

TCR Technology Newsletter

**1st Quarter
 2018**

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**Topic of the Quarter – Food Testing Laboratory
 (Microbiology and Chemistry)**



TCR Arabia Food testing division provides the following range of services using its multi-disciplinary certified and experienced personnel team of professionals:

- | | |
|---------------------------------|---|
| Food microbiology Services | Environmental hygiene monitoring |
| Food Chemistry Services | Water microbiology testing |
| Water Chemistry Services | Antimicrobial activity of chemicals/disinfectants |
| Food born illness investigation | determination of energy value in food |
| Shelf life determination | Chemical analysis of drinking water |

TCR Arabia undertakes material testing as per international standards and specifications as defined by ASTM, SASO, BAM, CCFRA, BS, APHA and others. Testing can also be done as per client-supplied specifications.

Topic of the Quarter – Food testing laboratory

Food Quality Testing and Food borne illness investigation

Food borne illness investigation: TCR Arabia investigation of food born illness and for different catering companies and monitoring their personnel hygiene, kitchen hygiene, storage conditions, critical and critical control points etc.

Microbial analysis of food: Bacteriological analysis of all types of food like pasta, macaroni, milk and milk products ,fresh , chilled, frozen meat and poultry , ready to eat foods . imported to Saudi Arabia, quality testing as per SASO , GS, APHA, CCFRA, AOAC methods. for TVC, Yeast and mould, Enterobacteriaceae, Total Coliforms, E-coli, E-coli0157:H7, Staph aureus Coag+ve, Listeria monocytogene, salmonella, Bacillus cereus, Vibrio parahaemolyticus, sulfide in fish etc.

Food testing and food borne illness investigation:



Food borne illness investigation by our qualified and experienced food investigation experts.

Food quality testing for all types of food and feed for their quality and compliance with the SASO, national international standards.

Food Quality testing Methods:

SASO , GS, APHA, CCFRA, AOAC methods.

Water Testing:

TCR Arabia food and water lab fully equipped with advanced equipment's and under take all types of water testing like bottled drinking water, swimming pool water, recreational water, sewage water, RO water etc.

TCR Arabia will all types of water testing for

Microbiological analysis of water

Coliforms, Fecal coliforms, E.coli, Fecal streptococcus, Salmonella, Shigella, Sulfate reducing bacteria SRB and Legionella testing.

Chemical Analysis:

Suspended Solids(TSS), Total Dissolved solids, Chloride(Cl), Sulfate(SO₄), Nitrate(NO₃), Bicarbonate(CO₃), Carbonate, Total alkalinity as CaCO₃, Total Hardness as CaCO₃, Calcium(Ca), Magnesium(Mg), BOD, COD etc.

Chemicals And disinfectants testing:

antimicrobial effectiveness analysis of chemicals and disinfectants as per British standard and check martin method.



Food lab Certifications:

ISO 9001-2008 Certification:

TCR has been certified by Intertek certification ltd for Microbiology Testing of Food and Water.

SASO/ISO 17025 Accreditation:

TCR has been accredited by SAC (Saudi Accreditation Committee) for Microbiology Testing of Food and Water under the Certificate no. N-T-00053.

Certifications:

Microbiology Lab of TCR Arabia is now ISO-17025 / SAC Accredited

شهادة اعتماد Accreditation Certificate



تشهد اللجنة السعودية للاعتماد (ساك) بأن
Saudi Accreditation Committee (SAC) Declare that

TCR Arabia Co. Ltd. Lab .

Address: Dammam

Scope : Food and agricultural

مختبر شركة تي سي آر العربية المحدودة

العنوان: الدمام

المجال : الغذائية والزراعية

قد حقق متطلبات اللجنة السعودية للاعتماد (ساك) وتم اعتماده وفقاً لمتطلبات المواصفة القياسية السعودية ساسو / آيزو / آي إي سي 17025 وذلك في المجال الملحق بهذه الشهادة

Has met the Requirements of Saudi Accreditation Committee (SAC) and has been accredited in compliance with SASO/ISO/IEC 17025 for the scope attached with this Certificate

رئيس اللجنة
SAC Chairman



سعد بن عثمان الفصبي
Saad O. Alkasabi



18/05/1442 : تاريخ الانتهاء / Expire Date

19/05/1439: تاريخ الاصدار / Issue Date

N-T-00053

Certifications:

Mechanical Testing Lab of TCR Arabia is now ISO-17025 Accredited



INTERNATIONAL
ACCREDITATION
SERVICE®

CERTIFICATE OF ACCREDITATION

This is to attest that

TCR ARABIA COMPANY LTD.

KING ABDUL AZIZ SEAPORT ROAD
DAMMAM, KINGDOM OF SAUDI ARABIA
32224

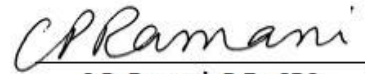
Testing Laboratory TL-783

has met the requirements of AC89, *IAS Accreditation Criteria for Testing Laboratories*, and has demonstrated compliance with ISO/IEC Standard 17025:2005, *General requirements for the competence of testing and calibration laboratories*. This organization is accredited to provide the services specified in the scope of accreditation maintained on the IAS website (www.iasonline.org).

This certificate is valid up to April 1, 2019.

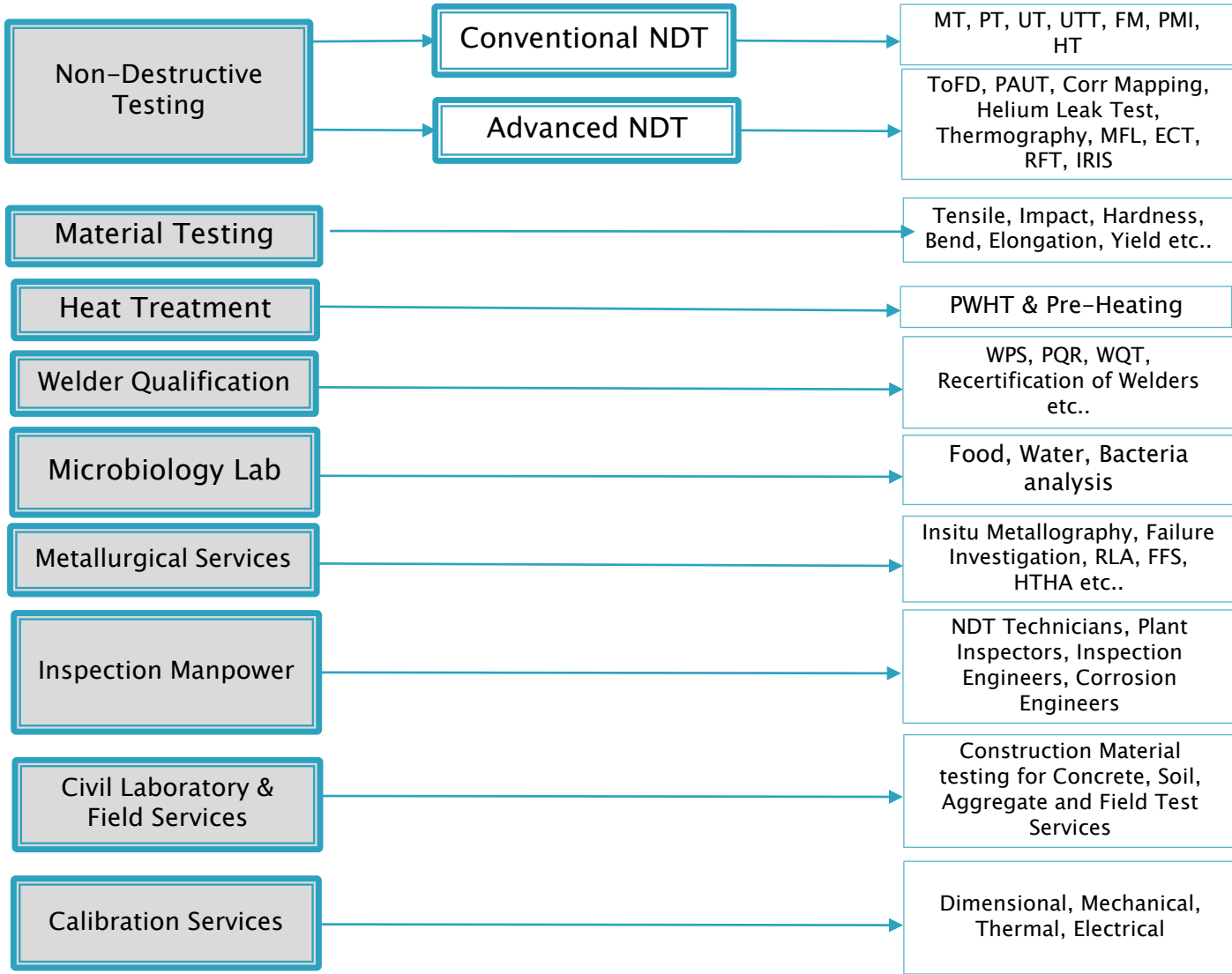


This accreditation certificate supersedes any IAS accreditation bearing an earlier effective date. The certificate becomes invalid upon suspension, cancellation or revocation of accreditation. See www.iasonline.org for current accreditation information, or contact IAS at 562-364-8201.



C.P. Ramani, P.E., CBO
President

Services Portfolio



Advance / High Temperature Inspection Techniques

Sl.	Service Description
01	Automated High Temperature Corrosion Mapping
02	Automated High Temperature Time of Flight Diffraction UT (ToFD)
03	Automated High Temperature Phase Array Ultrasonic Testing (PAUT)
04	Hydrogen induced Crack Examination (HIC)
05	Stepwise Crack Examination (SWC)

Advanced Metallurgical Services

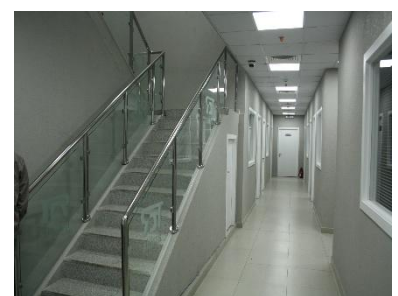
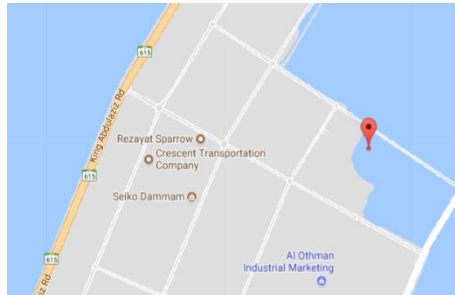
Sl.	Service Description
01	Root Cause / Failure Analysis
02	Remaining Life Assessment
03	Fitness for Service
04	Condition Assessment
05	Metallographic Replication / Insitu Replica

Events

TCR Arabia Head Office & Labs are now shifted to new location in Dammam



GPS Location: 26.450525, 50.193787



Events

VAT Implementation - Internal Training



Civil Laboratory Awareness Campaign



Events

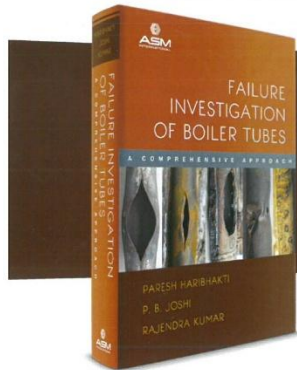
Clients Visit



Events

Book Launch

TCR Arabia is pleased to announce that ASM International is publishing a book authored by our Director Mr. Paresh Haribhakti on "Failure Investigation of Boiler Tubes". Book your copy today at www.asminternational.org/05243G or call 800.336.5152



FAILURE INVESTIGATION OF BOILER TUBES: A COMPREHENSIVE APPROACH

BY PARESH HARIBHAKTI, P.B. JOSHI,
AND RAJENDRA KUMAR

Scheduled Release: August 31, 2018

Product Code: 05243G | ISBN: 978-1-62708-156-6
Hardcover | Estimated Pages: 500

Failures or forced shutdowns in power plants are often due to boilers, and particularly failure of boiler tubes. This comprehensive resource deals with the subject of failure investigation of boiler tubes from basic fundamentals to practical applications.

Coverage includes properties and selection of materials for boiler tubes, damage mechanisms responsible for failure of boiler tubes, and characterization techniques employed for investigating failures of boiler tubes in thermal power plants and utility boilers of industrial/commercial/institutional (ICI) boilers. A large number of case studies based on the actual failures from the field are described, along with photographs and microstructures to allow for easy comprehension of the theory behind the failures.

This book is geared to practicing engineers and for studies in the major area of power plant engineering. For non-metallurgists, a chapter has been devoted to the basics of material science, metallurgy of steels, heat treatment, and structure-property correlation. A chapter on materials for boiler tubes covers composition and application of different grades of steels and high temperature alloys currently in use and future materials to be used in supercritical, ultra-supercritical, and advanced ultra-supercritical thermal power plants. A comprehensive discussion on different mechanisms of boiler tube failure is the heart of the book. Additional chapters detailing the role of advanced material characterization techniques in failure investigation and the role of water chemistry in tube failures are key contributions to the book.

The authors have long-standing experience in the field of metallurgy and materials technology, failure investigation, remaining life assessment (RLA), and fitness for service (FFS) for industrial plants and equipment. They have conducted a large number of failure investigations of boiler tubes and have recommended effective remedial measures in problem solving for power and utility boilers.

Non-Member: ~~\$220~~ **\$199**

ASM Member: ~~\$165~~ **\$149**

Prepublication prices good through August 31, 2018

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ORDER YOUR COPY TODAY AT
www.asminternational.org/05243G
or call the ASM International Service Center at 800.336.5152.

Staff Skills Enhancement

Certifications achieved by TCR Arabia employees in the 1st Qtr. 2018.

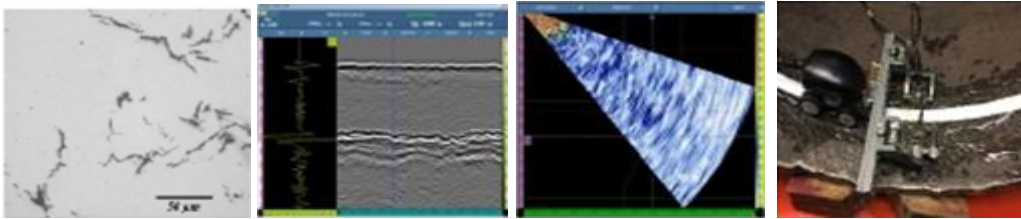
Name	Certification
Waqas Qasim	API 577 / API 653
Mustafa Mohammed Al-Jaber	ASNT Level II, ECT
Hussain Al-Safwan	ASNT Level II, ECT

HTHA training of TCR Employees in U.S.A

TCR Arabia recently completed training of its chosen staff on HTHA Detection and Sizing (HTHA-40). The training was concluded at Houston, Texas, U.S.A. by Lavender International last May 1-5, 2017.



HTHA course is designed to educate advance UT inspectors on methodologies and techniques to more reliably detect HTHA. The course is founded on extensive work and experience gained during industrial trials as part of the E2G HTHA JIP. Lavender are custodians of the extensive E2G sample inventory and this will be used for HTHA training and certification purposes.



Client Appreciation Letters



04th December 2017

EMPLOYEE WORK EXPERIENCE CERTIFICATE

TO WHOM EVER IT MAY CONCERN

This is to certify that **Mr. Waqas Qasim** from M/S TCR ARABIA was assigned as a Plant Inspector during SPV Scheduled Shutdown 2017. He has fulfilled his duties to our satisfaction with respect to his assigned designation in this S/D and he was involved in the inspections for piping, welding, equipment and lead the other disciplines with full dedication and found reliable, self-motivated, and trustworthy. We strongly recommend him to any petrochemical industry, which are undergoing any Turn around and Shut Down.

We wish him best of luck for his future Assignments and Endeavors.

Thanks & Best regards


Syed Mumtaz Zaidi
Sr. Inspection Engineer

معلومات عامة
معلومات الاتصال
معلومات إضافية
معلومات أخرى

New Staff

TCR welcomes its new team members and wishes them great success ahead



Mr. Ahmed Al-Nasserallah – NDT Technician

Mr. Ahmed has vast knowledge when in terms in NDT, he graduated with Mechanical Inspection and NDT Technology. His skills list in Radiographic Testing, Ultrasonic Testing, Penetrant Testing, Material Testing and Post Weld Heat Treatment is only few listed in his resume. He believed that joining TCR makes his skills improve and he is confident that growth with TCR makes him dwell in the field of the career he chooses.



Mr. Ahmed Al-Malki – PRO Jubail Office – Administration

Mr. Ahmed Al-Malki has high experience when in terms for the field he has chosen, before joining TCR, his primary job was an merchandizer from Al-Safi Danone Co. Ltd, he was a marketing staff and providing quality service with customer that the company has to offer. After his first career, he decided to shift little bit to became an Internal Collector by working from TW Horizon, he develop his interpersonal skills by contacting customers, following up cases and arrange agreements with the bank. Then his recent job was a Government Relations Administrator from MIDCHEM that all PR and government related work is task to him. Joining TCR will enhance his skills and he is sure that he can contribute well.



Mr. Ahmed Abdullah Ali Yaseen – Microbiologist – Microbiology Department

Mr. Ahmed is a professional. He completed B.SC Food Science course and graduate from it. His first qualification was with Quality Control in the field he has chosen. After schooling he worked at Dates Company in Al-Hassa, Saudi Arabia as Quality Control Officer. His knowledge about laboratory and Food Science brings him to TCR Arabia where he landed a job as an Microbiologist. He believed that he can contribute all his skills, knowledge and hard work to attain the company and department goals.



Mr. Mahdi Al-Ghasham – Finance/Admin Asst. – Finance Department

Mr. Mahdi has vast experience when it comes to administering and finance. His previous experience was working with King Saud university from 2005-2009 as BK Accountant. His last work before joining TCR Arabia is from Mohammed Almojil Group MMG from 2010-2017 (Oct) as Administrator. Joining TCR will contribute his knowledge and expertise in his chosen field. He believe that he can share and contribute to the future of TCR to met its vision and mission.



Mr. Ali Hassan Al-Yaseen – Machinist – Mechanical Department

Mr. Ali Al-Yaseen is an experience individual. His past work was with Wheatherford as machine operator for 2 years. He joined TCR to develop and improved his profession in Mechanical field. Being hired as TCR machinist, he can easily adapt his skills for various machine and equipment TCR has to offer. He is positive that he can contribute well in the field that he is pursuing.