

## INTISARI

Untuk menciptakan suasana menonton yang nyaman maka diperlukan lingkungan sekitar yang nyaman pula. Salah satu cara adalah dengan mengkondisikan udara sekitar sehingga bersuhu nyaman untuk ukuran orang Indonesia. Maka dirancanglah sistem pengkondisian udara untuk ruangan di dalam *sport hall* dengan tetap memperhitungkan pengaruhnya terhadap permainan/olah raga yang dilakukan.

Di dalam perancangan ini diperlukan data-data tentang keadaan gedung untuk mengetahui beban pendinginan yang harus ditanggung unit pendingin. Adapun data-data tersebut antara lain : luas gedung, suhu di luar ruangan, kelembaban, kapasitas, penerangan di dalam gedung, dan sebagainya. Setelah beban pendinginan diketahui maka dipakai untuk menghitung komponen pendingin yang lain seperti kompresor, kondensor, evaporator, dan lain-lain sehingga terciptalah suatu siklus pendinginan ruangan agar bersuhu nyaman untuk orang Indonesia. Demikian sekelumit gambaran tentang perancangan AC *sport hall* ini. Semoga cukup dimengerti dan bermanfaat bagi kita semua.

## ABSTRACT

To make comfortable exhibition condition, we need a comfortable area too. We can design softly chair, a good building construction, the best security for visitor, and so on.

Another way, we can make the air arround us have comfortable temperature for Indonesian people. So we will design the air conditioning system for the room in sport hall with still consider the influence for the game.

In this plan, we need some informations about building situation to know cooling load that have to be guaranteed by air conditioning unit. There are many informations that we are needed, such as : volume of the building (length, width and height); capacity for visitors; structure of wall, roof and floor; interior building (include electronic components such as fans, lamps, amplifier and so on); structure of windows and doors; out-door temperature; in-door temperature; humidity; wind velocity; and so on.

After we know the cooling load by calculation, so we can calculate another unit of air conditioning system such as compressor, condensor and evaporator. So it can be created air conditioning cycle to make comfortable room and suitable temperature for Indonesian people.

Thus a little description about sport hall air conditioning system. I hope it can be understood and usefull for all of us.