 **MINUTES**

**GASKET WORKING GROUP**

**MEETING**

**Dates:** January 11, 2019

**Time:** 9:00 AM – 10:30 AM EST **Vehicle: Go-to-Meeting**

**Present**:

Larry Sheffield – Inertech larrysheffield@inertech.com

Mark Neal - FSA markneal@europeansealing.com

Antonio Morales – Empak Spirotallic Mexicana SA DE CV technology@empak.com.mx

Thomas Jessup – EGC thomjessup@egc-ent.com

Patricia Pichardo – Empak Spirotallic Mexicana SA DE CVdesarotecno@empak.com.mx

Stephen Woolfenden – Eriks Group NV Stephen.Woolfenden@eriks.co.uk

Chett Norton – Triangle Fluid chett@trianglefluid.com

Jim Drago – Garlock jim.drago@garlock.com

Henri Azibert - FSA henri@fluidsealing.com

**Absent:**

Daniel Bisset – W.L. Gore dbissett@wlgore.com

David Mitchell - ESA daemitch@btinternet.com

Sylvia Flegg – Triangle Fluid sylvia@trianglefluid.com

Ron Frisard – A.W. Chesterton Ron.Frisard@chesterton.com

Antonio Escalona - Empak Spirotallic Mexicana SA DE CV - laboratorio@empak.com.mx

Mike Shorts – Triangle Fluid mike@trianglefluid.com

Lucas Norton– A.W. Chesterton Lucas.Norton@chesterton.com

Jacque Manders – South West Research jacqueline.manders@swri.org

Matt Wasielewski – Yarmouth Research matt@yarmouthresearch.com

Greg Raty – Slade graty@slade-inc.com

Martin Coulthard – James Walker martin.coulthard@jameswalker.biz

Greg Cole - A.W. Chesterton greg.cole@chesterton.com

Frank Herkert - Amtec fh@amtec.de

Arthur Hernandez – Nippon Pillar arthur.hernandez@nipponpillar.com

Laverne Fernandes – Garlock laverne.fernandes@garlock.com

Matt Bonagura – A.W. Chesterton Matt.Bonagura@chesterton.com

Francesca Torriani - General Packing francescatorriani@generalpacking.com

María García Gorrichategui - Montero Fye S.A laboratorio@monterofye.com

Constant Olivier – Technetics constant.olivier@technetics.com

Lee Gillette – W.L. Gore lgillett@wlgore.com

Philippe Pottier - Siem philippe.pottier@siem.fr

Chiara Sozzi – General Packing chiarasozzi@generalpacking.com

Charlie Field – W.L. Gore cfield@wlgore.com

Randy Wacker – InnerTech randywacker@inertech.com

Reiner Zeuss - SGL Group rainer.zeuss@sglgroup.com

Barry Anderson – Technetics Barry.Anderson@technetics.com

Juan Mayer – Empak Spirotallic Mexicana SA DE CV mayer@empak.com.mx

Mike Boyd - Triangle Fluid mikeb@trianglefluid.com

Dean McLean - A.R. Thomson McLean.Dean@arthomson.com

1. ***Approval of Agenda***
2. ***SWG Testing Standard***
* ***Round Robin Progress***
	+ ***Test results or observations***
		- ***Results from Garlock – Empak – Yarmouth***
		- ***Testing complete but report to be received - A.W. Chesterton, working on graphs and plan to have a report document for next session - Preliminary report done - Ron finalizing - AMTEC/James Walker in process – Please send the reports to Henri for compilation when completed.***
		- ***Concentration and mass flow rate class levels determination – 25 ppm for class 1 - class 2 at 50 PPM***
		- ***Mass flow rate measurement***
			* ***For helium it would be best to use mg/m.s and not give concentration.***
			* ***TaLuft should be minimum requirement – For PN40 DN40 the limit is 10-2 mbar.l/s.m, using mean diameter of gasket (Same a cc/s.m assumimng standard atmospheric pressure) – VDI reference? (2440 for valves and need reference for gaskets)***
			* ***API 622 limit of 100 ppmv methane for one inch diameter valve stem calculated equivalent to the value of 0.0137mg/m.s – B16.20 method (Annex A, Hamilton Paper)***
			* ***Use the gasket outside diameter largest winding since B16.20 is using it. Gaskets we tested, 3” 300# flange, OD is 149.4 mm (5.866”)***
			* ***Mass flow rate to be used for helium - 50 ppmv is standard from ISO 15848 – Need to have sampling flow rate of analyzer for proper conversions, but the rest is straightforward calculations***
			* ***Differential pressure method? Now included in the standard as an appendix – it would be very complex to get the equivalency, now equipment has limit of 10-3***
			* ***Calculations from Jim Drago included in the notes for review – Daniel verified the calculations – So did EGC – Decision to adopt the numbers for the standard - Henri to update draft and include in the notes***
		- ***Second round robin - Consensus is to test both Kammprofile and a low-quality gasket***
		- ***Test facilities, Chesterton, Garlock, James Walker, Yarmouth Research – AMTEC – Empack - Also possibility of Southwest Research (No participation lately)***
		- ***Triangle Fluid will provide samples – Kammprofile is ready, still waiting for the low quality samples - Thom also has a contact all he needs is 30 gaskets 3” class 300# flange –***
		- ***Chett to send the Kammprofile now – Chett to coordinate address list with Thom – 5 gaskets to each test site***
		- ***Ron and Chett to draft intro noting PCC-1 methodology and to add nomenclature warning for pressurized flammable gas – Chett to get together with Ron***
1. ***Handbook***
* ***Publication on Website***
	+ ***Posted in ESA and FSA websites***
1. ***KnowledgeBase***
* ***Sealing sense articles live***
* ***Folder in SharePoint to collect material***
* ***Training material uploaded needs editing***
* ***Chett broke down handbook into sections – Posted on SharePoint – All were to look at topics and volunteer***
* ***Format can be pdf from manual as it might be easier – Let us start with breaking it down into chapters into pdf files – later on we can always do PowerPoint files. – Need to organize the process and get volunteers***
* ***Form working group since we will be into waiting mode for SWG test round robin results – Volunteers Chett will work with Sylvia, Ron, Larry, Thom***
1. ***Standards***
* ***FSA Standards - List of corrections needed***
	+ - 1. ***FSA-MG-501-02 STANDARD – to be retired – Chett was working on it – Thom was to talk to Hope to find out where it stands***
			2. ***Steam Test ASTM F2716 and M&Y Statement - files with watermark – Completed – to be posted on website – Thom and Chett to check***
			3. ***(FSA-NMG-201-02) Recommended Practices for Determination of Extractable Sulfur for Non-Metallic Gasketing Material - Chett to review***
			4. ***(FSA-NMG-202-02) Recommended Practice for Determination of Water Soluble Chlorides - Chett***
			5. ***FSA-NMG-204-02\_RETIRED – No link – Henri to find out with Hope and John Galla***
			6. ***FSA-G-604-07) Oxidation Test Standard for Flexible Graphite Materials – Thom to review and coordinate update with Chett***
* ***ASME B16.20 – Edition Year is 2017 - SWG room temperature test, and elimination of double jacketed gaskets –Next Edition will be 2022. - Next meeting Florida March 25, 2019***
* ***API SWG testing adoption***
	+ - 1. ***Other types of gasket – (Kammprofile) second round robin might spark interest – Need coordination and contact***
	1. ***Sealing Sense Articles***
		1. ***Articles schedule***
			1. ***4/1/2019 – 8/1/2019 – 12/1/2019 – (1200 to 1800 words 2+ images)***
		2. ***Topics possibilities***
			1. ***Bolting***
			2. ***Test Standard release or development - Later in the year***
			3. ***Graphite and oxidizers 4/1/2019 Thom***
			4. ***Material article possibility from Sylvia Pan – HP Materials Solution -*** ***span@hpmsgraphite.com***
			5. ***Need some more topics***
		3. ***Other Publications***
			1. ***BIC (writing guidelines available - 400 to 600 words)***
			2. ***KCI***
			3. ***Flow Control***
1. ***Training – Webinars***
	* + 1. ***Webinars – Anti-seize / K factor series– Ron to contact Tom Blake at Jet-Lube and follow-up with Trish Stanislas***
			2. ***Webinars based on the manual***
2. ***Government Affairs***
	* 1. ***Environmental Regulation***
			1. ***Mexico –Draft rule issued – Comments filed with the Mexican Authorities – progressive regulation pushing for dry gas seals on compressors and LDAR programs for hydrocarbon processing facilities – Monitoring new administration actions***
			2. ***Ohio: Early Stakeholder Outreach - New Rules Regulating Emissions from the Oil and Gas Industry***
			3. ***California, Colorado, Wyoming, Pennsylvania. Keep monitoring***
			4. ***Canada – regulations respecting reduction in the release of Methane and Certain volatile Organic Compounds released April 26, 2018 - Implementation is 2020 – Alberta proposed regulation - comments submitted on 5/27/18 – No activity right now***
			5. ***IED (Industrial Emissions Directive) BATIS (Best Available Techniques Information System) and Brefs – Upgrade the ESA document on Sealing with final draft just needing some illustrations for the expansion joints section then ready release***
			6. ***DWD – Drinking Water Directive (DWD) in Europe. European Parliament has published report in favor of one uniform test – EDW very active and published a paper questioning the new approach – 10-member states report also issued saying the same thing in favor of following the EDW proposal. Encouraging but no formal decision yet – keep monitoring***
		2. ***Trade***
			1. ***Environmental Goods no progress***
			2. ***Tariffs trade wars - full blown with Europe and Canada – In progress with China – Deal with Mexico and Canada needs congress ratification – Confusion reigns –Meeting between US and China going on***
			3. ***CEO FSA lunch asked that Government Affairs committee look into it due to added costs - FSA President sending letter to Wilbur Ross, United States Secretary of Commerce. Letters to be drafted for Senator Ron Johnson action on reversing tariffs – Need example of how it hurts business – use template - Hope sent Government Affairs committee initiative documents to members***
			4. ***Brexit - Stalemate – No deal currently – Origin marking issue - Depends on Parliamentary vote which is expected to be defeated***
3. ***LCC – maybe after KnowledgeBase***
4. ***Membership***
	* 1. ***Klinger***
		2. ***SGL – Ron to call and follow up***
		3. ***South West Research***
		4. ***Amtec and Kybon joined***
5. ***Marketing***
	* 1. ***promotion of Handbook***
		2. ***FSA, ESA website viewing***
		3. ***Social media: EGC, John crane Chesterton, Triangle, Proco Products will cooperate to blast out info***
6. ***Outreach Projects***
	* 1. ***VMA – Updating valve basics and all set right now – going from one 2 ½ day class to 2 1 ½ day classes – after that they will consider cooperation***
		2. ***HI – Guide books***
			1. ***Commercial building***
			2. ***Slurry webinar***
			3. ***Condition monitoring standard***
			4. ***MS Handbook***
			5. ***Bearing Housing seals finalized document – just a white paper***
		3. ***KCI Valve World 2018– Dusseldorf November – CETIM presentation on Valve Packing Study***
		4. ***Industrial Valve Summit 22/23 May 2019 in Bergamo***
		5. ***API – Refining meeting – Testing above 500F***
		6. ***MSS interest in the gasket test – Lucas reached out but has not had answers***
		7. ***Power Gen – no plans***
		8. ***Chinese Packing and Gasket Association – Keep channels open***
		9. ***Indian Sealing Association***
		10. ***VDI -***
		11. ***BHRG***
		12. ***ISA***
7. ***New Business***
8. ***Next meeting***
	* 1. ***Thursday February 7, 2019 9:00 AM EST***
9. ***Adjournment***

 ***hva 01/11/2019***