CHINA PETROCHEMICAL NEWS

Friday, November 23, 2007

The Power Plant of Maoming Petrochemical Corporation

Has established sound management system

And implemented maintenance measures, SETTING UP

A NEW DOMESTIC RECORD FOR ITS CFB BOILER OPERATION

CHINA PETROCHEMICAL NEWS Up to November 20, Unit 1# and 2# CFB boiler of Power Plant of Maoming Petrochemical Co. have achieved 640 days and 540 days of operation time respectively, setting up a new record among similar domestic units for long-term operation without overhaul, and reaching international advanced level. The boiler efficiency has improved from the preliminary 79% to over 91%; the coal equivalent consumption both for power and heat supply has scored a historic result as well, 14.78 g/kWh and 1.7 Kg/GJ down in comparison to the average level last year. Over 8000 tons of coal equivalent has been saved during the first 10 months this year, for which it was evaluated “Best User” by Foster Wheeler Power Group Asia.

Compared with oil boilers, it is more difficult for a CFB boiler to maintain long-term operation because it fires solid fuel like coal, Pet-coke etc. that is easy to jam the bunker; in addition, large amount of ash from burning is easy to block the ash cooler; even worse, it is challenged worldwide by boiler wall wearing and tube burst. Therefore, similar domestic units generally shut down several times a year for maintenance. Faced by the pressure from production and challenges, the Power Plant has, at initial operation of the CFB boiler, put forward the working ideology of “to operate well the Plant and ensure reliable power for million-ton ethylene”, tried to use for reference the advanced management experiences both at home and abroad, and

paid great efforts in terms of daily management, equipment servicing and bottleneck removal and the like, aggressively exploring approaches to safe and stable production.

This Plant takes incentive measures such as rewarding a employee who has identified and eliminated safety hazards etc., thus employees' initiatives for safe production have been activated. Since the beginning of this year, over 50 accident threats in various forms have been discovered and avoided through careful in-process inspection, laying the foundation for long-term production. On the other hand, pertinent counter-accident precautions have been prepared according to the plant's production features; emergency counter-accident drills are organized among crew members every week by means of contests, continually increasing the employees' ability to deal with and remove troubles. A professional safety assessment system has been established and strengthened requiring that all safety management personnel must go deep into the field every day, tracking the plant operation status and preventing various behaviors breaking safe production rules, and that safety status be bulletined, summarized and commented, and then seriously handled according to stipulations. The reliability of safe production has been improved by positively boosting technical development and realizing dynamic safety monitoring.

This plant has set up and strengthened equipment management system that provides detailed provisions as to how many in-process inspection items are needed for every pump, compressor and fan, and what shall be cared during maintenance, all which contributes considerably to long-term run of the boiler. They carry out a super care system "Five in One" comprising machinery, electrics, instrumentation, operation and management. Therefore, 24-hour online monitoring is performed on key units throughout the plant, resulting in more scientific, timely and accurate judgments of the condition. Moreover, "Equipment Keeper" contest campaign has been launched that comprehensively evaluates and compares the equipment integrity, boiler efficiency, and special service for large units, etc., arousing the employees' enthusiasm to service the equipments well.

In order to reduce boiler wall wearing, besides 24-hour monitoring of boiler operation status through advanced equipments, this Plant also takes the opportunity of trouble-shooting inspection for the two boiler units by organizing people to measure the wall thickness, inspect the stress distribution on boiler walls, and select proper wearable material to spray the inside boiler walls. During spray coating, based on the stress conditions of boiler walls, parts susceptible to more friction with coal slag are key areas to protect. Owing to proper maintenance, no boiler wall damage has occurred since it was brought into service. (Reporter Zeng Guoming, Tanggeng)