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NEWSLETTER

Protecting Our Planet with new technology

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MOU on the Glass Bottle Factory Concluded between KC Glass and Uzkimyosanoat

President Kim Jeong-wan of KC Glass concluded an MOU on the J/V establishment of a glass bottle factory at Uzbekistan with Vice Chairman Mirazamahmudov of Uzkimyosanoat, an Uzbek state-owned enterprise which the Minister of the Commerce Department of Foreign Economic Investment in Uzbekistan participated in on May 26, 2015 at Lotte Hotel.

KC Glass is expected to establish and operate a glass bottle factory equipped with the latest equipments at Uzbekistan that can produce over 100 bottles annually. Also, it plans to export glass bottles to surrounding countries such as Kazakhstan, Kyrgyzstan, Pakistan, etc. by substituting imported glass bottles from China and Russia.

The MOU signing ceremony at that day was under auspices of the Minister of Trade, Industry & Energy and Department of Foreign Economy, and progressed thanks to the hosting of KOTRA and the Uzbek Embassy in Korea, and Vice Prime Minister Choi Gyeong-hwan and Vice Prime Minister of Uzbek Rustam Azimov attended the ceremony.

After the MOU conclusion, President Kim Jeong-wan delivered a pleasant impression because he could prepare a bridgehead to advance overseas based on accumulated know-how while KC Glass has managed a glass factory for 40 years. In addition, he expressed an aspiration to prepare for tasks so that best results could be yielded by analyzing on-site business environment thoroughly.

A Happy Time Shared with Seounsang (Mt.) Super View - 2015 KC Glass Picnic

Last May was filled with lush greenery and fragrant Acacia scent, in which KC Glass has gone to picnics in Seounsang three times. Executives and staff joined in the picnics with bright smiles and pleasant laughter by the pleasure of becoming one together with nature after escaping from daily life for a while.

On a background of beautiful Seounsang, it was a good opportunity to be able to connect close relationships with colleagues who could be disregarded owing to busy company assignments by sweating together while doing co-hiking and a foot volleyball game. The memories of unifying all into one mind while breathing clean air in nature brought vitality to the busy and hard company life. Though a sense of frustration was left because the picnic was finished too early, we hope the precious relations and memories of KC Glass in which executives and staff became more close in the picnic lasts for a long time.

Go KC Glass!!!





Dreaming Productions with Better Quality! - Initial Firing of KC Glass Furnace

Last April when moist spring rain was fallen, the initial firing ceremony which informs the prelude of the Furnace 2 Campaign at KC Glass was progressed. Approximately 50 persons including executives and staff including Executive Director Lee Suk-gu of our company and relevant ones of construction subcontractors prayed for production of high-quality goods by uniting under one idea. During April 1~20 when electronic furnaces were started, all relevant persons on construction did their best under one idea, and completed temperature rising of the furnace safely through such efforts and passions.

Through successful completion of furnace repair work, KC Glass becomes to leave another footstep for advancing to a leading company in producing glass new materials.

Regardless of the tight 20 days, our company delivers sincere thanks to all executives and staff along with the relevant persons in subcontractors who put passion and sincerity for furnace repair work.

2015 Workshop for Sustainable Growth

KC Glass executed a workshop subjecting “Profit Model of KC Glass to enabling sustainable growth” on May 23, 2015. This workshop progressed in SANGHYOWON (botanical garden) containing 25 years of effort by Chairman Lee Dal-woo.

Regarding R&D parts, announcements on the development of glass boards for cook top, success strategies on developing optical glass materials and lens, and commercial viability were progressed, and announcements on cosmetic bottles and advancing strategies on overseas business were made as part of new businesses. Finally, developing sustainable profit models through key abilities were announced in the part of profit model developments, and feedbacks on each subject were carried out.

After announcements were finished, President Kim Jeong-wan made a request to make effort in enhancing competitiveness by strengthening internal stability to make a leap to a small and strong business.

This workshop is expected to consider the future of KC Glass along with sustainable growth.



KC Solar Energy Selected to a Private Enterprise on Photovoltaic Generating Facilities of 33.24MWp Grade in North Jeolla Province's National Food Cluster

On May 12, 2015, KC Solar Energy was selected as a preferred enterprise at 『Public Contest of Private Enterprises on Photovoltaic Generating Facilities at the National Food Cluster Industrial Complex』 which is an affiliate of the Ministry of Agriculture, Food and Rural Affairs which is planned to be constructed in Iksan of North Jeolla Province, and an enforcement agreement is expected to be concluded.

In this project consortium progressed under auspices of KC Solar Energy, Korea Southern Power Co., Ltd., KB Asset Management Co., Ltd., S-Energy Co., Ltd., and SolarPark Korea Co., Ltd. participated in, and it is installed until 2016~2018 successively. It is composed of approximately 72.3 billion won for estimated expenses, 1,612 m² for lot areas, and 33,24MW for estimated volume, and belongs to long-term projects that endow profits of electricity production to resident companies by installing specified photovoltaic power generating facilities to roofs and parking lots of their building.

By taking this opportunity, KC Solar Energy has a plan to grow a new growth drive through photovoltaic power generating facilities at industrial complexes, and is confident that our company will stand high as a company of large-volume photovoltaic generating facilities in name and reality through this selection.



[Air view of photovoltaic power generating facility business at the industrial complex of national food cluster]

KC Solar Energy Selected as a New Project-Supporting Object for Enhancing 2015 National Standard Technical Strength

On May 21, 2015, KC Solar Energy was selected in the business “Development of field evaluating methods on life and performance characteristics of solar photovoltaic modules” which was a project for enhancing the 2015 national standard technical strength and ordered from the Korea Evaluation Institute of Industrial Technology under the Ministry of Trade, Industry and Energy.

This project is progressed by the supervision of Korea Testing Laboratory, and KC Solar Energy is scheduled to improve field evaluation methods on module life and performance characteristics of photovoltaic power plants having been operated under a 3-year total business period and 520 million won in expenses as of now as a participating company.

KC Solar Energy will have an opportunity of approaching one step to growth of a specialized photovoltaic company through new business expansion to national projects along with R&D. It is also expected that it will ensure competitiveness of O&M business by means of systemizing plant management of KC Solar Energy together with profitability as a professional field evaluation organization on future photovoltaic plants.

Congratulations!



2015 KC Solar Energy Picnic

On May 28, KC Solar Energy held the 10th anniversary picnic at Han River Nanji Camp. To congratulate KC Solar Energy greeting 10 full years of establishment this year, approximately 20 persons including President Lee Tae-young and executives and staff of KC Green Holdings participated in this event.

President Lee Tae-young praised the efforts of KC Solar Energy for the time being, and congratulated the event by saying greetings with expectations on new leaps. Managing Director Shin Seong-ryong of KC Solar Energy followed by brief congratulatory address of President Lee Tae-young requested passionate fulfillments of executives and staff on assignments for developing KC Solar Energy, and then suggested a toast for a bright future of KC Solar Energy.

At that event, executives and staff of KC Green Holdings who became to work in the same place due to new building transfer shared a welcoming place with pleasant minds, and discussions on strategic cooperation for the future that will be made together were discussed between KC Solar Energy and KC Green Holdings. Through the picnic where all participants talked together under one idea regardless of their positions, and could envision a better future, bright future of KC Solar Energy having been closer is expected.



KC Environment Construction Co., Ltd Received an Order on Engineering Work of Yecheon NCC, C5 Separation Project

On May 18, KC Environment Construction additionally received an order on OSBL section engineering work of Daelim Industrial Co. in relation with the Yecheon C5 Separation Project.

Yeochun NCC (Co-Representative Park Jong-guk, Jeong Ji-won) progressed a business of installing facilities of mixed pentane (C5) which is the first high-functional advanced chemical material in Korea at the expanded subdivision of Yeosu National Complex. The project was commenced on January 2015 by Hanwha Engineering & Construction and Daelim Industrial Co., Ltd aiming for completion by January 2016. Separately from ISBL sections of Hanwha Engineering & Construction whose order was being progressed, KC Environment Construction received an engineering work order on OSBL sections of Daelim Industrial Co., Ltd. additionally.

The total ordering amount is 12.35 billion won (including VAT), and is being progressed aiming for completion by January 2016, and the scale of construction is the same as follows.

- Earth work 110,000m³,
- Concrete 20,000m³,
- Steel reinforcement 2,000 tons

This acceptance of order is a splendid achievement under difficult sales environments owing to construction industry recession, and can be said as preparing a turning point of reconsidering the status of KC Environment Construction at Yeosu Chemical Industrial Complex.





LCUK Participated in Biomass Forum Opened in Poland

Lodge Cottrell attended IV Forum of Biomass and Waste as a part of the effort to advance the European market in addition the British market based on executing experiences on plant environmental facilities of biomass and energy from waste. More than 250 representatives besides Lodge Cottrell gathered in Krakow, Poland in order to participate in this forum related to biomass and wastes, and the following persons graced the forum with their presences.

- Janusz Piechocinski – Prime Minster, Department of Polish Economy
- Marek Sawicki – Minister, Department of Agriculture Rural Development in Poland
- Marek Sowa –Head of Malopolska State
- Jacek Majchrowski – Mayor of Krakow

Poland, where this forum was held, has many chances of relevant fields with biomass and energy form waste, and it was a meaningful occasion of discussing about new markets because related nations and business persons took part in it. Lodge Cottrell is expected to make inroads for new markets within European countries through various efforts besides participating in this forum while sharing occasions to discuss about chances on future business together with relevant companies.

Clestra Hauseman, Carrying on Continuous Business with LG CNS

Clestra supplied and installed the BTJ6 panel and LOFT panel to a new building of LG CNS located in SangAm Digital Media City. The reason for selecting Clestra by LG CNS is the excellent capabilities of Clestra together with their economic and high-quality panels having been provided from 2004 regardless of short lead time in this construction. Like previous projects, successful finishing of installation work this time became a good opportunity of concreting further business relationships between Clestra and LG CNS.



Team Leader Jin Kyeong-yong of NoITec, Thesis Announcement to Korea Institute of Plant Engineering & Construction

An announced thesis by Team Leader Jin Kyeong-yong of NoITec to Korea Institute of Plant Engineering & Construction was inserted in The Plant Journal. Contents of the thesis under the subject <Prediction of Maximum Fly Ash Conveying Capacity of Fly Ash System in a Power Plant> are related to the prediction of maximum fly ash objecting to fly ash-conveying facilities having been operated in a domestic D coal-fired power plant; detailed contents can be found in Vol 1, No. 1 of The Plant Journal, and important information is the same as follows. In the fly ash-conveying system which is formed by fly ash-conveying pipe conduits composed of conveying pipes 550m in horizontal distance, 40m in vertical distance, 9 elbows, and 0.254m in diameter and volumetric fly ash-conveying air blowers with 1,163 mmH₂O trip constant pressure and 5,040 m³/h air volume, maximum fly ash-conveying quantity is made when pressure loss of the fly ash conveying system according to increases of fly ash-conveying quantity becomes the same with the trip pressure of the volumetric fly ash-conveying air blowers, and the possible maximum fly ash-conveying quantity is expected to be 52,600 kg/h.

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발전 보일러용 비회 이송설비에서 최대 비회 이송량 예측

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Prediction of Maximum Fly Ash Conveying Capacity of Fly Ash System in a Power Plant

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초록 : 연구에서는 국내 D 석탄 화력발전소에서 비회 이송량 35,800 kg/h의 용량으로 운전 중인 비회 이송설비를 대상으로 최대 비회 이송량을 예측하였다. 수평거리 550 m, 수직거리 40 m, 엘보우 9개소, 직경 0.254 m의 이송관으로 구성된 비회 이송관로와 트립(trip) 정압 1,163 mmH₂O, 총량 5,040 m³/h인 용적식 비회 이송 송풍기로 이루어진 비회 이송 시스템에서 최대 비회 이송량은 비회 이송량의 증가에 따른 비회 이송 시스템의 압력 손실과 용적식 비회 이송 송풍기의 트립 정압이 같아질 때이며, 이 조건 하에서 가능한 최대 비회 이송량은 52,600 kg/h로 예상되었다.

ABSTRACT : This study presents prediction of maximum fly ash conveying capacity of fly ash system in a power plant. The mixture ratio and pressure drop characteristics of air-fly ash flow in piping system are not well understood due to the complexity of particle motion mechanism. In this paper, the researcher investigated the optimum mixture ratio when the pressure drop of fly ash conveying system is equal to maximum static pressure of displacement fly ash transport blower and the capacity of fly ash transport according to the optimum mixture ratio by experimenting the fly ash conveying system of domestic D coal thermal power plants, which is currently in operation. The experiment results showed that the maximum fly ash conveying capacity of fly ash system were founded under the condition of maximum air volume 5,040 m³/h, static pressure of trip condition 1,163 mmH₂O. In addition, it was predicted maximum mixture ratio of the air-fly ash was 8.66 and maximum capacity of fly ash conveying was 52,600 kg/h under these conditions.

Key words : Fly ash(비회), Mixture ratio(혼합비), Prediction of conveying capacity(이송량 예측)

기호설명

f : 관 마찰계수
 ρ : 공기 밀도 [kg/m³]
 g : 중력가속도 [m/s²]
 D : 이송매관 내경[m]

V : 공기 속도[m/s]
 L : 이송매관 수평길이[m]
 H : 이송매관 수직길이[m]
 Re : 레이놀즈 수
 ζ_b : 곡선관 압력손실계수
 m : 혼합비
 u_a : 비회 입자의 속도[m/s]
 u_{mg} : 중력 침강속도[m/s]
 s : 비회 입자 비중량[kg/m³]

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