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**COMPRESSION PACKING**

**WORKING GROUP**

**Go-to-Meeting Conference**

***November 19, 2018***

**Present**:

Larry Sheffield – Inertech larrysheffield@inertech.com

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**Absent:**

Hans Dekker – A.W. Chesterton hans.dekker@chesterton.com

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Sylvia Pan – HP Materials Solution span@hpmsgraphite.com

1. ***Approval of Agenda***
2. ***Handbook***
	1. ***Review Process***
		1. ***Handbook– final adjustments made to cover, disclaimer and some final review comments to be incorporated***
		2. ***Ready for publication, i.e. posting on websites***
3. ***Joint FSA ESA Projects-***
	1. ***LCC Power consumption formula***
		1. ***Double checking results and formulas - all to use and check – cost of effluent high $100 per 1000 gallons or 19.85 Euros/ m3 – Changing size skips in the middle case – Leakage factor imperial units for class 1 and 3 goes to 0 in assumptions effects heat generation? – heat soak does not show up below a certain level balanced by heat generation of packing?***
		2. ***If you find anything send to Henri – Leave as an on-going item – Henri to place spreadsheet on SharePoint and in meeting notice***
		3. ***Change of the LCC platform – No Schedule yet but John Crane has committed support***
	2. ***Valve Packing Study***
		1. ***CETIM prepared Spreadsheet – Need to make it a bit more user friendly - More tests with different variables – 2 graphite ring references with their associated installation procedures; 4 pressure levels: 20, 40, 60 & to 80 bar; 2 stem movement types: rotation & translation; 2 test for each configuration – Still need variation on installation procedure – no improvement on the spreadsheet so far – question on working on more tests such as different types of packing – Presentation scheduled for Valve World 2018 – Ralf to ask Hubert for copy of presentation***
	3. ***ESA – PD 002 (BS 4371)***
		1. ***Draft number 5 completed - gaps concerning quality of packing – there is good information for graphite and carbon ––Specifics on quality packing for Vegetable fiber, aramid, Novoloid, etc. –Need to differentiate between poor quality packing and high-performance ones – Some information received but still need more needed – Discussed at ESA meeting – Associate members can bring details for PTFE on yarn and dispersions and also need test method – Topic brought up at FSA annual meeting - Anything on PTFE quality would be most useful, Mandy to look into it***
	4. ***K Factor study/ASTM WK 56884***
		1. ***Ron to follow up such as possible joint study or webinar on anti-seize for packing and gaskets – Need to find out who is on the committee***
4. ***Education projects.***
	1. ***FSA Webinar(s) Series on bolt lubrication - In progress envision two parts, K factors, trying to get Jet Lube involved - Ron to follow up goal for first of the year***
	2. ***Use new handbook to base webinars – Idea to do a series when the manual is released – to be organized in a couple of months for release first quarter of 2019***
	3. ***ESA Packing training material***
		1. ***ESA working on the animations and voice over***
		2. ***Delivery/platform method on new website with new software tools - PowerPoint conversion still in process – convert to video and then uploading the video, so it is lengthy – First piece is done to be live by the end of the year - platform is there and can also be used for other projects with more possibilities that just using PowerPoint, it is a free program to enroll in – When active make sure there is link from FSA website***
	4. ***KnowledgeBase***
		1. ***Sealing Sense Articles Repository Active! Possibly get one person responsible for each Division. Linda volunteers for Packing articles – Henri to check with other Divisions***
		2. ***Folder set up on SharePoint to gather material – Topic list started by Linda –discussed format at the Annual Meeting – Could use Word documents or PowerPoint Presentations – PowerPoint presentations can be used for webinars, so they have dual purpose and use – Should be primary focus next meeting***
		3. ***ESA Participation – Right now focusing on own website and training material and including existing publications***
5. ***Standards & Regulations***
	1. ***API 622 – 640 - 641- 602 - 623 – 621 - 608***
		1. ***622 – 1/8” cross section – 100 PPM no adjustments – 624 refers to 622 - 3rd edition – published Oct 2018***
		2. ***API 621 valve reconditioning 4th edition published Oct 2018***
		3. ***API 623 Steel Globe valves - extension till 2020 - 1st ballot 131 comments – finalizing 2d ballot document***
		4. ***API 624 testing of rising stem valves for fugitive emissions – First edition published Feb 2014 - Extension till Feb 2021 – TF meeting***

***When specified packing other than 622 for elevated temperatures such as mica based packing - End user may specify alternative packing not tested per 622***

***Discussion on testing at 750F as the next step. For 1000F would need helium***

***Discussion API 624 compliance is limited to test temperature – Other option: for temperatures beyond API 624 end user may specify packing or manufacturer to ensure that temperature is within the limit of API 624 -***

***Add packing stress same as what was used in 622 for what valves are covered under the qualification extension, in addition to same type of packing (Section 11.1) - Need performance requirement of latest edition of API 622 for extension of qualification (100 ppm no adjustment) –***

***Options of going to higher temperature – what would the next level after 500 F? would it be 700F? Possibility to heat up with nitrogen to temp, cool down and then introduce methane to test leakage. With this system could even go to 1000F***

* + 1. ***API 641 Type testing of quarter turn valves for fugitive emissions 1st edition out 10/2016***
		2. ***6FA Fire Test committee – Using API 607 (Valve test) for packing should be good 589 has not been reissued and is not recognized by API – Only 607 is current -*** ***API 607 Fire test for ¼ turn valves and valves equipped with non metallic seats – 6th edition published 9/2016***
		3. ***API 600 Gate valves 13th edition published 2015 - Added nickel alloy and other high alloy - Max clearance requirement between wedge/disk guides and body guides – Concern about valves capable of operating at 1000F but API 624 and 622 limited below – (problem with PTFE)***
	1. ***ISO 15848 – no activity – TaLuft being modified fall 2018 and would point to 15848 (draft issued in June) – TaLuft certificate existing will be still valid but new testing will be to 15848 – that is only for valves and not packing – some extension for temperatures and pressure classes – discussion on different material – Keep monitoring expected release of new TaLuft sometime next year -***
	2. ***EN 16752 – no activity***
	3. ***Emission Regulation***
		1. ***Mexico issued draft of methane and hydrocarbon rule – Comments prepared for FSA response – translated and filed with the Mexican Government – Waiting for release – Antonio to monitor***
		2. ***IED (Industrial Emissions Directive) BATIS (Best Available Techniques Information System) and Brefs – SEALING DEVICES REDUCTION OF FUGITIVE EMISSIONS DOCUMENT – final draft prepared by David Mitchell – Should be close to be public. David to check***
		3. ***EPA Rule on Methane still in effect***
		4. ***States action monitoring***
			1. ***Pennsylvania (permit rule went into effect August 8), Colorado, Wyoming – Ohio EPA DAPC Rulemaking - New Oil & Gas Industry Rules - Requesting Stakeholder Input***
			2. ***California Governor Jerry Brown signed new renewable energy mandate that by 2025, 50% of all power will be derived from renewable sources, and 60% by 2030.***
		5. ***Canada rule –issued on May 9, 2018*** [***http://laws-lois.justice.gc.ca/PDF/SOR-2018-66.pdf***](http://laws-lois.justice.gc.ca/PDF/SOR-2018-66.pdf) ***- Focus on LDAR program starting page 28***
		6. ***Alberta proposed regulation*** [***http://www.aer.ca/documents/directives/Directive060\_Draft.pdf***](http://www.aer.ca/documents/directives/Directive060_Draft.pdf) ***- comments submitted on May 28, 2018 – Fugitive leaks exception at 10,000 ppmv, argued for 500 ppmv – No activity or response at this point***
	4. ***WTO EGA***
		1. ***Tariff trade wars – Problems on the horizon – confusion is dominant – Mexico and Canada trade treaties completed – No details yet - tariffs on steel and aluminum still in effect – FSA CEOs want this to be on Government Affairs agenda due to its damaging efects***
	5. ***EU Drinking water standards – EDW very active – Issue with relying on the Construction Product Regulation which does not address pumps or seals – European Parliament has published report in favor of one uniform test – keep monitoring***
	6. ***Food contact Graphite – EC 1935/2004: Follow German regulation and declare compliance from ESA - Schunk Conducting migration test with also MAMAT involved – On-going activity for testing***
	7. ***EPA Clean Water – No action***
	8. ***PFOA Contamination***
		1. ***EPA label PFAS 'hazardous' (polyfluoroalkyl substances) at National Leadership Summit and effort to designate PFOA and PFOS as “hazardous substances”.***
		2. ***2020 regulation will list this as an SVHC with an acceptable threshold of 20ppb:*** [**http://www.sgs.com/en/news/2017/06/safeguards-09717-eu-regulates-pfoa-and-related-substances-under-reach**](http://www.sgs.com/en/news/2017/06/safeguards-09717-eu-regulates-pfoa-and-related-substances-under-reach)
		3. ***White paper on FSA and ESA packing not containing PFOA and PFOS, at least below a threshold following REACH regulations with limits of 25 ppb – question of what amount actually is in the “PFOA free” dispersions – amount in packing vs. dispersion – Would need data – Daikin may have information – Bring it up to Government affairs? Mandy to ask Carl, Larry to check if any info available and to share next meeting***
	9. ***Other***
1. ***Publications***
	1. ***Sealing Sense Articles***
		1. ***Compression Packing Handbook release Due December 1, 2018. Carl and Ron***
		2. ***Interview with Pumps and Systems on state of the Industry for January – Sherwin Damdar of Garlock volunteered***
		3. ***Fire Test Standards- Matt Wasielewski - End of Year once 6FA progresses?***
		4. ***624 Standard Update- (Empak?) Now extension to 2021, so delay from schedule***
	2. ***Other***
		1. ***Pump Engineer***
		2. ***Chemical Engineering***
		3. ***BIC***
		4. ***Flow control***
		5. ***KCI Valve World***
2. ***Outreach Projects***
	1. ***Fluor/Canada – Not active***
	2. ***VMA -***
	3. ***A&M Pump Show – Abstract review – very full program next year***
	4. ***HI***
		1. ***Guide books recommendation – Mechanical Seal handbook update - Commercial Buildings, packing write-up – Slurry Webinar – Condition Monitoring for rotary pumps – Engineering Data Book – Variable Speed Drive Webinar – Lunch and Learn variable speed drive on bearings and seals (primarily mechanical seals) at the October meeting in Montreal***
		2. ***Co-location for the Fall of 2019 in Pittsburg PA***
	5. ***Valve World America 2019***
	6. ***Industrial Valve Summit 22/23 May 2019 in Bergamo – David invited to Advisory Board – Limited presentations new format – papers to be published – limited number presented in the plenary session –*** [***https://www.industrialvalvesummit.com/wp-content/uploads/2018/09/Call-For-Papers-4-sett-2018-1.pdf***](https://www.industrialvalvesummit.com/wp-content/uploads/2018/09/Call-For-Papers-4-sett-2018-1.pdf)
	7. ***API***
		1. ***API 682 Meeting at Refining meeting and regular conference calls started***
		2. ***Fall Refining Meeting – Issue with higher temperature testing and safety with methane***
	8. ***Power Gen – no plan***
	9. ***Chinese Packing and Gasket Association – Keep channels open***
	10. ***Indian Sealing Association – Monitor***
	11. ***STLE –***
	12. ***BHRG David to monitor***
	13. ***FLMUG - MUGAUG***
	14. ***Valve World – CETIM Presentation – Hans to be there, maybe can report to the group***
	15. ***Pump Summit with Valve World cancelled***
3. ***New Business***
	1. ***Membership***
		1. ***Daikin – Ron to contact - membership meeting tomorrow***
		2. ***Steve Boss of SGL indicated intention to rejoin at beginning of next year. Need to follow up***
	2. ***Expansion joint and reciprocating pump photo badly needed by David***
4. ***Next Session***
	1. ***Monday January 7, 2019 9:00 AM EST***
5. ***Adjourn***

***hva 11/19/18***