

University of Illinois Department of
Agricultural Engineering
BESS Lab

Project Number: 98215

Test Date: October 21, 1998

Fan

Make: Hired Hand

Model #: 6603-5500
with 6621-0350 roll seal

Manufacturer: Hired Hand

Blade Size: 48.4"

Orifice Dia.: 49"

Blade

Number: 3

Shape: propeller

Material: galvanized steel

Pitch: -

Clearance: 0.3"

Shutter Roll seal

Material: poly cloth

of Doors: 1

of Columns: 1

Door Length: 54"

Location: intake

Other Attachments:

Motor

Make: Magnetek

Model #: 8-194083

H.P.: 1

Amps: 4.3/8.6

Volts: 230/115

RPM: 1725

S.F.: 1.40

Drive

Drive Pulley Dia. AK34

Axle Pulley Dia.: 10.4" o.d.

Housing

Material: steel

Intake Area: 54.3"x54.8"

Discharge Area: 49" dia.

Depth: 31" top
23" bottom

Guards

Description: wire

Spacing: 1" x 2"

Location: exhaust

TEST RESULTS

HIRED HAND 6603-5500

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 98215	0.00	584	21600	21.2
Fan description:	0.05	583	20300	19.3
48" belt drive, 1 hp Magnetek 8-194083	0.10	582	19000	17.5
motor, slant steel housing, roll seal shutter	0.15	581	17500	15.6
model # 6621-0350 and guard	0.20	580	15800	13.7
	0.25	578	12600	10.6
	0.30	578	7900	6.6
