

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

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**Project Number:** 97250

**Test Date:** October 21, 1997

**Fan**

Make: Chore-Time

Model #: 40403-3622

Manufacturer: Chore-Time

Blade Size: 36"

Orifice Dia.: 36.5"

**Blade**

Number: 3

Shape: propeller

Material: galv. steel

Pitch: -

Clearance: 0.3"

**Shutter**

Material: plastic

Number of Doors: 12 per

Number of Columns: 2

Door Length: 19.9"

Location: intake

**Other Attachments:**

discharge cone 45" o.d., 24" deep

**Motor**

Make: Fasco

Model #: U28B1

H.P.: 1/2

Amps: 6.0/3.0

Volts: 115/230

RPM: 825

S.F.: 1.15

**Drive**

Drive Pulley Dia.: direct

Axle Pulley Dia.: drive

**Housing**

Material: galv. Steel

Intake Area: 42.5" x 42.5"

Discharge Area: 36.5" dia.

Depth: 22"

**Guards**

Description: wire

Spacing: 2" concentric

Location: exhaust

TEST RESULTS

CHORE-TIME 40403-3622

|                                             | Static Pressure  | Speed      | Airflow    | Efficiency      |
|---------------------------------------------|------------------|------------|------------|-----------------|
|                                             | <u>in. water</u> | <u>rpm</u> | <u>cfm</u> | <u>cfm/Watt</u> |
| Test: 97250                                 | 0.00             | 845        | 10930      | 22.8            |
| Fan description:                            | 0.05             | 839        | 10210      | 20.3            |
| 36" direct drive, ½ hp Fasco U28B1 motor,   | 0.10             | 829        | 9320       | 17.4            |
| galv. steel slant housing, plastic shutter, | 0.15             | 819        | 8300       | 14.4            |
| guard and discharge cone                    | 0.20             | 808        | 7280       | 12.0            |
|                                             | 0.25             | 793        | 5700       | 8.7             |
|                                             | 0.30             | 759        | 3770       | 5.1             |

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