

**University of Illinois Department of
Agricultural Engineering
BESS Lab**

Project Number: 98229

Test Date: October 27, 1998

Fan

Make: Hired Hand

Model #: 6603-6010
with 6611-5016 shutter
Manufacturer: Hired Hand

Blade Size: 48.5"

Orifice Dia.: 49.1"

Blade

Number: 3

Shape: propeller

Material: galvanized steel

Pitch: -

Clearance: 0.3"

Shutter

Material: Plastic

of Doors: 15 per column

of Columns: 2

Door Length: 26.1"

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.: MA38

Axle Pulley Dia.: 10.4" o.d.

Housing

Material: Fiberglass

Intake Area: 54" x 54.5"

Discharge Area: 49.1"

Depth: 30.5" top
27.5" bottom

Guards

Description: wire

Spacing: 2" concentric

Location: exhaust

TEST RESULTS

HIRED HAND 6603-6010

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 98229	0.00	629	22700	18.1
Fan description:	0.05	627	21500	16.4
48" belt drive, 1 hp Magnetek 8-194083	0.10	624	20200	15.0
motor, fiberglass housing, plastic shutter	0.15	623	18700	13.4
# 6611-5016 and guard	0.20	622	16700	11.8
	0.25	622	13900	9.8
	0.30	618	9000	6.0