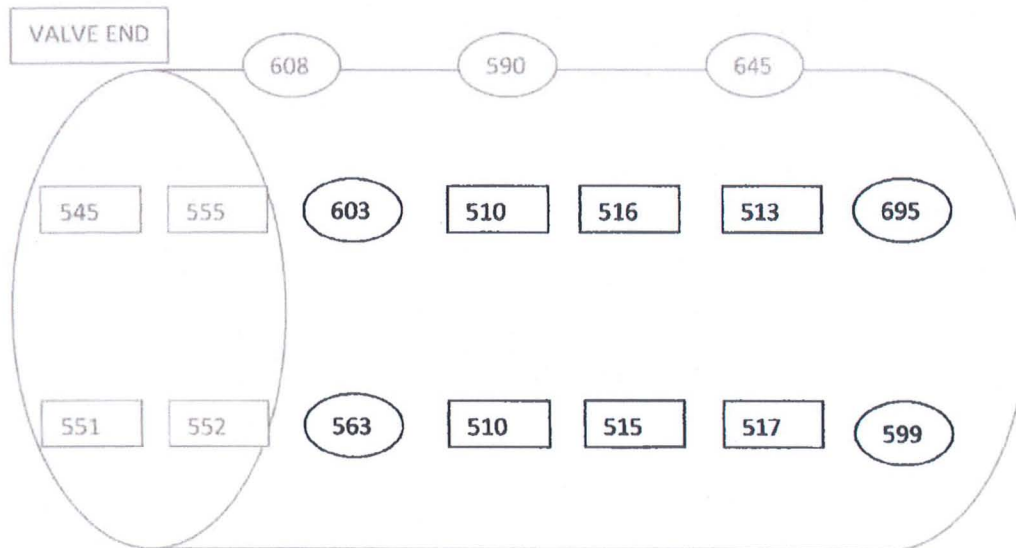
THICKNESS READINGS

DATE 4-16-2012

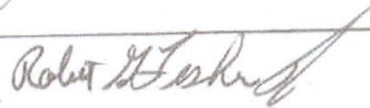
MFE. SERIAL #20 920-063, STOOMWEZEN # 4010401, URENCO # 1629/000535

THICKNESS IN THOUSANDS OF AN INCH

 INDICATES WELD THICKNESS



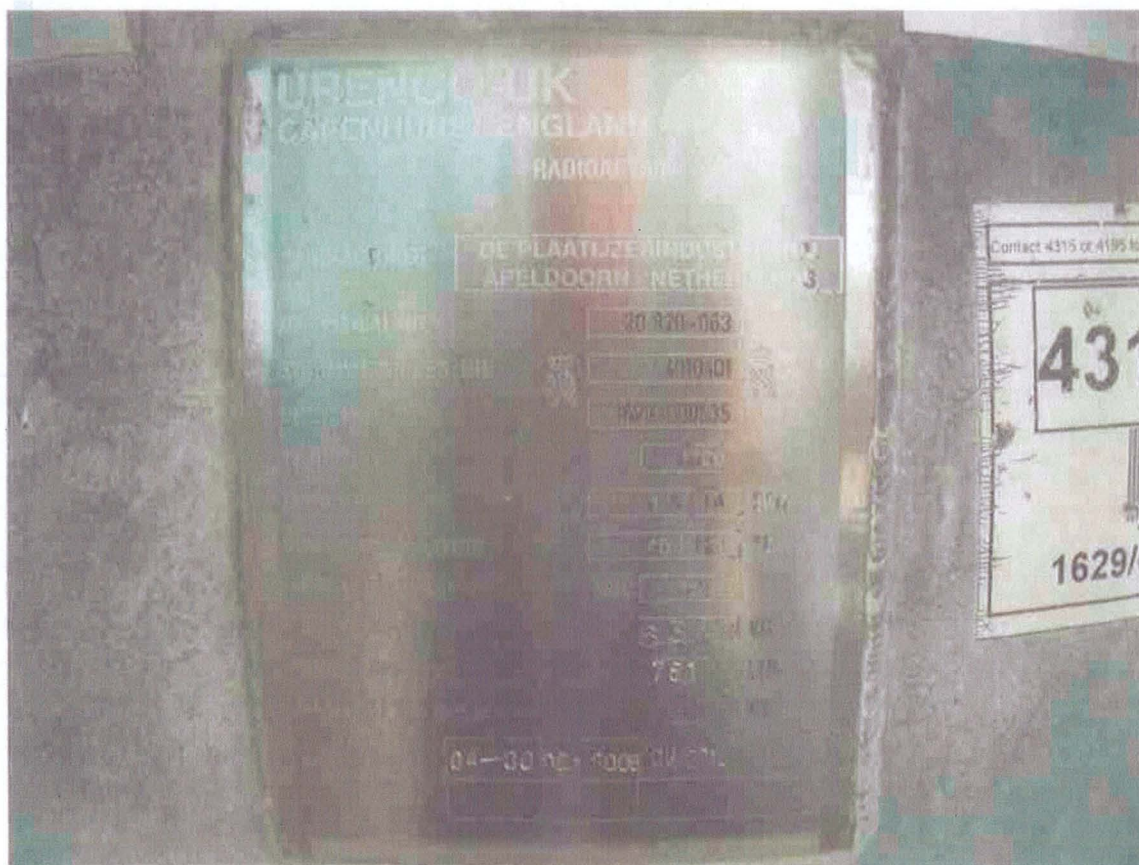
Robert G. Fisher Jr.



AWS CWI #05030191, South Carolina LLR License # 80



Robert G Fisher Jr.
CWI 05030191
QC1 EXP. 3/1/2014



MFR SERIAL NR 20 920-063

STOOMWEZEN REC. NR 4010401

URENCO NR 1629/000535

Name Plate.

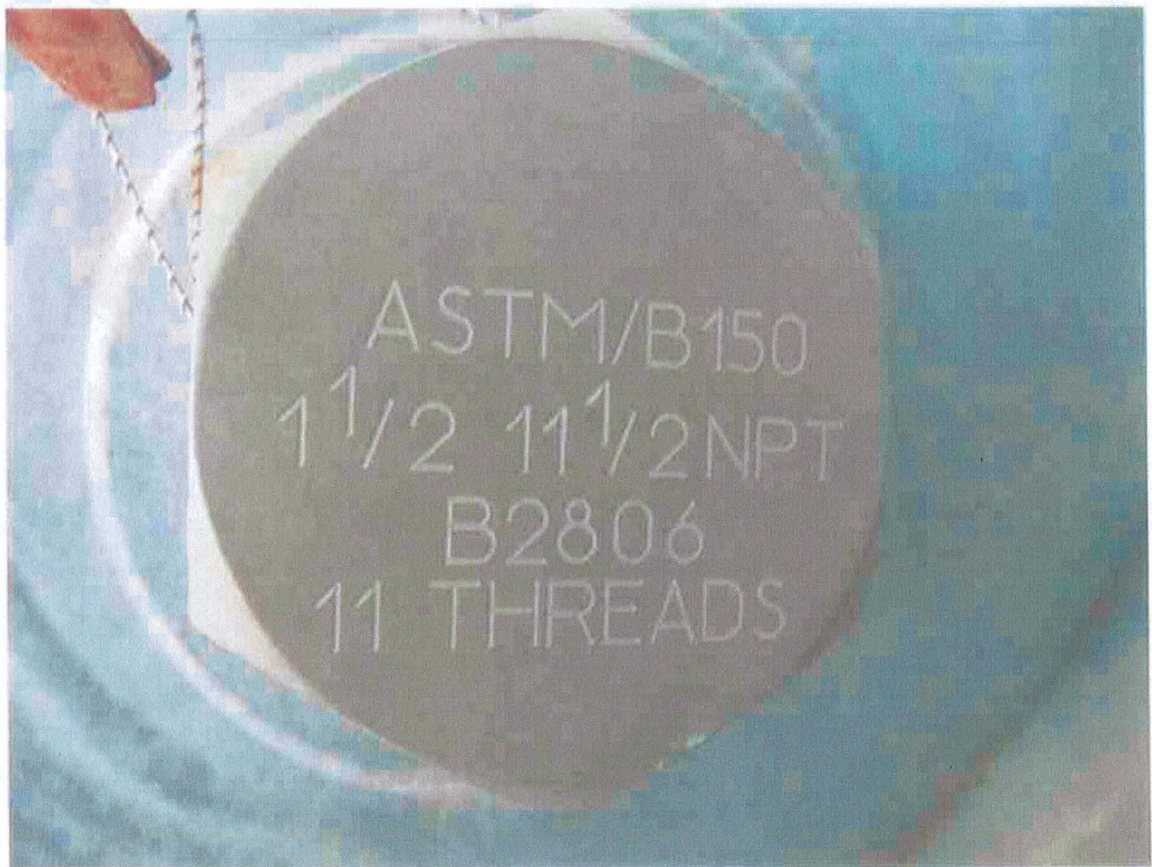


MFR SERIAL NR 20 920-063

STOOMWEZEN REC. NR 4010401

URENCO NR 1629/000535

View of valve end showing typical construction and no defects.



MFR SERIAL NR 20 920-063

STOOMWEZEN REC. NR 4010401

URENCO NR 1629/000535

View of plug showing typical construction and no defects.



MFR SERIAL NR 20 920-063

STOOMWEZEN REC. NR 4010401

URENCO NR 1629/000535

Side view from plug end showing typical construction and no defects.

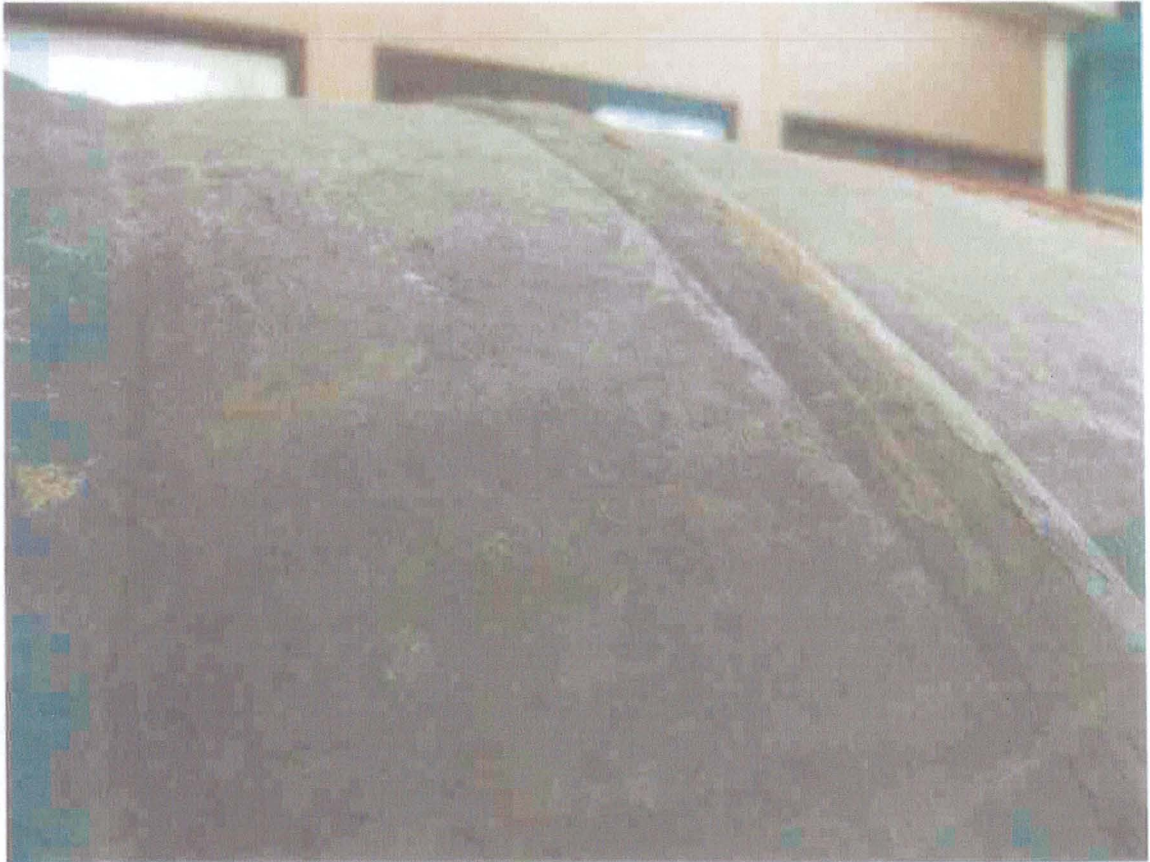


MFR SERIAL NR 20 920-063

STOOMWEZEN REC. NR 4010401

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Side view from valve end showing typical construction and no defects.



MFR SERIAL NR 20 920-063

STOOMWEZEN REC. NR 4010401

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Close up view of girth weld showing weld profile found to be the same on all cylinders viewed by this manufacturer, stamped or not.

UF₆ CYLINDER INSPECTION DATA SHEET

CN-46

CYLINDER NUMBER 1629/000535	CYLINDER MODEL <input type="checkbox"/> 30A (2½-ton) <input type="checkbox"/> 48F (14-ton HW) <input type="checkbox"/> <input checked="" type="checkbox"/> 30B (2½-ton) <input type="checkbox"/> 48Y (14-ton HW) <input type="checkbox"/> <input type="checkbox"/> 48A (10-ton) <input type="checkbox"/> 48G (14-ton LW) <input type="checkbox"/> <input type="checkbox"/> 48X (10-ton) <input type="checkbox"/> 48H (14-ton LW) <input type="checkbox"/>	<input type="checkbox"/> DATE SHIPPED <input checked="" type="checkbox"/> DATE RECEIVED WATER CAPACITY 751 LTR HYDROSTATIC PRESSURE TEST DATE OF _____ <input checked="" type="checkbox"/> IS ACCEPTABLE <input type="checkbox"/> IS NOT ACCEPTABLE CYLINDER'S CONTENTS ARE SOLIDIFIED <input type="checkbox"/> YES <input type="checkbox"/> NO	CYLINDER BEING INSPECTED <input type="checkbox"/> PRIOR TO BEING SHIPPED <input checked="" type="checkbox"/> AFTER BEING RECEIVED <input type="checkbox"/> PRIOR TO BEING FILLED <input type="checkbox"/> PRIOR TO BEING TESTED
Cylinder is Code Stamped <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	INCHES Hg _____	CYLINDER STATUS <input type="checkbox"/> FULL <input type="checkbox"/> EMPTY	
CYLINDER IS OVERFILLED: <input type="checkbox"/> YES <input type="checkbox"/> NO. Net weight is _____ pounds. Maximum Allowable Fill Limit is _____ pounds.		CONDITION Acceptable Un-Acceptable Not Applicable	
I. CYLINDER VALVE, VALVE PORT AND PLUGS	A. VALVE 1. Valve Type Dencote 1" 2. Physical Damage _____ 3. Thread Engagement 9 (Threads showing 5) 4. Valve Cap - Present and in Place _____		✓ ✓ ✓ ✓
	B. VALVE PORT 1. Plugged with UF ₆ _____ 2. Contaminated with Other U-Salts or Foreign Material _____		
	C. PLUGS 1. Physical Damage _____ 2. Thread Engagement 7 (Threads showing 4) 3. Sealed _____		✓ ✓ ✓
	D. VALVE PROTECTOR: ~ 1. Present and Properly Positioned _____ 2. Sealed _____ Description of Damage (if any): _____		
	II. CYLINDER WELDS A. CIRCUMFERENTIAL HEAD SEAM WELD - VALVE END B. CIRCUMFERENTIAL HEAD SEAM WELD - PLUG END C. LONGITUDINAL SEAM WELD D. LIFTING LUGS - WELD Description of Damage (if any): _____		✓ ✓ ✓ ✓
	III. CYLINDER SHELL AND HEADS A. SHELL B. HEAD-VALVE END C. HEAD-PLUG END Description of Damage (if any): _____		✓ ✓ ✓
	IV. STIFFENING RINGS A. VALVE END B. CENTER C. PLUG END Description of Damage (if any): _____		✓ ✓ ✓
	V. SKIRTS A. VALVE END B. PLUG END Description of Damage (if any): _____		✓ ✓
	DATE AND TIME INSPECTED 4-16-12 INSPECTED BY Robert G. Fisher Jr.		
	SECTION A THIS SECTION TO BE COMPLETED BY QUALITY EVALUATION PERSONNEL. REMARKS _____ _____ The above item(s) is <input type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable DATE _____ QUALIFIED INSPECTOR _____		
SECTION B THIS SECTION TO BE COMPLETED WHEN THE DAMAGE INDICATED ABOVE IS EVALUATED BY OTHER THAN QUALITY EVALUATION PERSONNEL. The following damage has been evaluated and disposition is: _____ APPROVED BY _____ TITLE _____ DATE _____			

UCH-8008 (S 2-92)

DISTRIBUTION
 White - Uranium Control (KYRC)
 Blue - Quality Evaluation (When Section A is completed)
 Buff - Originator

CONDITION LEGEND :
 A - Acceptable
 B - Unacceptable
 NA - Not Applicable

Typical Cylinder Inspection Data Sheet

Urengo NR 1629/000535
MFR Serial NO. 20.920-063