

# casagrande group

## IN DEPTH *NEWS*

The news letter for customers, agents, staff and friends

August 2007

COMPANY'S NEWS

## Bauma 2007 for the Casagrande group

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During the 7 days we had on our stand an average of 300 visitors a

day with peaks up to 600 in one single day. More than 600 companies have visited us, providing the interest and the attraction which we have generated in past few years.

The equipment on display has generated curiosity and contrac-

tors had a chance to see by themselves the Casagrande production. The master piece was the C900NG together with the FD60, nevertheless the other rigs like the B135, B170, B180HD, C7NG, HBR605, HBR609 and the HBR205GT have attracted both clients and curious competitors. The latter made positive comments about us stating that the equipment increased its quality and finishing and how Casagrande all in all has grown. More contractors are talking about us positively and were greatly impressed by our team which was on the stand. Our unity and friendly environment has contributed definitely to an enthusiastic image of the Company.

Last but not least important was the fact of introducing TEC as

part of our family. The heavy duty Baya grab and the small FUTURO on our stand showed the product offering of the Casagrande group. On the TEC stand the B250 together with the CSM (cutter soil mix) generated an interest on the high end of the market which puts Casagrande amongst the top players of the foundation equipment manufacturers.

The message which we conveyed is of a growing company with latest state of the art technology and well finished equipment has been accomplished. We also want to thank all the Casagrande and Hütte sales people and the agents which have given their contribution to make the Bauma 2007 a successful event. We do look forward to continue on this level of exhibit for the forthcoming shows.



NEWS

## TEC system

TEC system is a French based company which incorporates different brands such as Domine and Bonne Esperance. They have been in the business of foundation equipment manufacturing for 40 years and in the recent years has benefited from the know how and in depth knowledge of the major foundation contractor in the world. This has led to develop highly sophisticated equipment such as the diaphragm wall grab Baya and the CSM. Other

products are manufactured within TEC such as the compact FUTURO, injection-grouting equipment and special accessories.

TEC and Casagrande have jointly decided to cooperate having found that their respective synergies will give benefit to both companies and the market. TEC is representing Casagrande in France and Casagrande in turn is representing TEC in the rest of the world.

Within TEC there is extensive know how in foundation engineering which will be further enhanced within the Casagrande group sales network.

With these new products we are able now to offer a comprehensive range of products which has no equals in our business field.

It is our intention to further develop the technical knowledge of our group and TEC is an initial step towards this direction.



# Venetian, Las Vegas, with the Casagrande hydromill FD60.

Diaphragm walls have been finally installed in Las Vegas (Nevada). For years, only minipiles, drill shafts, CFA (marginally) and secant pile walls have been used for foundation and temporary support of excavation.

Because the geological soil condition, excavation in the very hard "Caliche" formation (up to 1.200 kg/cm<sup>2</sup>) was performed only using rotation drilling techniques. But with the development of the Hydromill (reverse circulation) technology, the obstacle to excavate very hard soil and rock formations has been successfully overcome.

The first tentative to propose the use of the technology failed a few years ago, when the Venetian Hotel and Casino decided to enlarge their facilities in Las Vegas. At that time, a couple of contractors (including Bencor), unfortunately and unsuccessfully, proposed to use the diaphragm wall challenging the "supremacy use" of the secant pile technologies. But for various circumstances, at the end of the project, the old proverb prevailed: "He, who leaves the old familiar road for a new one, knows what may have been left behind, but does not know

what he will find ahead,"..... and the decision to use the well-known secant pile solution prevailed. As expected the installation of secant pile walls, designed to the extreme of the equipment capacities, resulted in various construction, schedule and quality control problems during installation and the underground excavation an exposure of the wall.

Finally, in 2006, Bencor was able to propose with the TERRACON Consulting Engineers & Scientists designer team to install approx. 30.700 m<sup>2</sup> wall at the Cosmopolitan development. Thanks to the incredible success in production, schedule reduction and quality obtained, when the second phase of the Venetian expansion was finalized, there was no question that the diaphragm wall was going to be chosen, also, at the Venetian Tower expansion!

The result was that, not only, the secant pile perimeter walls were



substituted with a structural diaphragm wall, but also, the standard caisson foundation piers were substituted with low bearing elements (LBE or "barrettes") installed with the same diaphragm wall equipment.

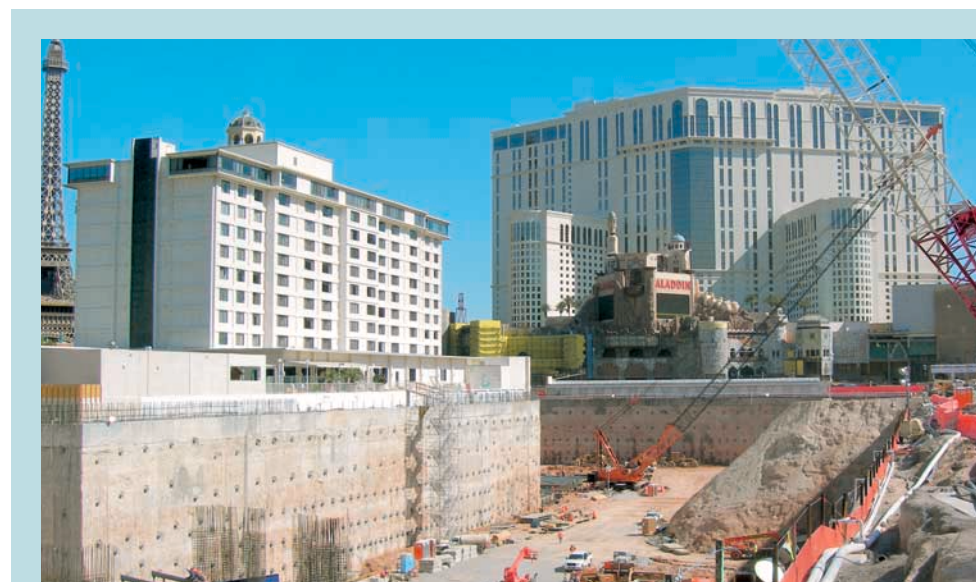
The result, a Casagrande FD60 hydromill is now used to install the foundation for the entire project. Bencor was able to manage the installation of approx. 11.150 m<sup>2</sup> foundation system showing the capacity to manage, coordinate and

install the diaphragm in a very limited and restricted area in one of the busiest avenue in the world: the Las Vegas.

Bencor was founded in 1984 specializing in diaphragm wall installation, first, and then in caisson, retaining wall and anchor technologies. The first hydromill they purchased was a Casagrande K3L hydromill in 1996 to be used at the Twin Buttes Dam Rehabilitation Project in San Antonio, Texas. Since then, Bencor has built a fleet of mills, the majority of which (three) are Casagrande.

At the Cosmopolitan site, rigs from multiple manufacturers were used to install the diaphragm wall but only the Casagrande's Hydromill was able to form perfect panels in the very hard "Caliche" formation and to excavate the secondary panels forming concrete to concrete watertight joints between panels. When the time came to decide which equipment was going to be used at the Venetian, it was clear the best option was the use of the Casagrande hydromill FD60 because:

- The possibility to better control verticality and to create a special "key" between the panel joints.
- The possibility to record in real time, while excavating the panels, not only the position of the milling tool on the "x" and "y" axis, but also, the possible rotation ("z").
- The extra production achieved in hard soil and rock formations due to the "full face" cutting area obtained only with the use of the "Casagrande patented chain transmission system".
- The reliability of the Casagrande hydromill equipment, the very low consumables and spare part replacing cost.
- The minimization of break-down time recorded in comparison to other systems.



The incredible schedule advantage achieved during the installation of the first diaphragm wall in Las Vegas at the Cosmopolitan was clearly acknowledged. The benefits were then confirmed when the wall was exposed. No remedial work was needed for leaking joints or imperfect wall construction (compared to standard secant pile construction) was reported due to the excellent work performed by Bencor and the characteristics of the equipment chosen to form the panels' joints.

When the Venetian finalized the

construction of the second phase of their hotel and casino expansion, the diaphragm wall technology was chosen in alternative to the secant pile technology used in the previous phase of the Hotel and Casino expansion. The decision was also made based on the requirement to use the Casagrande Hydromill excavation system because of the possibility to achieve better watertight joints and insuring no delay during production or during the excavation. We are expecting to find the same admirable results achieved at the Cosmopolitan

when the walls at the Venetian project will be exposed

The use of secant piles walls is still a very valid and reliable technology, however, in certain soil and water table conditions, where deep excavations are needed or because the project watertight joint requirements, the diaphragm wall solution should be always considered as a very valuable solution.



Job site



# Casagrande newly opened agency in Saudi Arabia' Kingdom

The Middle East has been a very important market for Casagrande. Our goal to build a strong presence in the area and in this respect, we have developed a very well planned organization based on close business relationship with all the local dealers and a yard/workshop in Dubai were one of the more experienced Casagrande technical manager has been relocated from Italy and where all spare partes are available for the region.

The Area Manger for the Middle East, Mr. Andrea Babbo reported the following: "Casagrande last target has been adding a permanent presence in Saudi Arabia. We are proud to announce that Casagrande has opened a representative office in Jeddah (a very important Middle East commercial centre). To insure full time service to our local clients we have in Jeddah a full time experienced Service Manager and one sales director . He will be supported by a specialized team of engineers and technicians which will be able to answer quickly to our clients' enquires and the market requirements".

Over 300 Casagrande's rigs are currently working in the Middle East only. The majority were sold in the last three years and the best selling models are the B250, B180 HD and

B125. In the Kingdom of Saudi Arabia a total of 32 Casagrande rigs have been sold up to date.

Casagrande has recently signed important sales contracts with most of the local Saudi Contractors for 5 units B180 HD units and 3 units B125. Our clients have identified these models as the most suitable for local soil conditions; moreover also the B250 has been recently sold into the Kingdom, this model is "Demand for high rise building is increasing every day" Mr. Babbo reports "Casagrande will be able to respond with their B250 piling rig. We have sold over 60 units in UAE and the quality and performance of this model will satisfy the demand also in Saudi. We are the first piling rig supplier to open an office in the Kingdom. Our goal is to become the major area supplier of piling rigs

in the next three years. We believe the market can only respond positively to our investment and to the improving quality of our services".

We expect to announce additional positive news in relation to Casagrande Middle East presence in our next magazine edition.



## INTERVIEW

### A brief interview with Mr. Sreedhara Narayanan, Casagrande Saudi Arabia Kingdom sale director

#### 1. When your cooperation with Casagrande started?

"It's almost 2 years I am now working as Casagrande Agent, originally through AFI and now directly as the manager of the newly formed Casagrande agency. Before my newly appointment I was working in AFI as product specialist for foundation division and I was the sales and customer relation advisor for foundation equipments manufactured by Casagrande, ICE, TAETS, IHC, and FUNDEX for the counties Saudi, Bahrain, Kuwait and Qatar.

#### 2. How is the new Casagrande office organized?

Our office is located in Jeddah, the major commercial city of Saudi Arabia, it is our intent to be close to our customers in order to support after sales requirements.

We have two mechanical engineers employed full time here. They both have been trained in Fontanafredda. Both of them are from Egypt. Their job is to reach customer whenever required in any part and city of the Kingdom.

#### 3. How do you see the future of the market in your area?

We envision incredible market opportunities for the next 5 coming years. However it will be challenging to insure that the prospective clients clearly understand the capacity of Casagrande and the commitment to the Kingdom market.

Our piling and micro piling rigs are working in some of the prestigious projects / locations in Saudi and to name few are:

One C400 & one B180 HD in "GCC interconnection project" with M/s. NCC  
One B180 HD for piling jobs in project for "construction of Water tower for Al Khobar" with M/s. ICC

One B125 in Jubail for "Royal Commission of Saudi Arabia" with M/s. RGME  
One B250 in Area Amir Majid, in Jeddah for construction of secant wall for under pass project

Four C6, two working in Dammam for under pass project of Al Darbas Co, one for Anchroing jobs in Al Misfalah and one in area Hira- Jeddah, from company M/s. Safco

Two C6 in Holy city Mecca with M/s.Saudi Bin Laden,for Anchroing jobs  
Two C6 in Holy city Mecca with M/s.Kaskttas for Anchroing & soil stabilisation project

KRC 2 for diaphragm wall project in Abha with M/s.Shibh Al Jaziara  
KRC 2 for diaphragm wall project in Jeddah with M/s. Kaskttas.

#### 4. Tell us something about your background.

I love special design equipment, this is the reason I am in this job.

I have a diploma in Engineering and one in Management and a 9 years working experience in this with equipments for tunnelling, foundation, drilling and piling technologies

I believe that mere survival is not enough in our business. I want to be in No.1 in the job I am handling. Our goal is to make of Casagrande the No.1 sup-

Here below the contact information's for our representative in Jeddah:

#### Casagrande Representative Office

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#### Sales Director:

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#### Technical Department:

Mr. Hassan Bermawy:  
Tel. 00966-05-03726863  
Mr. Essam Awad:  
Tel. 00966-05-08594588

info

plier to the Saudi market by next year, This will be achieved not just in having the more number of rigs sold in the market, but especially in the support and back-up service to be provided from our Jeddah facilities.

My experience as a project engineer helps me to understand the soil information provided by our clients and help me in suggesting our clients the more suitable equipments for their projects.

