

University of Illinois Department of
Agricultural Engineering
BESS Lab

Project Number:02200bd

Test Date: June 18, 2002

Fan

Make: Big Dutchman

Model #: 60-36-5206

Manufacturer: Canarm

Blade Size: 36"

Orifice Dia.: 36.7"

Blade

Number: 3

Shape: propeller

Material: galvanized steel

Pitch: -

Clearance: 0.4"

Shutter

Material: plastic w/s.s. frame

of Doors: 12 per column

of Columns: 2

Door Length: 20.3"

Location: intake

Other Attachments:

Motor

Make: FHP

Model #: P1170-48D6

H.P.: 1

Amps: 4.6

Volts: 230

RPM: 850

S.F.: -

Drive

Drive Pulley Dia. direct

Axle Pulley Dia.: drive

Housing

Material: fiberglass

Intake Area: 39.3" x 40"

Discharge Area: 39"

Depth: 31" top
27.5" bottom

Guards

Description: wire

Spacing: 2" concentric

Location: exhaust

Test Results

BIG DUTCHMAN 60-36-5206 Test: 02200bd	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Fan description: 36" direct drive, 1 hp FHP P1170 -48D6 motor, fiberglass housing, plastic shutter and guard	0.00	849	15,900	16.6
	0.05	845	15,210	15.2
	0.10	842	14,460	14.0
	0.15	837	13,590	12.8
	0.20	833	12,730	11.7
	0.25	829	11,690	10.4
	0.30	827	10,120	8.9