

# MEMO

## " TURKISH FIRE SPRINKLER MARKET SURVEY - 2000 "

*Subject* : Fire Sprinkler Market in Turkey - 2000

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### **1- Purpose**

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The purpose of this memo is to provide an overview of the Fire Sprinkler Market in Turkey, in year 2000. This memo is aimed both for local and foreign companies, who are manufacturers, representatives, investors, contractors, insurance companies, material suppliers, consultants, etc.

Due to the fact that Turkey does not have reliable and official data on market situation, besides attempting to convey certain information about the Fire Sprinkler market, this memo also aims to create a discussion and confirmation environment, by uncovering and bringing certain substantial data into under daylight. Hence, any confirming or non-confirming feedback or opinion is most welcomed, since the certainty of the information presented here is subjective and discussable.

However, against all these uncertainties, the attempt with this memo has to be considered as a good willed attempt to arrive reliable information at least in the future.

### **2- Scope**

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The scope of this memo is the technical, commercial and organisational aspects of the market. A benchmarking approach to the representative or manufacturing companies involved in Fire Sprinkler market has not been attempted. Only the companies, who represent a significant performance or novelty from a meaningful aspect for the overall market, have been explicitly considered.

In sprinkler market, not only the sprinkler heads and alarm valves, but also the ancillary equipment specific to the fire sprinkler systems (mainly imported material) such as flow switches, valves, grooved couplings, etc. are included; but excluding the conventional installation equipment such as pipes, hangers, pumps, etc.

The information sources, on which this report is based on, are

- promotional information supplied by the companies (i.e. reference lists, advertisements, public announcements, web sites, etc.)
- confidential information supplied by companies, specific for this memo,
- the first hand sources, such as documentation, quotation, etc. supplied specifically to our company, for the jobs where our company is the independent fire consultant

However, this study is not based on,

- confirmed market figures supplied explicitly by all the companies
- statistical figures supplied by the official authorities

The figures are taken as "demand" values that are the business potential created in 2000, not the orders placed, nor the invoices. Taking into consideration of the 1-2 months of delivery times and delayed orders, another unavoidable uncertainty becomes obvious due to the convention problem and definition of year 2000.

The information is up-to-date by end 2000, within a consideration of present and last 2 years of performance of the parties.

### **3- Overview**

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An overview of Turkish Fire Pump Market in 2000 is as follows :

- a) the number of fire sprinkler head demand, in 2000 is estimated as 100,000+;
- b) the market potential of fire sprinklers is estimated as USD 8 Million+;
- c) sprinkler applications have recently become a common mechanical installation item in both government and private commercial buildings, hence the previous problem "whether to have sprinklered or not" has replaced with "which spaces to be sprinkler protected",
- d) the main driving forces behind the increase in sprinklered buildings can be summarized as,
  - the promotional activities of the representative sales companies,
  - sprinklers to be seen as part of high-tech building technology; the profitability and increase in high-tech buildings made a positive impact,

- revenue making potential of sprinkler systems especially for contractors,
  - mechanical engineering consultants offering their clients sprinkler systems both with technical and also for beneficiary reasons,
- e) specially foreign insurance inspectors require sprinklers and they are keen on correct and complete installation per standards, which create a considerable enforcement over the investor and installer, whereas local inspectors are still away from a qualified inspection, without having a positive impact on increasing the sprinkler applications and proper installations,
- f) designers and consultants are still not technically competent to apply the standards properly, they are not capable of making the differentiation between the standards, approvals; hence becoming totally manipulated by the material suppliers and marketing techniques,
- g) due to the lack of shop drawings and availability of qualified installers, the quality of the fire sprinkler installations is very poor, where proper installation requirements are almost completely ignored,
- h) with the impetus of seismic protection and flexible couplings, installations with grooved couplings has increased and brought a new breath, together with an opportunity to the market; grooved couplings are welcomed because of speed and installation quality, which is still a major problem both for welded and threaded installations; also leasing or free of charge groove machines has supported this trend,
- i) USAF base applications has totally lost the traditional leading role, which is now taken over by the multinational foreign industrial investments,
- j) with 1999 version, NFPA 13 has become the ultimate source of reference for sprinkler applications, vanishing LPC(FOC) and VdS completely; providing a strong back-up to the US manufacturers,
- k) head and system variety, hence appropriate system solution or optimization is very poor, basic sprinkler head is understood to be standard pendent/upright, brass/white; where EC, QR, QREC, LD, ESFR, etc. are still not employed as it should be,
- l) engineering is still not applied with full merits of optimization and locally supplied product conformance maintained; still pipe-schedule pipe sizing is the main trend; computer program calculation although without full conformance and data entry verification has an increasing tendency,
- m) the most common mistakes made in the sprinkler system installations are mostly due to lack of knowledge and improper engineering, hence improper valve location, spoiling the obstruction rules, lack of test, drain, maintenance facilities are the major installation defeats; whereas pipe supporting, original material quality, listed material use are on the satisfactory level,
- n) the most common mistakes made in the sprinkler design are mostly due to lack of knowledge and improper engineering again; hence over-engineering, improper equipment location, smoke exhaust coordination, lack of overall system design, test and maintenance availabilities are the major defeats due to bad design,
- o) there is no communication or public announcement mechanism, to report sprinkler success or defeat stories, so that real life performance and experiences play a role on motivating and even enforcing for better quality installations and better engineering,
- p) there are neither legal enforcement nor major fires to promote sprinkler installation efficiency,
- r) specialized service providers like designers, installers, testing parties, periodic maintenance providers are still lacking,
- s) there is a saturation in number and size of companies, after a series of companies launched in 1996-1998, there is no participation to the market, neither as new companies, nor as existing companies' interest shift; the size of the companies being approx. 5 employees (including full time engineers, office staff, etc.),
- t) overall performance/investment is still low, by %50's; i.e. half the money spent is wasted,
- u) the sprinkler market is dominated totally by the US manufacturers, who operate from Europe; hence using both of the advantages, being a US manufacturer and selling over a European country,
- v) The list of representative companies or suppliers is as follows, together with the principal manufacturers,

Supplier	Principle Manufacturer(s)
ARASTA	Viking
DOĞAN	Angus
D&K	Grinnell
EKUR	Grinnell
EMO	Viking

ENSER	?
FOKUS	Victaulic
KORUN	Central/Spraysafe - Grinnell
NORM TEKNİK	Globe
ODES	Grinnell
PALMET	Reliable
TEKNO	Grinnell
TRANSANKA	Grinnell
YANMAR	?
ZAFER	Ascoa

- y) there are still no “stocking/from-the-shelf” companies, hence the deliveries are in fluctuating nature, actual delivery times for a complete system being 4-8 weeks,
- z) almost all the US manufacturers are delivering from a European base, which in return shortened the delivery times, lowered the freight charges, which is reflected to the customer as better service and price,
- aa) manufacturing companies, even the leading ones, such as Grinnell, Globe and Viking still are “not” willing to invest in this country; instead getting the ultimate benefit and revenue in the shortest term is still their main goal; any kind of investment (publishing catalog in Turkish, opening training centers, donating some operational or demo systems, giving scholarships, publishing installation or maintenance manuals in Turkish, translating the standards, etc.) are left completely to the local representative, where the representative is not willing to invest except short term sales returns,
- ab) use of locally manufactured devices are very limited, almost all the equipment are imported, pipes, hangers, supports, -sometimes- butterfly and OS&Y valves are the equipment supplied from the local manufacturers; however the reasons for not being able to replace with local manufactured equipment are, lack of listing/approval, availability and low USD exchange rate, making the imported goods inexpensive,
- ac) apart from İstanbul and Ankara which have traditionally been the center of sprinkler procurement, İzmir has become another local reference mainly due to Arasta, who is committed to İzmir area only, which showed a successful model,
- ad) Norm Teknik shows a considerable performance and continues to grow, although the principal company Globe is relatively a weak and marginal manufacturer; hence Norm Teknik has proved that the weaknesses of a principal can be compensated with a dynamic and aggressive local support; showing how a representative company can be successful by its own merits,
- ae) one of the most appreciable marketing phenomena is appointment of locally resident professionals, working directly for the principal company, while the local representative is still kept; with this model Grinnell and Victaulic has one locally resident professional; where locally resident professional does not make direct sales, but follows the jobs, makes customer visits on behalf of the principal company, answering the needs of the customer directly and full authority; at least in the short term, this model seems to be a successful model from certain aspects, however it has to be followed closely,
- af) EMO with Viking, is still in a low-profile existence, due to ongoing administrative turmoil in the company; specially İstanbul office is unable to compete with highly dynamic competitors,
- ag) one of the countries where Victaulic introduced his sprinkler range early enough is Turkey; with the brand new series of products, Victaulic has brought a considerable novelty to the sector, with light, less-space demanding, state-of-the-art, easy to maintain products; since the market is dominated by at least 20-25 years old, almost old-fashioned products; however, with non-aggressive nature and limited abilities of the local representative, Victaulic is not yet caught the deserved sales performance,
- ah) Palmet and Odes represent the supplier+installer type of companies; although they are not competent and not well enough compared with a good conventional mechanical contractor, their staff, tools, references make them the only companies with contracting nature; noting that Odes installation staff are previous Palmet employees, it wouldn't be a mistake to state Palmet as the contracting home venture, among the representative sales companies,
- ai) except Tekno, the representative companies are not technically oriented and promoting on technical basis, but instead completely marketing and sales oriented, technicality being employed when needed; hence, the installations whose system solution, design and installation supervision is handled by the sales companies are not in a technically satisfactory level,
- aj) once, 5 years before, the market leader Central/Spraysafe has lost his brilliance completely, although Omega defeat has not created any defeat at all, but pertained by Grinnell's acquisition of Central, making Grinnell

the ultimate leader; this has adversely effected the representative of Central/Spraysafe, (i.e. Korun), resulting a loss of interest and market share; hence it is once more proven that loyalty, commitment to and investment in a name/brand of a principal company is misleading, in this global and changing world,

#### **4- Current Trends**

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By 2000 the main market trends can be summarized as follows,

- a) the profit margins are in reducing trend, coming down below 15% level, due to high competition, standard sprinkler (brass, ½") price is down to USD 2.50,
- b) direct import by the customer, benefiting for the incentives is in a reducing trend; it is on the 10% level,
- c) compared with the past years, there is a reducing potential for re-export or sales to third countries, especially over Turkish contracting services,
- d) residential applications are not applied, where commercial applications lead, followed by industrial applications,
- e) although the post-earthquake rebuilt has created a considerable business potential, together with the fire protection sector in general, fire sprinkler sector couldn't get a considerable share from the billion USD investments; mainly due to the fact that there were not any post-earthquake fires (except Tüpraş fire); nevertheless specially the industrial rebuilt has created a certain demand which has ceased after mid-2000,
- f) over sizing and lack of optimization is still an engineering drawback to reduce the number of applications,
- g) installing sprinklers is not decided by an engineering rationality (e.g. through risk assessment) but rather decided by a speculative manner; hence it is common to come across same type of building erected by the same authority, one having sprinklers, the other not,
- h) complete service chain i.e. design, installation, supply, operation, commissioning, periodic maintenance, improvements has still missing links, where overall performance is still questionable and unsatisfactory,
- i) lack of proper and defined acceptance procedures allow and forgive bad engineering practices, installations,
- k) the building control decree at force of law launched in April 2000 has created an environment where building safety is questioned, however building safety is seen as earthquake safety, completely ignoring the fire safety, hence expecting a positive impact due to decree on sprinkler is beyond a goodwill,
- l) seminars and trainings have reduced in number, coming down to zero; companies have lost their interest, even for promotional purposes, in presenting papers in conferences or in participating exhibitions, which at the end is a sign of a preference of a one-to-one job follow-up, instead of a general, community oriented promotion,
- m) technical papers or presentations are still of product promoting nature; subjects which are not directly linked to sales, such as design, engineering, correct installation, test and commissioning, etc. are completely ignored,
- n) knowledge normalization in the sector and a continuing education is extremely needed, however, market trend is towards keeping the knowledge limited among a group of people,

#### **5- Future Trends**

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It is expected that, in the coming years,

- a) sprinklered buildings will increase in number, hence a growing market is expected,
- b) the advantages of local technical support and services will be appreciated more by the customers,
- c) partial protection will be widened, throughout protection concept being the new step for increasing the sprinkler applications,
- d) representative companies will be more marketing oriented rather than engineering,
- e) importance of engineering will be more evident,
- f) Victaulic, with current and enhanced product range has a promising future, they have to watched closely,
- g) stocking, from the shelf delivery type companies are expected,
- h) grooved coupling has been welcomed by the contractors, operations&maintenance people, as well as marketing people, hence its market has strong signals of a considerable growth in the coming years,
- i) new and effective marketing models, strategies both from the manufacturers and local representatives are expected,

- ji) manufacturers seem to be getting involved with the local situation in more depth, without leaving everything to the local representatives,
- k) local manufacturers for a range of non-sophisticated grooved couplings can be expected in the future, due to the market growth and Turkey's quite well position in the cast iron production,
- l) high cost of fire pumps and water reservoirs will continue to be the major threat before the widespread application of the sprinklers,
- m) if Grinnell continues to work through a number of distributors, having sole representatives era can come to an end, the other manufacturers following the same way due to increasing demand,
- n) leading and aggressive manufacturers (specially Grinnell) may think of opening their own office, where previous experience proved to be successful in other technical markets (such as pumps, HVAC controls, etc.)
- on) after İstanbul, Ankara and İzmir, Bursa, Adana, Kayseri, Gaziantep are the future candidates of being local references of sprinkler procurement, due to their increasing potential and need to be locally serviced,
- p) in case, USD exchange rate is not suppressed any more, but finds its real value, local manufacturers for some of the sprinkler equipment should be expected, since importers will no longer be enjoying the low exchange rates,
- rp) overall performance/investment has to be increased to 80%'s; i.e. wasted money has to be reduced to 20%'s,
- s) committed specialized service providers like designers, installers, testing parties, periodic maintenance providers, independent consultants are expected to come to scene in five years time,

## **6- Conclusion**

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This memo is intended to be revised according to the comments, which are expected to be received from different parties. The intention is to release this memo annually, hopefully with more substantial and confirmed data, received through participation of more parties involved in the fire sprinkler market.

Karina is grateful and expresses his gratitude to the parties who have shared their sincere opinion and confidential data, with full confidence and commitment to Turkish Fire Protection Community, for the sake of gathering correct and unbiased information.

### **Important Remark :**

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