

2002 History Paper
Mississippi Chapter ASHRAE

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Title: One OLD Chiller

I have stumbled on a very old centrifugal chiller this year that is still operating with extremely high reliability and decided to do my history paper on this particular system.

How many 72 Ton Centrifugal chiller jobs have you ever seen? Not many I'll bet. I was not even aware that centrifugal chillers were manufactured in such low tonnages. However, I have seen one in operation and it is currently running in Building #69 at the Mississippi State Hospital in Whitfield, MS. I have attached a picture of the chiller and associated pumps. The chiller was installed in 1971. This building and one other, constructed at the same period, were done so before the state integrated it's facilities. This building was originally referred to as the Colored Building and it's counterpart the White Building. I am including this information, not intending it as a negative, but merely to date the equipment.

One of the things that make this system unique, other than the size and age of this centrifugal chiller, is that the building has no backup system. In other words, there is only one chiller, one chilled water pump, one cooling tower and one condenser water pump and the maintenance staff tell me that the system has never been down for anything other than a pump motor replacement. A purge unit was added to the chiller to remove air but aside from that the chiller has performed remarkably well for it's entire operating life.





TRANE CENTRAL

THE TRANE COMPANY - LA CROSSE, WISCONSIN

MADE IN U.S.A.

SIZE **10-BF4-BV2**

SERIAL NO. []

EVAP. PASS COMBINATION **40**

COND. PASS COMBINATION []

REFRIGERANT []

PURGE AND CONTROL CIRCUIT

VOLTS **115**

CYCLE **60**

PHASE []

AMPS **3.6**

COMPONENT MODEL NUMBERS

CTV **35**

PNL **1476**

CDS **25**

PRG **5**

COM **791**

BAS **138**

EVF **108**

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U. S. PATENTS:
2746269, 2768511, 2770106, 2793506, 2817213, 2817476, 2942436
2956435 - 3,017,071, 3040972 OTHER PATENTS PENDING