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## **INTERVIEW WITH CONSTRUCTION CHEMICALS MAGAZINE TURKEY FEBRUARY 2008**

### **INTERVIEW QUESTIONS:**

- 1 First of all, could you talk about organization and working structure of EFCA, and also federation purpose?

EFCA was formed in 1984 as a partnership between National Admixture Associations to **represent and promote the interests of the admixture industry** at a time when there was increasing European legislation and standardisation in the field of construction products.

Initially an EFCA Board was established consisting of one voting representative from each National Association. A President was elected from the Board to chair meetings and a part time paid secretary appointed to run the administration of the Federation. The Board sets overall policy and undertakes promotional activities.

An EFCA Technical Committee (TC) was also established with members from each National Association. The TC's primary objective was to coordinate the industry response to the European standardisation work of CEN TC104 and especially to SC3, the admixture committee. Prior to the formation of EFCA, SC3 was dominated by academics that were making unreasonable demands of the admixture industry and with no coordinated industry view and response it seemed probable that standardisation would be excessively expensive and unworkable for admixture manufacturers and users.

The Technical Committee continues to work on admixture standards but with increasing environmental and sustainability legislation, a separate EFCA Environmental Committee (EC) was established to look after Health, Safety and Environmental issues. This committee has recently become the more important forum.

To increase focus and speed up the work rate, an EFCA Executive Committee was established composed of the President, Vice President, Secretary and Chairmen of the TC and EC.

It should be stressed that EFCA does not work with individual admixture companies. Attendees at EFCA meetings represent their National Admixture Association not their company.

Further information on EFCA, its objectives, organisation and publications can be found on its website [www.efca.info](http://www.efca.info)

- 2 Which important projects did you realize recently and could you give some information about your ongoing projects?

Effective admixture standards remain the prime focus of EFCA. The main package of standards in the EN 934 and 480 series were first published in the period 1997 to 2003 but as experience in their use was gained, it soon became apparent that amendments and eventually revision would be needed. EFCA took on the role of redrafting key clauses in the standards, undertaking comparative testing across Europe to check their effectiveness and acceptability and then presenting the revisions to CEN. These are either about to be published or will undergo formal vote in the next few months.

In addition, one part of the EN 934 series was missing. This related to the effect of admixtures on the corrosion susceptibility of embedded steel but there was serious disagreement across Europe on the test method and also the technical basis for the requirements. Following meetings with experts in the field, EFCA worked on a draft test method and requirements which have been accepted by CEN. The test method EN 480-14 is now published and the requirements should be published in EN 934-1 before the end of 2008.

EFCA was a key instigator in the project to produce “**The European Guidelines for Self Compacting Concrete**”. This was a joint project also involving EFNARC, ERMCO, BIBM and CEMBUREAU. The guidelines were published in May 2005, are available for free download from the publications page of the EFCA web site [www.efca.info](http://www.efca.info) and are now forming the basis for introduction of SCC testing and specification to European standards in the EN 206 and EN 12350 series.

Current EFCA projects include the REACH legislation, the European Mandates M/366 on Regulated Dangerous Substances and M/136 on Construction Products in contact with Drinking Water. EFCA is directly or indirectly involved in a number of CEN committees on these issues as well as being a member of the EC CPDW expert sub group on concrete.

- 3 Could you please give us full particulars about concrete admixtures, especially about these points: its production capacity; and your evaluations about consumption, exportation, technology, quality and practice of the industry?

Admixture sales have doubled in the last 10 years and admixtures are used in at least 80% of all Ready Mixed and Precast concrete. It is inconceivable that structural concrete would now be supplied without an admixture. With admixture use close to market saturation, future growth is likely to follow trends in concrete use although the move from normal plasticisers to superplasticisers use is likely to continue. In 1998 Superplasticiser use made up 47% of the total (normal plus super) plasticiser market but this had

increased to 58% by 2006. The total plasticiser market accounts for 80% of the total admixture market.

The introduction of PolyCarboxylate Ether (PCE) superplasticisers in the late 1990s has certainly contributed to the growth in admixture use with most structural precast now using them. They are also essential for SCC production. Specific figures for Europe are not available but in the UK, PCE accounts for over 65% of superplasticiser sales.

Most admixtures continue to be manufactured locally as transport can seriously impact on both the final cost and the speed of delivery. The carbon footprint involved in delivery to customers is also becoming a key issue in many countries. The larger international companies may manufacture in central locations and then export to their national companies, often as a concentrate but export of final product direct to customers makes up a very small part of the European business.

EFCA is a partnership between National Admixture Associations but at national level the associations are made up of individual admixture companies and generally represent at least 80% of local production and sales. These companies are expected to work to the European Admixture Standard EN 934 and to CE mark their products. They are also expected to operate an ISO 9000 quality management scheme and an ISO 14000 Environmental scheme although this is not always mandatory. EFCA and its partner associations take quality very seriously as any failure to provide a high level of product and service reflects on the whole industry. The major international companies are represented on all National Associations but there are also many local companies involved who are still expected to meet the same high standards of quality and service.

- 4 If you compare European industry with the world's industry, about concrete admixtures sector what could you say about these two industries?

Much of the European market is now mature and as a result concrete use is static and most concrete contains admixture so there is little scope for growth. The technology is at a high level in terms of production, development and in technical support for the concrete producers and users. The key issues for the market are related to meeting European legislation and this will involve testing, provision of information and improving sustainability related aspects of production and delivery.

At international level there is much greater scope for growth related to new infrastructure and housing. European technology will be steadily transferred into these markets and we have seen European based admixture companies progressively expanding their business in countries like China.

- 5 What do you think about REACH? Why do you think this project is realizing and by this project construction chemicals industry and concrete admixtures industry will get what kind of impacts? And what working projects are ongoing about REACH in Europe?

The admixture industry will be affected by REACH but also by EU mandate M/366 on Regulated Dangerous Substances which has a strong overlap with REACH.

Most chemicals used by the admixture industry will have to be registered under REACH and some admixtures may be required to provide leaching data under M/366 but we do not believe that any will be affected by restrictions on use. This means that admixture manufacturers will only have to enhance the information in their Safety Data Sheets and possibly their CE marking.

EFCA has a sub group on this and is sharing information as far as is possible. It will be several years before these changes are made.

6 In your opinion, what Turkish companies should do about REACH?

The major international companies will provide all the data necessary for amending local Safety Data Sheets for their companies in Turkey. Any local companies need to be talking to their raw material suppliers now to ensure that the supplier is aware of what must go into the suppliers Safety Report and hence the changes to their Safety Data Sheets which then need to go into the admixture Safety Data Sheet.

7 What do you say about concrete admixtures sector in 2007? What will be the expectation of you about the sector for 2008?

Admixtures continue to be a key constituent of concrete and even if sales growth slows there will be a strong demand for technical support for the concrete industry in producing cost effective and innovative concrete that meets increasingly stringent sustainability demands. As a result, the profile of the admixture industry is likely to become more prominent over the next year and beyond.

8 How do you have relations with KÜB in Turkey?

KÜB was a member of EFCA but met some administrative problems and was forced to withdraw in 2000. We continue to have contacts through international company members on the EFCA executive and are hopeful that KÜB will be able to rejoin EFCA soon.

9 Do you have any other company contacts from Turkey?

EFCA is a partnership between National Admixture Associations and does not work with individual companies but we do have contacts through international company members on the EFCA executive.

10 Could you please give us some details about the revision of the Construction Products Directive (CPD) and concrete admixtures sector? Which level are the studies? What is the role of EFCA in this issue?

The CPD is likely to become a regulation rather than a directive and this will give greater uniformity of implementation between member states as well as greater powers to the commission. Although this is likely to result in changes for the concrete industry and EN 206 we do not see any significant changes for

the admixture sector. Of more concern for EFCA is the possible change to admixture mandate M/128 although there is no specific information on what is being proposed but we know that the clauses on ER3 are likely to change.

- 11 Turkey as a country trying to introduce to European Union (EU), how do you find Turkish concrete admixtures sector and its development? Which factors do you think influence this development?

Turkey is undergoing a period of rapid growth at least partly associated with its aspirations to join the EU and as a result concrete construction is booming. Admixtures are an essential part of this and we have seen a significant increase in local admixture manufacture to meet demand. Concrete quality and durability is an essential feature of modern construction but Turkey also has other considerations including hot summers and cold winters. Admixtures are key to concrete meeting these and other requirements but they will only do so if the admixtures themselves are of high quality and National Admixture Associations like KÜB are important in establishing this locally. Membership of EFCA helps to ensure uniformity of quality across Europe and offers support in benchmarking European levels quality.

- 12 In your opinion, by EU process what kind of reflects Turkish construction chemicals industry and concrete admixtures industry will get?

Many Turkish construction chemicals companies are subsidiaries of international companies based in Europe and are already working at or close to the EU manufacturing and quality standards. All Turkish admixture producers should be working towards conformity with all aspects of the admixture standard EN 934 and to being able to CE mark their products. Actual CE marking may be a problem if there are no suitably qualified and independent 'Notified Bodies' to carry out the third party inspections but this is a government not an industry problem.

Admixture producers also need to be aware of other EU legislation that is in progress or being considered as this helps to enhance customer confidence in the admixture industry and its ability to meet future demands.

Involvement with EFCA can help to increase awareness of European issues but also to allow EFCA to consider Turkish issues when responding to CEN or the EU.

- 13 How do you think Turkish companies should prepare this EU process concerning concrete admixtures sector?

See answers to Q 11 and 12

- 14 If you compare Turkish concrete admixtures sector with the other members of EFCA, what are the differences of these two different industry areas?

See answers to Q 11 and 12

15 What are the recent developments, trends, technologies and products in concrete admixtures sector in worldwide?

Self-Compacting Concrete is undoubtedly the biggest technology change and was largely facilitated by the development of PCE Superplasticisers. SCC is not just about the admixture, it is also about all concrete constituents and mix design but these are not simple matters and there is huge potential for problems if the concrete is not 100% correct. A failure of SCC could affect the credibility of the whole industry so only reputable and experienced suppliers should be used. Admixture technologists are frequently at the forefront of the knowledge and technology of SCC production.

16 What do you think about the effects of energy efficiency through an concrete admixtures sector?

The admixture production process is already fairly efficient but water use is often wasteful and EFCA believes that delivery and technical support could be improved in relation to overall transport.

Admixtures offer customers a significant opportunity to reduce embedded CO<sub>2</sub> and to reduce energy use in placing and curing of concrete.

17 What do you think about future of the European concrete admixtures sector? Will it maintain its production and consumption capacity and its qualities?

The European admixture industry is strong and proactive at all levels. It has set and will maintain the international benchmark for quality and service. However its future is totally dependent on concrete continuing to be the construction product of choice and because of this EFCA and its partner National Associations are working closely with the whole concrete sector to promote the sustainable advantages of concrete over other construction products.

18 Could you tell us what working projects do you carry on about the environment? And how the environmental issues will influence the concrete admixtures sector? What are your previsions about this subject?

Admixtures make up a tiny proportion of concrete, usually less than 0.15% by weight but they carry a disproportionate concern for most regulators. For this reason, the EFCA Environmental Committee is very active at many levels: it has developed an EFCA 'Seal of Environmental Quality', coordinated information on admixture leaching, looked at the long term fate of admixtures including in demolition waste, produced Environmental Product Declarations. Further information on these subjects is available for free download from the publications page of the EFCA web site [www.efca.info](http://www.efca.info).

EFCA is active on the European Commission Expert group for Construction Products in contact with Drinking Water and on the CEN TC 104/WG14 group representing concrete interests at CEN TC 351 on Regulated dangerous Substances.

EFCA keeps a long distance watch on CEN TC 350 which is looking at a sustainability standard but is working with the European Concrete Platform and a number of National Associations on Sustainability issues.

19 Are there any associations that you depend on?

EFCA works very closely with the European Concrete Platform whose members are: ERMCO (European Ready Mixed association), BIBM (European Precast association), CEMBUREAU (European Cement association) and UEPG (European Aggregates association). The platform agrees the strategy for promoting the European Concrete Industry.

EFCA is a member of CEPMC the Council of European Producers of Materials for Construction and uses them as a source of information and interaction with the European Commission. It is also involved on a number of its committees.

EFCA is a member of EFCC the European Federation for Construction Chemicals and has close links with EFNARC the European Federation for Specialist Construction Chemicals and Concrete Systems.

EFCA Executive Committee  
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