

Test Report No. S09MEC00454-1B-CORR01-CLC
dated 22 DEC 2008



PSB Singapore

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SUBJECT:

Thrust Force Test – Reversible Jet Fan (KWJ 1120).

TESTED FOR:

Kruger Ventilation Industries Pte Ltd
No.17 Tuas Avenue 10
Singapore: 639141

Attn: Mr Xie Yong Heng

TEST DATE:

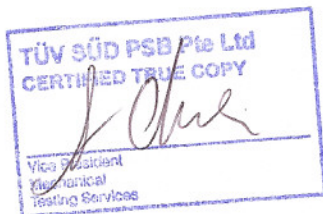
17 Dec 2008

TEST METHOD:

Laboratory Methods of Testing Jet Tunnel Fans for Performance
ANSI/AMCA 250-05

PURPOSE OF TEST

To determine and verify the tested jet fan thrust force rating against the published thrust force rating.



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Yong Heng Xie



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SAMPLE DESCRIPTION:

Fan Details

Model : KWJ 1120
Brand : Witt & Sohn
Type : Reversible Jet Fan
Speed : 1760 rpm
Impeller material : Aluminium Alloy
Casing : Mild steel

Motor Details

Brand : Kruger
Rating : 37Kw 4P
Voltage/Phase/Frequency : 380V-3ph-60Hz
Rated ampere : 69.9Amp
IP rating : IP55
Class : H
Speed : 1770rpm

Duty – Forward Thrust Force : 990 N at free condition.
Reverse Thrust Force : >891N at free condition.

METHOD OF TEST

The Witt & Sohn Jet Fan was tested on Kruger Thrust Force Testing Facilities. The thrust force test station was set-up as per Figure 5A of standard ANSI/AMCA 250-05 (refer to Appendix for test set-up).



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TEST RESULTS :

1) Flow direction : Forward (Impeller to motor)

Freq (Hz)	Td (°C)	Tw (°C)	ρ (kg/m ³)	Volt (V)	Amp (A)	N rpm	Equip Display (Kg)	Thrust Force (N)
60	27.82	23.85	1.162	380	68.0	1780	124.4	1219.9

2) Flow direction : Reverse (Motor to impeller)

Freq (Hz)	Td (°C)	Tw (°C)	ρ (kg/m ³)	Volt (V)	Amp (A)	N rpm	Equip Display (Kg)	Thrust Force (N)
60	28.10	23.93	1.161	380	67.5	1779	117.7	1154.2

Where:

Td = Ambient dry bulb temperature

Tw = Ambient wet bulb temperature

N = Impeller rotational speed

Freq = Fan frequency

Volt = Voltage

Amp = Ampere

ρ = Air density

Chua

Chua Lee Choong
Testing Officer

Chua Peck Cheong

Chua Peck Cheong
Product Manager
Industrial & Polymer Products
Mechanical Centre





Appendix

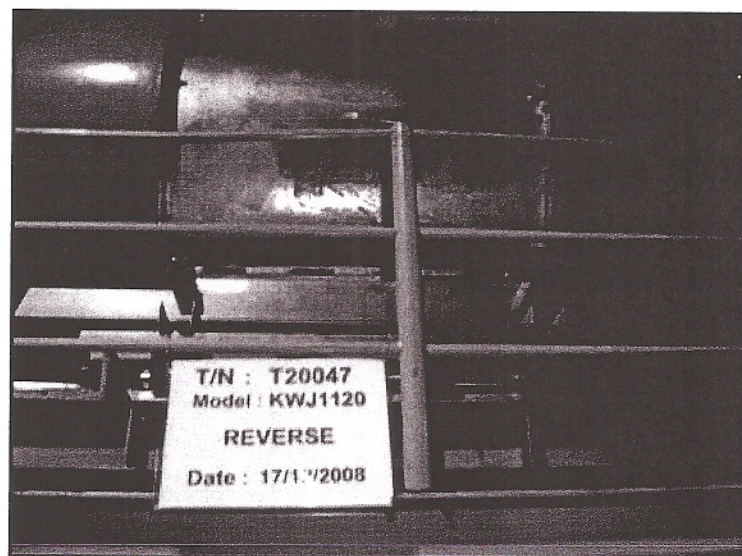
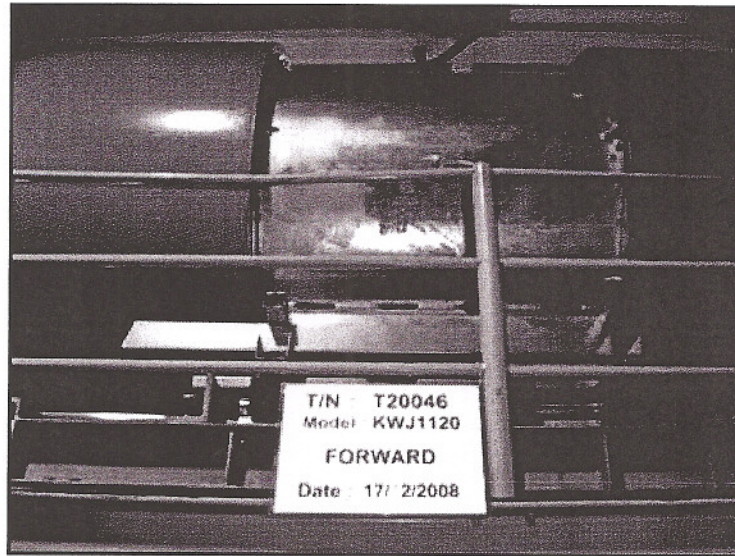
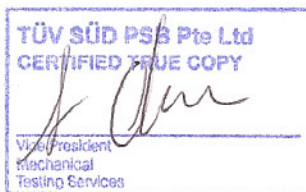


Photo 1 Jet Fan Model: KWJ 1120
Test set-up

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January 2008

