

#### The European Association for the Taps and Valve Industry



**KLAUS SCHNEIDER CEIR PRESIDENT** 

Dear colleagues and friends, The amount of water on the earth is gigantic and constant (1.4 billion km3) but of an uneven territorial distribution. Only 3% (42 million km3) is "fresh" water, the natural source of drinking water - on principle sufficient to supply all people with water for consumption. Today 1.4 billion people have no access to clean water. During the 28 July 2010 UN General Assembly, Bolivia

proposed that access to clean drinking water and water for basic sanitary care should be established in human rights law (122 nations agreed, 42 nations abstained: USA, Canada, 18 EU nations etc.) In countries like South Africa and Equator, the right to water is enshrined in the constitution!

Tackling water shortages for human needs in many regions requires political, economic, technical and humanitarian decisions and actions. One possible measure is to carry out a programme of "saving water": water should not be "consumed" but "used" carefully - this is the main principle of water saving. When used, water should only be polluted in such a way that it can always be recycled by purification treatment and be suitable for human use again. If water saving is understood as a restriction of the amount of drinking water used, it is also necessary to take due care of its

hygienic quality. To keep drinking water pure in piping systems and to protect it against microbial contamination, water must flow and must be maintained at less than 25°C (cold) and more than 55°C (warm). All measures aimed at saving drinking water must respect these elementary conditions. Finally, the water at the end of drinking water distribution systems (fittings) must be of the required hygienic quality, containing no pathogens in concentrations causing illness. In the context of the "Blueprint to Safeguard Europe's Water Resources" and European Energy Efficiency policies, taps and showers were identified as water- and energy-related products and were included in the "Eco-design Working Plan 2012-2014". Over the last year, the following policy options have been identified in the "MEErP preparatory study on taps and showers" by the Joint Research Centre (JRC - European Commission): (1) mandatory resource efficiency label, (2) implementation of technical devices limiting the consumption of water and/or energy, (3) implementation of water meters in products, (4) restrictions on water flow rates for some products. Another option, known as "business as usual (BAU)", means no action is required because the market is transforming by itself, and the identified targets for water and energy savings will be reached without any further policy measures.

Gazette

CEIR and its members commented on the conclusions of the JRC study. We clearly stated that market transformation towards more efficient lwaterand energy-saving) products has been underway for several years, and that industry has been driving this change, and that voluntary labels have proven to be essential and very successful in supporting this change.

# **CEIR CONGRESS 2014 IN INTERLAKEN (SWITZERLAND)**

The CEIR Congress 2014 will take place in Interlaken, Switzerland on 15 to 17 May. This year's discussions will focus on developments in dual use item legislation, energy markets and opportunities, building certification systems and resulting problems, temperature variations and optimal distribution systems, water hygiene and microbial contamination of drinking water, water and energy efficiency of products. The high level speakers are J. Rudolph, Head of Product Management/Approvals Neoperl; B. Suter B.Sc., Lucerne University of Applied



**CEIR CONGRESS – INTERLAKEN (SWITZERLAND)** 15-17 MAY 2014 Venue: Grand Hotel Victoria Jungfrau, Interlaken, Switzerland **Programme:** Thursday 15 May - Arrival of participants 13.30 - 16.30 Board meeting 17.30 - 21.00 Dinner cruise on Lake Brienz Friday 16 May 09.00 - 17.00 Conference with speakers / panels 08.30 - 17.00 Visit Jungfrau (optional - for partners) 19.00 – 23.00 Formal dinner at hotel Saturday 17 May 09.30 - 11.00 Committee reports 11.30 – 13.00 General assembly and international association addresses Sciences and Art; J. Böer, Head of Trade Control, von Environment. Roll; Prof. Dr. Dieter Kreysig, A panel discussion will focus Chemist: O. Meile, Swiss Federal Office of Energy, Building Sector; V. Vogt, Chairman of the Board of Directors

Burckhardt Compression Holding AG; and F. Pekár, European Commission, DG

on the European Water Label, its development and the challenges ahead in the context of policy developments at European and national level. The views of a sanitary valves

manufacturer and a ceramics manufacturer, a national government representative, an international association and a retailer will be expressed and debated.

The objective of this annual gathering is to ensure that our members are up-to-date and can exchange views on important issues and developments which may influence their businesses and strategies. CEIR members, associate members and the members of CEIR's sister associations are welcome to join us at our Annual Meeting.

A Dinner Cruise on Lake Brienz will take place on Thursday 15 May to welcome delegates, guests and partners. Friday 16 May is fully dedicated to presentations by highlevel speakers and debates, and is open to CEIR members and to members of international associations. CEIR Committee presentations, sister organisations' presentations and the General Assembly will take place on Saturday 17 May.

A partner programme has been organised to explore the natural beauty and scenery surrounding Interlaken.

To be kept up-to-date, please check tapsandvalvesindutrycongress2014.wordpress.com

# STÉPHANIE UNY IS THE NEW SECRETARY-GENERAL OF CEIR

The Board of CEIR is pleased to announce that Stéphanie Uny has been appointed Secretary General of CEIR, the European Association for the Taps and Valves Industry. Stéphanie Uny is a French national who holds a Masters in European Studies from the KUL (Leuven, Belgium). She has more than 10 years of lobbying experience for companies and trade associations. She has worked for the cosmetics, chemical,



pharmaceutical and engineering sectors. She is Senior Adviser in the Orgalime Partnership and has advised CEIR on EU policies and lobbying since 2004. She will take office after the General Assembly on 17 May 2014. Guy Van Doorslaer, currently CEIR Secretary General, will retire at the end of 2014.

# ECODESIGN STUDY ON TAPS AND SHOWERS



A second (and last) Technical Working Group (TWG) meeting took place on 25 March 2014 regarding the Ecodesign study on taps and showers which is currently being conducted by the Joint Research Centre (JRC) on behalf of the Directorate General for the

Environment of the European Commission. Discussions focused on the preliminary outcomes of the project and a range of policy options: a mandatory resource efficiency label; an ecodesign measure, e.g. inclusion of a water meter in new devices (estimated to reduce water and energy use by 7% and 9% respectively, and have a direct impact on the label without undermining product performance); mandatory inclusion of technical devices to cut off water supply after a certain time, limit flow or restrict hot water use; restrictions on flow rates; voluntary labels; standards and information campaigns.

Following the publication of Tasks 1-7 within the preparatory study, the deadline for comments was 11 April. CEIR and its individual members issued a position paper in February 2014 and provided detailed comments on the preliminary conclusions of the JRC study : market transformation has been underway for several years without mandatory policy measures, driven by technological developments and demand for efficient products; voluntary labels - including the European water label - have proven very successful, although announcing possible mandatory measures at this stage would surely undermine all voluntary initiatives; ecodesign measures will be too complex to define due to the variety of technologies available on the market, and the associated CE marking will lead to confusion on the product's conformity with hygienic requirements (which are not harmonised); water meters in all products is not a valid policy option.

The final report is to be adopted in July 2014, after which the Commission will draft policy recommendations and launch the consultation process for possible adoption within a year.

# THE EUROPEAN WATER LABEL CONTINUES TO GROW



Since January 2014, another major taps and showers manufacturer and a world leader in the habitat and construction markets have joined the scheme, which now has 66 registered brands in its database with over 6500 products. Of all the products registered, 40% are faucets and 28% are shower fittings, electric showers and shower handsets (the scheme also comprises 21% WCs and 9% bath tubs in the UK). Products are registered in 32 countries and by the end of this year another major increase in registrations is expected.





Discussions are moving ahead with FECS – the European ceramic sanitaryware industry – to extend the label to ceramics at EU level. The label will soon include an energy factor showing information on the energy consumption generated by the use of the tap or shower. Further information about the Water Label:

http://www.europeanwaterlabel.eu



## CHROME-PLATING ON SANITARY TAPWARE: CHROME(6) VS. CHROME(3)

HOLGER FEHRHOLZ CHAIRMAN OF THE CEIR SANITARY TECHNICAL COMMITTEE

# 1. History of chrome and chrome-plating 1.1 Chrome

Chrome and its chemical combinations have a long history of use for various pre-industrial and industrial processes. In the following, we focus on surface treatments using chrome and leave aside the use of elementary chrome in metal alloys.

The Hittites used chromium salts around 1200 B.C. in order to harden the surfaces of their bronze swords. From the 18th century onwards, naturally exploited chromium lead ores were used as dye for leather and textiles. Lead chromate was used as pigment for yellow paint. Towards the end of the 20th century it was more commonly understood that a number of chromium compounds are dangerous for human health if there is exposure to them in a form that man can absorb.

#### 1.2 Chrome-plating

There are mainly two different industrial methods of chrome-plating on metallic surfaces: chromate coating (chemical plating) and galvanic chrome-plating (electrochemical plating). Our focus is on the galvanic chromeplating as this is the process commonly used by the sanitary tapware industry.

Galvanic chrome-plating is an electrochemical process where elementary chrome is deposited on the surface of a metallic component (with this component being the cathode). This process was developed and patented in the 1920s and has been commonly used in industrial applications since then. Chrome-plating is undertaken in order to protect metallic surfaces against corrosion and abrasion as well as to create a glossy metallic surface, resembling polished silver. The common process uses chrome(6) acid which is reduced to elementary chrome in the course of the electroplating process.

Today, almost all sanitary tapware is chrome-plated (with an underlying layer of mostly nickel). Apart from aesthetic reasons, the chrome-plating makes sanitary tapware easy-to-clean and durable as it creates a hard and smooth surface. Also, products made from a special ABS plastic, like handshowers, can be galvanically chrome-plated after the plastic is chemically copperplated. The colour of chrome-plated ABS matches exactly that of chrome-plated brass or other metals like brass and zinc alloys. This makes it very easy to combine different chrome-plated components no matter what the base material is and where the plating is undertaken.

# 2. Hard (functional) vs. decorative chrome-plating2.1 Definitions

There is no exact (in the sense of set in stone) definition of the difference between hard (functional) chroming and decorative chroming. Usually, functional chrome-plating requires a thickness of the chrome-layer between 0.1 and 10 microns, depending on the application. One purpose of hard chroming is to give the surface of metallic material better mechanical properties, e.g. higher resistance to abrasion and less friction. Another important purpose of hard chroming is to make metallic alloys corrosionresistant, e.g. on car bumpers that used to be made from steel and would rust within days if not chrome-plated. Decorative chroming is used to create a certain metallic look to a surface. Thus the main focus is not on mechanical or chemical properties but on aesthetics. Surface thicknesses of decorative chrome layers are often be-

cal or chemical properties but on aesthetics. Surface thicknesses of decorative chrome layers are often below 0.1 microns. Quite often, the underlying layer or the chrome layer is doped to obtain certain effects (like black chrome).

#### 2.2 Situation of the sanitary tapware industry

For sanitary tapware, the thickness of the chrome layer is quite often around 0.05 - 0.2 microns. Chrome-plating is undertaken for both aesthetic and functional reasons here. The shiny surface of chrome-plated taps looks of high value and it is impossible to imagine a modern bathroom without chrome-plated taps. However, the functional aspect of chrome-plating of sanitary tapware is by far more important than the decorative aspect. Unplated sanitary tapware used in the bathroom would become dull very quickly. More important, the relatively soft brass material would have marks and scratches after a very short time of use. Such products would therefore have a very short use phase when compared to plated sanitary tapware. Chrome-plating of the brass surface makes it resistant to corrosion, scratches, acids and bases (that are often used as detergents). It also makes the tapware easy-to-clean and thus very hygienic, which is obviously key for sanitary applications.

#### 3. Chrome-6 3.1 Definition

Chrome-6 (also commonly known as hexavalent Chrome or Chrome trioxide) is mostly used in the form of chromic acid in aqueous solution for industrial processes. Chrome trioxide as a pure substance is a dark red crystalline solid. Both the solid and the aqueous solution are highly dangerous substances. Even small doses can cause poisoning of humans and animals and can pollute water and the environment. Additionally, chrome-6 is very hard to remove from the environment once spilled. As a consequence, chrome-6 has been identified as substance of very high concern (SVHC) under the REACH directive.

## 3.2 Current use and market

Chromic acid in aqueous solution is the main raw material for electrochemical chrome-plating processes. This method is used for almost all chrome-plated sanitary tapware. Apart from this, almost all functional chromeplating processes for mechanical parts use the chrome-6 galvanic processes. In this sense it is the 'gold standard' of chrome-plating surface treatment.

There are many galvanic plating plants all across Europe that work with the chrome-6 plating process and have done so for decades. As the hazards resulting from the use of chrome-6 have been well understood for a long time, there are strict rules of use already in place. Maximum exposure rates that encompass health risks for the workers are defined and regularly controlled, the galvanic process as such is capsuled, exhaust air and wastewater are treated so that in essence there is almost no risk of exposure to chrome-6. Without these measures, local authorities in the various EU countries today would not grant an operating permit to a galvanic plant.

## 3.3 Future use under REACH

Being part of the official SVHC list under the REACH directive, the use of chrome-6 and its chemical combinations must be registered in order to be allowed to use them after the 'sunset' date. Substances on the SVHC list will only obtain an authorisation for use if many criteria are met, such as exposure scenarios that exclude unintended human contact with the substance, risk assessments and also a lack of equivalent alternatives. At present, working groups from the chemical and mechanical industries are working on dossiers in order to obtain an authorisation for the use of chrome-6.

The sanitary tapware industry only uses approximately 1% of the chrome-6 acid that is currently used across Europe. This is why we have to liaise and connect with the main producers and users of chrome-6 in order to gain an authorisation for the plating of sanitary tapware. The main focus is on functional chrome-plating so evidence must be supplied that there are no alternatives that offer the same functionality. Decorative aspects alone (like the mentioned colour matching on various materials) will most probably be insufficient to obtain an authorisation. Authorisation is likely to be granted only if the chrome-6-using industry can prove that this is the sole substance that can be used to treat materials in the described way and that all known alternatives deliver significantly worse results.

Timing is very critical though; bearing in mind that there are probably thousands of different applications for the use of chrome-6, the so-called sunset date after which unauthorised use is prohibited (21.09.2017) is basically tomorrow. Applications for authorised use even must be filed by 21.03.2016. If the respective application is not a granted exception, the use of chrome-6 will be forbidden after the sunset date.

Currently, there is one joint submission from the major players of the chrome-6-producing industry, trying to fill as many applications as possible. Functional chroming will be one of these applications. Sheer decorative plating is – at least from today's perspective – not very likely to gain authorisation.

## 3.4 Possible consequences

If the use of chrome-6 for galvanic plating does not gain authorisation from ECHA (European Chemicals Agency) under the REACH directive, there will be many processes used today across Europe that will no longer be possible after the sunset date. For our industry this would mean that chrome-6 plating of tapware can no longer be undertaken in Europe. However, chrome-6 can still be used in overseas countries such as China or India. In essence, the well-controlled and strictly monitored use of chrome-6 in a European galvanic plant is possibly abandoned, with production transferred to a country outside the scope of the REACH directive and probably with lower environmental standards.

## 4. Chrome-3 as surrogate

Amongst various other alternative surface treatments like PVD coating, there is one variant of chrome-plating frequently discussed as a consequence of the above-mentioned situation with chrome-6. The substance in question is chrome-3, which is trivalent chrome.

#### 4.1 Chemicals used

Under the constraint that chrome-3 galvanic plating is a process that is rarely used in the sanitary tapware industry, the main chemical compound used for plating is chrome(3)-chloride. This substance is by far less hazardous than chrome-6 compounds. For example the LD50 dose (rate, oral intake) of chrome(3)-chloride is 37.4 times higher than that of chrome(6)-oxide. This is why chrome-3 is often discussed as an alternative to chrome-6, which is only true if the focus is on the safety of the substances as such.

#### 4.2 Processes

The process of chrome-3 electroplating differs from that of chrome-6 plating not only because of the chemical agents but also regarding the process and the process control. It has to be mentioned that today there are only a few sanitary tapware manufacturers or coating companies across Europe that operate a chrome-3 galvanic plant with significant output. Furthermore, the products plated with the chrome(3) process are almost exclusively marketed by one big furniture chain store.

#### 4.3 Problems

Regarding appearance, it is almost impossible to match colours of components made from different materials or even from the same material but in different factories. As a consequence, all parts must be plated at the same site. However, appearance is only one problem. In the ECHA newsletter dated April 2014, Dr Martin Metzner from the German Fraunhofer Institute published a guest comment in which it is confirmed that - despite many efforts and much research - there is no replacement for chrome-6 plating for sanitary fittings today for numerous reasons, including durability of the plated surface. In line with that, CEIR members have reported that surfaces plated with chrome3-using processes are much less resistant when

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it comes to mechanical properties (abrasion, durability) and chemical resistance (cleansing). Thus from a technical perspective, chrome-3 plating is clearly an unsatisfactory alternative to chrome-6 plating.

#### 4.4 Experience and market share

Currently, sanitary tapware products with a chrome(3)generated surface are offered at the bottom of the product range. In this case, the service life is likely to meet the expectations of the end user, because the products are very cheap and thus the consumer presumably has a low expectation regarding the lifetime. This is why these products are not a significant case for the sanitary tapware industry as the consumers' lifetime expectation of an average tap made and marketed by a known tapware manufacturer is at least 10 - 20 years. In the most recent Task 2 report on the MEErP preparatory study on taps and showers, the Joint Research Centre of the European Commission assumed an average expected lifetime (use phase) of 16 years for a sanitary tap (domestic use). Clearly it has to be stated that to date there is no other reasonably producible surface other than plating with a chrome(6) agent that can guarantee this lifetime.

#### 5. Conclusion

The European sanitary tapware industry and its suppliers have been using the chrome(6) plating process for many decades now, and they are operating their plants at the highest possible safety level, closely monitored by local authorities, and with the lowest possible impact on human health and the natural environment. Thus, having to abandon chrome(6) plating across Europe if no authorisation is granted under the REACH directive means that in future this process might be undertaken in countries with lower technical and safety standards. Or to be very clear on that: Europe would potentially export the health and safety risk to developing countries. It must also be clearly stated that to date there is no alternative to chrome(6) plating when it comes to functional properties of the surface of sanitary tapware. Unless we all can accept that a tap will become a disposable product and both the policy makers and the manufacturers can accept a high level of customer dissatisfaction, including considerable hygienic issues, we need to continue using chrome(6) plating technologies.

The conclusion therefore is that the sanitary industry must be able and allowed to use the chrome(6) process for functional reasons also in the future, and under welldefined, zero-emission and safe process conditions. Sanitary tapware manufacturers are used to making products that preserve the most important foodstuff of all - drinking water. Therefore we consider ourselves capable of handling the risks of chrome(6) use with no negative impact on human health and the natural environment.

# CHANGE IS ON THE WAY AS U.S. PLUMBING PRODUCTS MOVE TO LEAD-FREE

BARBARA C. HIGGENS CEO/EXECUTIVE DIRECTOR OF PLUMBING MANUFACTURERS INTERNATIONAL "SECOND PART - CONTINUATION FROM THE GAZETTE N. 6"

The Federal Reduction of Lead in Drinking Water Act, which

passed in 2011, will go into full effect on January 4, 2014. It may come as a surprise that the plumbing industry, through Plumbing Manufacturers International. (PMI), was a primary proponent

of getting this law passed, in the spirit of harmonizing regulations across the U.S. The Federal lead legislation is the result of collaboration with industry. Policymakers and others used PMI and its members as a resource and subject matter expert. PMI worked in a bipartisan fashion to secure support and passage of the legislation with a broad coalition of industry organizations, as well as coordinating closely with the offices of U.S. Sens. Barbara Boxer and James Inhofe and the staffs of U.S. Reps. Tom Petri, Henry Waxman and Anna Eschoo. Given this success, PMI will work to ensure that such collaboration with policymakers will continue to help guide and inform legislation and to provide adequate time for compliance and avoid unintended consequences. However, questions remain. As the deadline approaches, PMI continues to work with the U.S. Environmental Protection Agency (EPA) to clarify enforcement guidelines in order to address a number of unanswered questions. Furthermore, PMI has worked diligently to educate distributers, installers, suppliers, consumers and manufacturers about the new law.

#### **Initiating Legislation**

The story begins in 2009 in California with the introduction of AB 1953. Although PMI and others in the industry believed that the performance-based NSF/ANSI Standard 61 was an excellent and more-than-sufficient measurement tool to monitor lead levels by evaluating the quality of water flowing from the tap, PMI ultimately worked to strengthen California's prescriptive law by helping to write language and advocating enhanced enforcement. AB 1953 set a prescriptive 0.25% lead content (wetted surface) product requirement. Soon other states began looking at lead regulations, too, some considering different allowable levels from the California standard. PMI successfully advocated that those states (Louisiana, Vermont and Massachusetts) harmonize their regulations with California's. Recognizing the need to head off a potential patchwork of lead content requirements, PMI proactively worked to set a federal standard. With proposed lead laws emerging in several states, manufacturers advocated one uniform standard instead of 50. The Federal Reduction of Lead in Drinking Water Act passed the Senate by unanimous consent on December 16, 2010, during a lame duck session. The House of Representatives then passed the bill without amendment by a vote of 226 to 109 on December 17, 2010. President Obama signed the bill into law on January 4, 2011, to be effective three years from that date, on January 4, 2014.

# ELECTRIC AND ELECTRONIC PRODUCTS: ROHS AND WEEE DIRECTIVES

The follow-up of the development and implementation of European regulations is a "business as usual" job for organisations such as CEIR. However, even the best qualified experts find it tricky to understand the situation with regard to electric and electronic equipment. The RoHS and WEEE Directives have been recently revised (respectively under 2011/65/EU and 2012/19/EU) and will be gradually applicable to a broader range of products until the deadlines of 2018 (for WEEE) and 2019 (for RoHS) when all electric and electronic products apart from exceptions will be covered. Unfortunately, the discrepancy in national transposition and practices and a delay in the availability of the texts create a very confusing situation for industry, with little time to prepare future steps. Just as an example, the new WEEE Directive (on the Waste of Electric and Electronic Equipment) should have been transposed into the national law of the 28 Member States by 14 February 2014. Only 10 countries were ready on time...

CEIR is following carefully these developments and will publish as soon as possible a position on the future steps as described in the RoHS and WEEE Directives.

# 39TH MOSTRA CONVEGNO EXPOCOMFORT, FIERA MILANO, 18-21 MARCH 2014 (MCE 2014)

The exhibition closed with record results, confirming its world leadership in diverse industry sectors, including residential and commercial installations, air-conditioning and renewable energy

MCE 2014 has solidified its position at the heart of business strategy dedicated to residential and industrial installations, air-conditioning and renewable energy. An international showcase, the 39th MCE closed registering an all-time best for attendance figures.

There were more than 2000 exhibitors, of whom 43% were from abroad, and 156,000 trade visitors, with a 3% increase in international visitor numbers compared to the 2012 edition.

In particular, there was a rise in the number of attendees from the Russian Federation, Turkey and Poland compared to the previous edition. As with the previous edition, there was a major increase in attendees from Germany, France, Spain and the UK, confirming the trend of a show of trust by foreign visitors in this leading specialised trade fair. Moreover, compared to the 2012 edition there was an increase in participation from many strategic markets such as India, China, United Arab Emirates, United States of America, Australia, the Baltic States and the countries of the former Yugoslavia, accompanied by a growing number of attendees from across the African continent (in particular Algeria, Ethiopia, Ghana, Libya and Nigeria). A large audience of skilled professionals turned to MCE as an international benchmark event, an unparalleled showcase for the most groundbreaking installation technologies and solutions that combine comfort and wellness with excellence in terms of energy efficiency, water conservation, safety and design.

Plus, a resounding "thumbs up" for the rich programme of over 200 conferences and workshops, a unique opportunity for educational and professional upgrading focused on the most topical themes aimed at professionals in those industries targeting innovation, quality and environmental sustainability to maintain Italy's first place as leader in the market, with Germany in second place.

# 4MS INITIATIVE – POSITIVE LIST OF METALLIC ALLOYS IN GERMANY

In January 2011 the four Member States participating in the 4MS Initiative (Germany, France, the Netherlands and the United Kingdom) agreed to work together in order to harmonise their national approval schemes for products in contact with drinking water. Specifically, the 4MS are working together in order to adopt common practices for the acceptance of the constituents used in materials in contact with drinking water and for the testing of materials.

The 4MS cooperation has been formalised by a Declaration of Intent. Other Member States may participate either by becoming a formal member of the group (adopting the 4MS proposals into their schemes) or by adopting the acceptance procedures of the 4MS.

Within the 4MS, Germany chairs the group responsible for the methodology for the assessment of metallic materials and al-

loys. This group has already defined the 4MS approach to metallic materials in a Procedure for the Acceptance of Metallic Materials Used in Contact with Drinking Water. On the basis of these evaluation criteria, a list of metallic materials demonstrating suitability for use in contact with drinking water has been drafted.

According to this list, only accepted materials (tested on the basis of standard EN 15664) can be used. Approved metallic materials are then classified for use in three product groups: 1) Pipes, 2) Pipe mountings, pipe couplings, appliances such as pumps, and 3) Components with parts in water that do not overall exceed 10% of the entire component surface in pipe mountings, pipe couplings and appliances such as pumps.

The updated version of the list (dated December 2013) is published on the UBA website (www.umweltbundesamt.de).

Germany, as the first of the 4MS members, is now changing its national legislation in order to introduce the 4MS approach into the existing legal framework. The formal European notification procedure ended in March and the new UBA evaluation criteria will probably be published in the first half of this year. The list of accepted materials will become mandatory two years after publication. Responsibility for conformity with the new criteria will lie with the owner of the water distribution system and certification of products will probably not be required.

Regarding the plating of products, Germany is developing a voluntary system based on a new DVGW standard for the assessment of surface coatings with nickel layers.

The DVGW standard is under development and the current draft (based on EN 16058) contains a product test applicable to all plated products (taps, fittings, hoses, ball valves etc.). It is important to note that it will not possible to group different products by extending the test results of a single product. Moreover the test will not be required if no nickel is present on the inner surface.

# A NEW EUROPEAN STANDARD FOR ECODESIGN OF MECHANICAL PRODUCTS

Ecodesign has been an important topic for many years. Our pumps colleagues are deeply involved in this issue.

In 2011, CEN/TC 406 was created to work on the proposal for a French standard NF E 01-005 (2010) "Mechanical products — Methodology for optimising environmental impacts in product design and development" and to propose it as a European standard.

This standard is based on PhD work and many industrial experiments (first in France, then in Denmark and Germany).

The main advantage of this standard is to propose to companies (mainly but not exclusively SMEs) a simplified approach to optimise the ecodesign of their product. This approach is much less demanding than a complete Life Cycle Analysis and enables the company to improve its mechanical products at lower cost and in less time. It also enables them to show to external bodies their awareness of environmental impact.

The "electric" part of an actuated valve is also considered in the evaluation.

Using simple algorithms and a list of easy questions, the methodology is easy to use.

CEN/TS 16524:2013 was published in July 2013. A presentation is available from the CEIR secretariat (secretariat@ ceir.eu). Have a look at it and ... apply!

The European Association for the Taps and Valves Industry - www.ceir.eu - May 2014

# RECAST OF EUROPEAN DIRECTIVES

After several years of work, the recast versions of a number of European Directives have recently been published. The following were published in the Official Journal of the European Union on 26 February 2014 :

- Low Voltage Directive : 2014/35/EU
- ATEX Directive : 2014/34/EU
- Measuring Instruments Directive : 2014/32/EU
- Electromagnetic Compatibility Directive : 2014/30/ EU

• Simple Pressure Vessels Directive : 2014/29/EU The technical requirements remain unchanged. The main objective of each recast was the alignment with the New Legislative Framework, which is a set of rules concerning New Approach Directives and CE marking.

The new versions of the Directives will be fully applicable by 20 April 2016. In addition to the new number, other changes are the reinforcement of rules for Notified Bodies, their subsidiaries and subcontractors, verification obligations for distributors and the obligation to provide a single Declaration of Conformity when a product is covered by several Directives. CEIR is currently analysing these new texts to identify all new elements.

# AVR MEETS CEIR FOR A STRONGER ALLIANCE IN EUROPE

On 9 May 2014 a meeting was held in San Maurizio d'Opaglio (Italy), at the heart of one of the biggest clusters of taps and valves' manufacturers. The main purpose of the meeting was to intensify the cooperation and coordination between AVR and CEIR, since AVR is one of the most important CEIR members. The Italian manufacturers of taps and valves had the opportunity to be informed and updated on the latest news regarding the "European Water Label". Both CEIR President Klaus Schneider and AVR President Ugo Pettinaroli were in attendance and promoted this European Label operated by the Water Label Company Ltd.

The European Water Label is very important as it will help to increase consumer awareness of water and energy efficiency. The need to save water will become increasingly vital in the years to come and drinking water will be considered as the "blue gold" by future generations. In fact, just 1% of all water is drinkable; the vast majority of water on our planet is saline. The European population is growing, with almost 740 million people living on our continent. Water is essential for survival and we need to ensure that there will be enough fresh, drinkable water for everyone in the years to come.

The new European Water Label is an intelligent solution that will help and guide consumers in saving water, energy and, as a consequence, money. The Water Label is now used by several European manufacturers of baths, taps, shower handsets and shower controls, and the number of companies involved in this voluntary labelling continues to increase. It is an excellent marketing and educational tool, following the new trends that call for a sustainable model of consumption and for greater water and energy efficiency in buildings. Moreover, the legal requirements on energy efficiency for new buildings are becoming increasingly stringent. The voluntary European Water Label, should it become widespread in the industry, could actually prevent mandatory European legislation.

# CEIR ENCOURAGES MARKET SURVEILLANCE INITIATIVES

The marketing of valves in Europe in general is highly regulated. Concerning products in contact with drinking water, complex regulations exist at national level in many Member States. CEIR considers as unfair and unbalanced a situation where much is asked of the industry and little is done to control the market. In this context, it is worth noting that France has recently published the list of "ACS" certificates. As a reminder, an ACS certificate is mandatory in France to sell a product in contact with drinking water. It can be downloaded from the websites of the laboratories in charge. Certificates from the former Lille laboratory are missing but will be added soon.

http://www.eurofins.fr/activites-environnementales/ pages-hln/attestations-de-conformite-sanitaire-acs.aspx http://www.groupecarso.com/eau-environnement/ analyses-des-materiaux-et-objet-au-contact-de-leau/

# INTERNATIONAL VALVE INDUSTRY FORUM & EXPO' 2015

# FORUM & EXPO

#### Dates: 14 - 16 April 2015

**Venue:** Russia, Moscow, All-Russian Exhibition Centre **Organizer:** Industrial Forum, JSC

**Official support:** Scientific & Industrial Valve Manufacturers Association (NPAA), Chamber of Commerce and Industry of Russia, ASTM International (American Society for Testing and Materials), The European Association for the Valve Industry (CEIR), Polish Industrial Valves Association (SPAP), Polish Society of Mechanical Engineers and Technicians (SIMP), The Ukrainian Association for Valves Industry (APAU)

#### VALVE INDUSTRY FORUM & EXPO 2015 - all pipeline valves at one time and at one place!

Valve Industry Forum – is the meeting place for all leading participants of valve industry market, manufacturers, design institutes, engineers and consumers, for effective communications and cooperation development.

# EXHIBITION OF LEADING PIPELINE VALVES MANUFACTURERS:

Valve Industry Expo is holding within Forum and is the main event for valve industry in Russia! The leading valve companies will introduce their developments and Innovations Gallery will help new companies to perform their perspective innovations.

#### **EVENTFUL FORUM CONFERENCE PROGRAM:**

- 3 days, 3000 delegates and 60 reports from industry's experts
- More than 20 events: conferences, seminars, round-table discussions, presentations and workshops devoted to the most relevant topics of valve industry
- Discussions of the relevant tendencies, innovations in constructions and technologies, market developments

For more information please visit http://en.valve-forum.ru/ Contact organizers by e-mail: inter@valve-forum.ru **Nr.7** 

THE EUROPEAN ASSOCIATION FOR THE TAPS AND VALVES INDUSTRY DEFENDING AND PROMOTING THE VALVES INDUSTRY SINCE 1959

CEIR represents the common economic, technical and scientific interests of the European valves industry, in particular towards European and international authorities, and in economic and commercial circles. CEIR gathers 13 national associations with a total of 340 companies in Europe. CEIR is the European reference body, cooperating with international institutions and bodies on technical matters, harmonised regulations and rules for efficient and environmentally-friendly taps and valves.

- CEIR develops appropriate programmes and tools to support the European valves and taps industry in understanding and maintaining a good knowledge of valves and taps technologies and the related market requirements.
- CEIR promotes safety, energy savings and environmental integrity.
- CEIR maintains an open and constructive dialogue with all EU stakeholders and institutions determining or influencing the progress of our industry.
- CEIR participates in European and international standards organisations.
- CEIR is a non-profit organisation, registered in the European Union Transparency Register under the number 54018122087-60.

There are 3 CEIR Committees in charge of marketing and technical aspects where members can network and work together to influence incoming legislation.

- The Sanitary Technical Committee comprises experts from the main taps & showerheads manufacturers and associations in Europe. It informs and advises its members on all product-specific technical matters. It mainly works on EU regulatory developments, standardisation and pre-normative issues.
- The Building & Industrial Valves Technical Committee comprises manufacturers of gas, heating, water and fire-fighting valves in all CEIR member countries. It also includes manufacturers of valves, actuators and associated products for all industrial applications. The Committee represents the common economic, technical and scientific interests of its manufacturer members. Here again, it informs and advises its members on all product-specific technical matters, EU regulatory developments, standardisation and pre-normative issues.
- The Marketing & Communication Committee is in charge of coordinating "The Gazette", the CEIR newsletter. It launched the CEIR Quarterly Business Trends Survey in 2012and has produced a "Valve Terminology" CD. The Committee is also in charge of the website and the promotion of CEIR.

CEIR, THE EUROPEAN ASSOCIATION FOR THE TAPS AND VALVES INDUSTRY

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