

# USER GUIDE TO:

# DEKALB BLOWER FAN SELECTION SOFTWARE

THIS MANUAL WILL PROVIDE A QUICK REFERENCE OF VISUALIZED STEPS TO ASSIST IN EFFECTIVELY USING THE SOFTWARE SELECTION TOOL.

12 EASY TO FOLLOW STEPS PROVIDED

## Dekalb Blower 4.0

This application software is an advanced engineering tool that allows you select Dekalb Blower fans for your industrial ventilation design in a quick, accurate and reliable manner.

Developed according to technical specifications of the major standards organizations, Dekalb Blower software provides complete solutions and detailed reports for all design requirements.

Dekalb Blower 4.0 is a customized version of our software solutions. It has been specially developed for our customer Dekalb Blower Inc.

### Industrial Fan Software



### Dekalb Blower 4.0

**Version:** 4.00.1606  
**Language:** Multilanguage (English - Portuguese - etc.)  
**Operating System:** Windows XP / Vista / 7 / 8 / 10  
**Primary License:** Dekalb Blower Inc.  
**End User License:** Freeware  
**File Name:** DekalbBlowerSetup.exe  
**File Size:** 7.43 MB

[Download](#)

### Screenshots

Like all applications of our company, Dekalb Blower software has been developed by dedicated professionals that hold in high regard the accuracy of engineering calculations and the reliability of technical analyses implemented in the algorithms of the software.

With the same care and commitment, the software interfaces have been designed for simplicity and ease of use without compromising its unmatched range of features and capabilities.



1) Hover over thumbnail to view enlarged image. 2) Click on thumbnail to hold enlarged image in place. 3) Click outside thumbnail to hide enlarged image.

### About the Customer



Dekalb Blower is an industry leading designer and manufacturer of superb quality custom, semi-custom, and standard fans ranging from heavy duty industrial process fans to OEM fans to a comprehensive line of commercial supply and exhaust fans for the HVAC plan and spec market.

Dekalb Blower, Inc.  
 Yorkville, IL - United States  
[www.dekalbblower.com](http://www.dekalbblower.com)

### Customer Testimonial

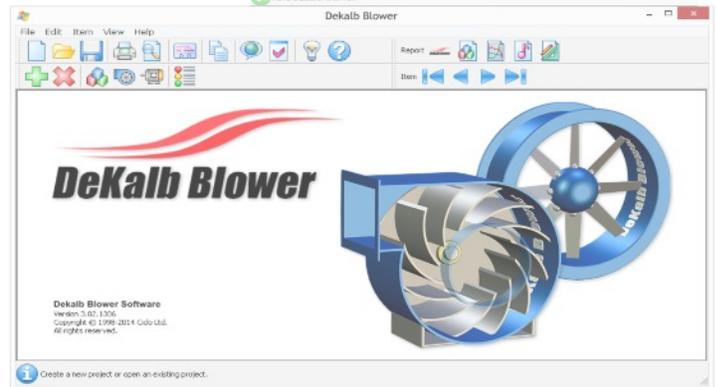


"We are very proud to have partnered with CICLO SOFTWARE to develop this very precise software pertaining to Dekalb Blower's complete line of industrial fans and blowers. From the smallest details to the most sophisticated calculations, CICLO has delivered the most comprehensive software that makes fan selection to our customers as easy as a few clicks of the mouse!"

Eric Johansen

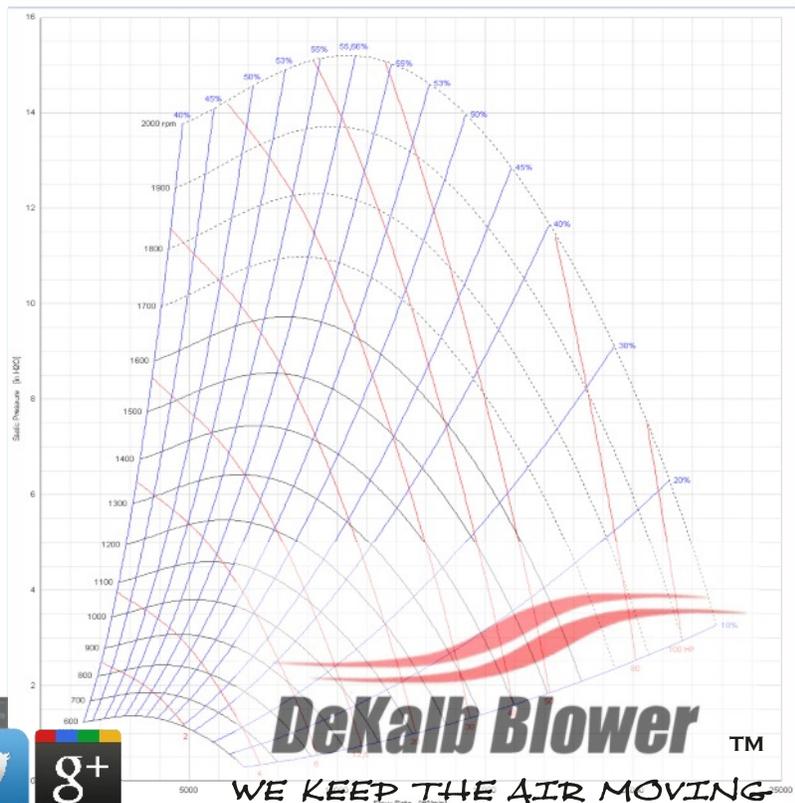
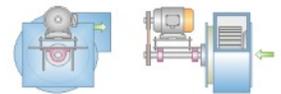
[WWW.DEKALBBLOWER.COM](http://WWW.DEKALBBLOWER.COM)

DEKALB F-S MANUAL 1.01-6-17



**Dekalb Blower**  
 Size: FHD200  
 SWSI + Double Wall Insulated  
 Plug + Loose Inlet Cone  
 Plug + Single Outlet Scroll

Diameter	20 in	Density	0.75 lb/ft <sup>3</sup>
Width Full	11,125 in	Temperature	70 °F
Outlet Area	2,242 ft <sup>2</sup>	Altitude	0 ft
Inlet Area	2,264 ft <sup>2</sup>	Bar. Pressure	29.92 in Hg



**DeKalb Blower**™

WE KEEP THE AIR MOVING



EMAIL

**SALES@DEKALBBLOWER.COM**

Designed and Engineered  
**IN THE USA**

**EST. 2000**

**DeKalb Blower**



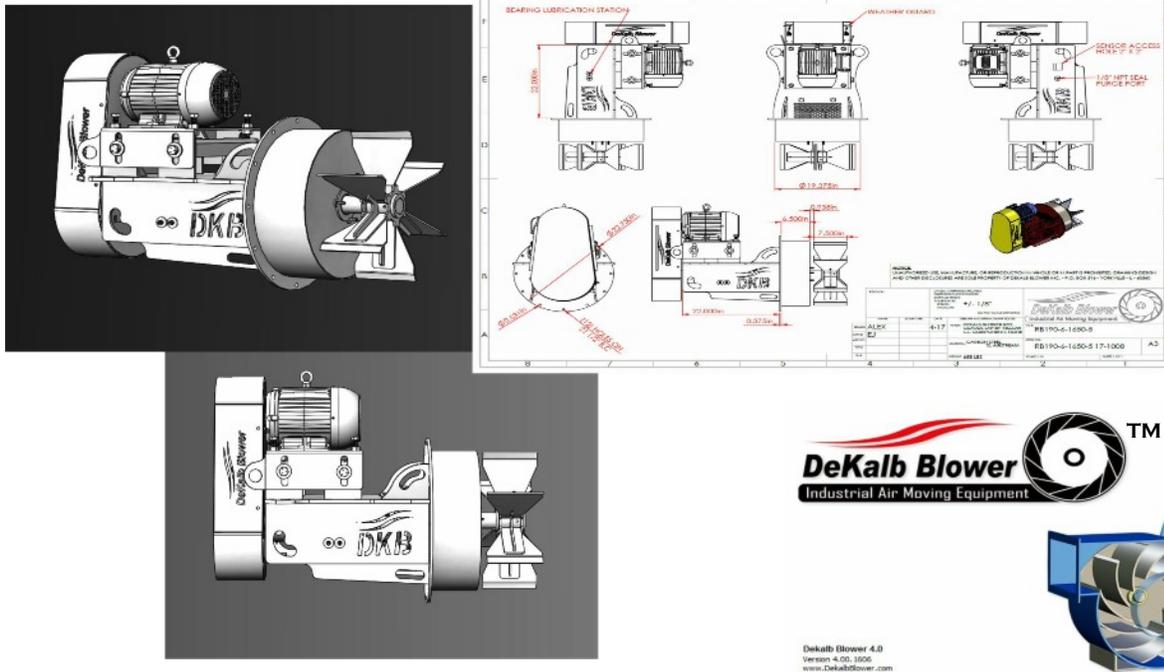
**2  
YEAR**

**WARRANTY**



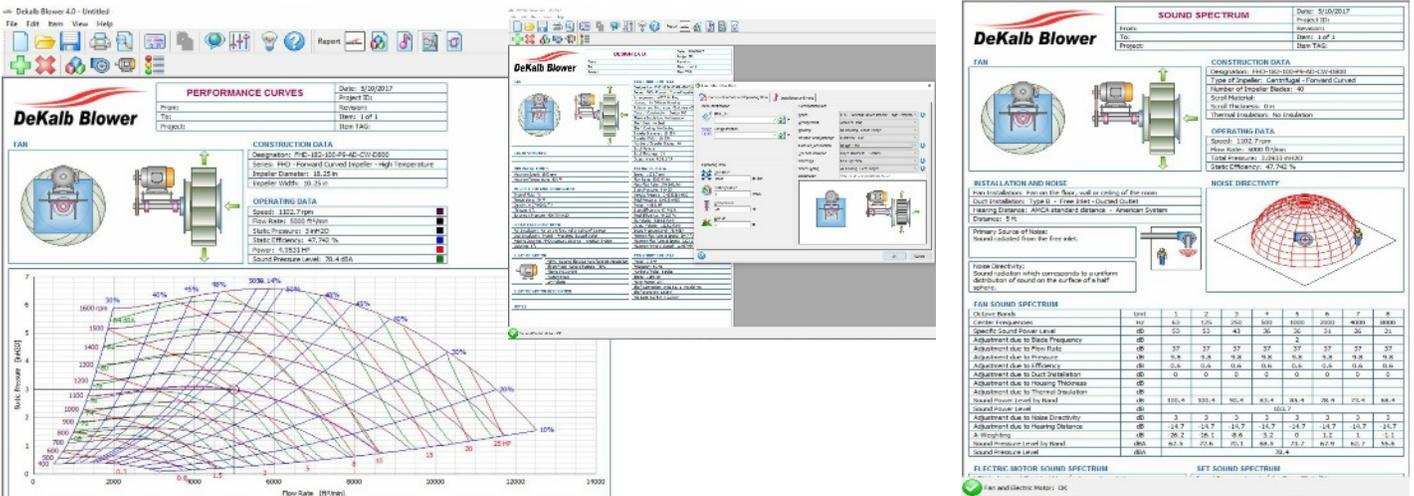
## DEKALB BLOWER OFFERS THE LATEST IN 3D AND 2D DRAFTING

- Complete CAD models of all makes and assemblies available for download
- Custom fan designs also available utilizing our software capabilities
- Files downloaded by our customers are they same files used to fabricate and manufacture the entire product  
No second guessing and eliminates all potential for errors. 100% repeat accuracy with state of the art software to CNC machinery communication.



## DEKALB BLOWER OFFERS SIMPLE TO USE FAN SELECTION SOFTWARE

- Windows based software with full performance curves and efficiencies
- Covers all makes and models of all DeKalb Blower products
- Complete with optional wall / insulation thickness options and shaft seal arrangements
- Complete with sound spectrums and de-rates for optional airflow accessories
- Multiple languages and standards to select from
- Complete with motor selection sizing and voltage options as well



THE FAN SELECTION SOFTWARE INCLUDES ALL APPLICABLE DEKALB BLOWER DESIGNS AND SERIES OF IMPELLERS PER PRODUCT CATALOGS. THE FAN SELECTION SOFTWARE PROVIDES QUICK REFERENCE TO THE DEKALB BLOWER PRODUCTS LIBRARY WITH A FEW CLICKS OF THE MOUSE. FOR FURTHER DETAIL OF DEKALB BLOWER IMPELLERS OR DESIGNS, VISIT OUR WEBSITE @ [WWW.DEKALBBLOWER.COM](http://WWW.DEKALBBLOWER.COM) OR FEEL FREE TO GIVE US A CALL AT ANYTIME, WE WILL BE HAPPY TO ASSIST.

THE WEBSITE ALSO CONTAINS ALL PRODUCT CATALOGS IN DOWNLOADABLE AND FLIPBOOK FORM FOR QUICK REFERENCE, ALSO A COMPLETE 2D AND 3D CAD PRODUCTS LIBRARY.

## **THERMAL-MAXX**<sup>TM</sup>

HIGH TEMPERATURE DESIGN FANS TO **2200 DEG F**

## **THERMAL-FLO**<sup>TM</sup>

STANDARD DESIGN FANS TO **800 DEG F**

### **STEP 1:**

DOWNLOAD THE SOFTWARE DIRECTLY FROM THE DEKALB BLOWER WEB PAGE, OR INPUT THE FOLLOWING LINK INTO ANY COMPARABLE WEBSITE BROWSER. (DOWNLOAD THE MOST CURRENT SOFTWARE RELEASE. THE SOFTWARE RELEASES WILL BE DESIGNATED BY A HIGHER NUMERAL FOLLOWING THE PRIMARY NUMBER SETS. THE SOFTWARE IS CURRENTLY IN ITS BETA RELEASE AND IS CONSTANTLY GETTING FEATURES AND PRODUCTS ADDED TO IT AS OUR PRODUCTS LIBRARY GROWS. COPY AND PASTE THE LINK IF NEEDED.

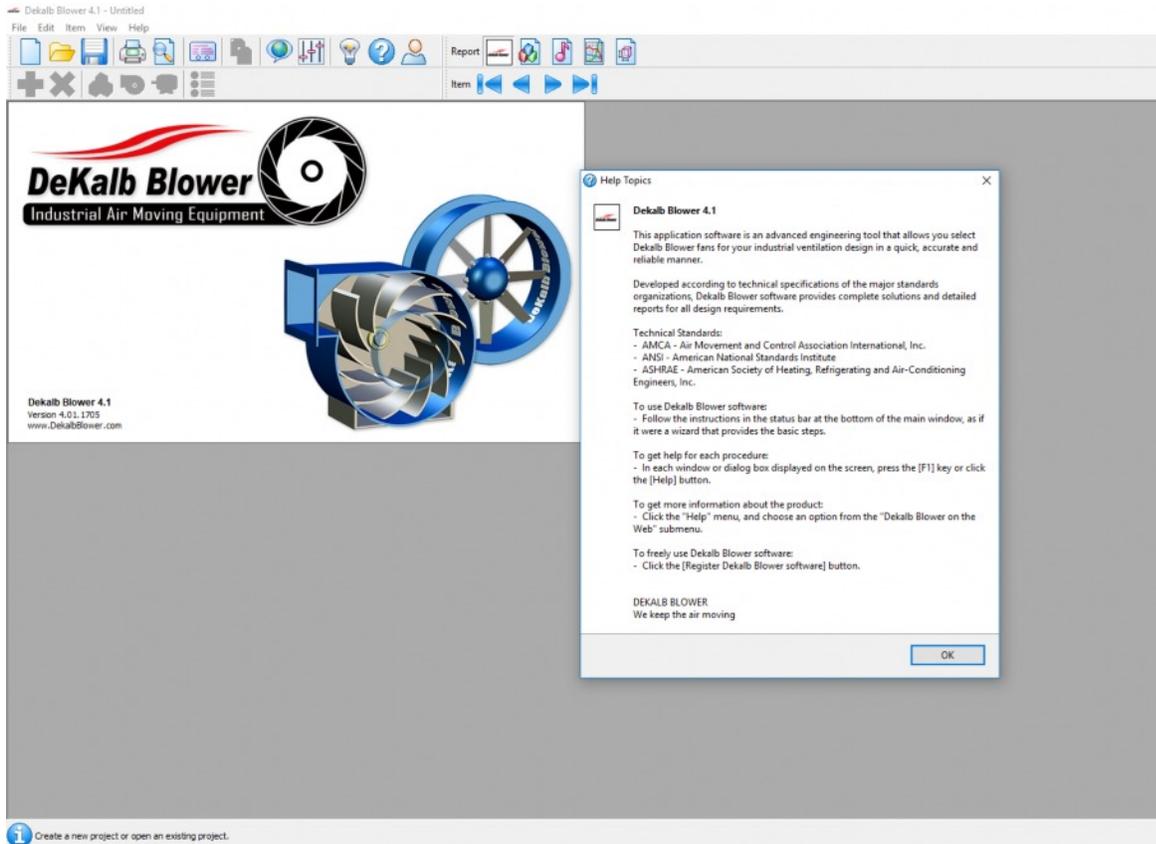
[www.ciclosoft.com/enu/case\\_1312DB\\_dekalb\\_blower.htm](http://www.ciclosoft.com/enu/case_1312DB_dekalb_blower.htm)



2017 - DEKALB BLOWER INC.

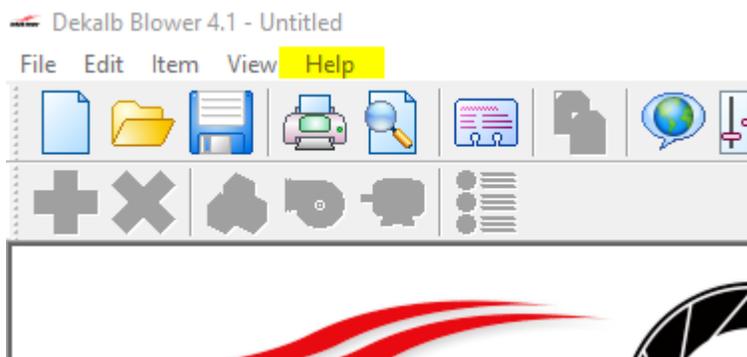
## **STEP 2:**

AFTER SOFTWARE IS LOADED AND READY TO RUN, SELECT THE LANGUAGE YOU WOULD PREFER TO USE FOR NAVIGATION.



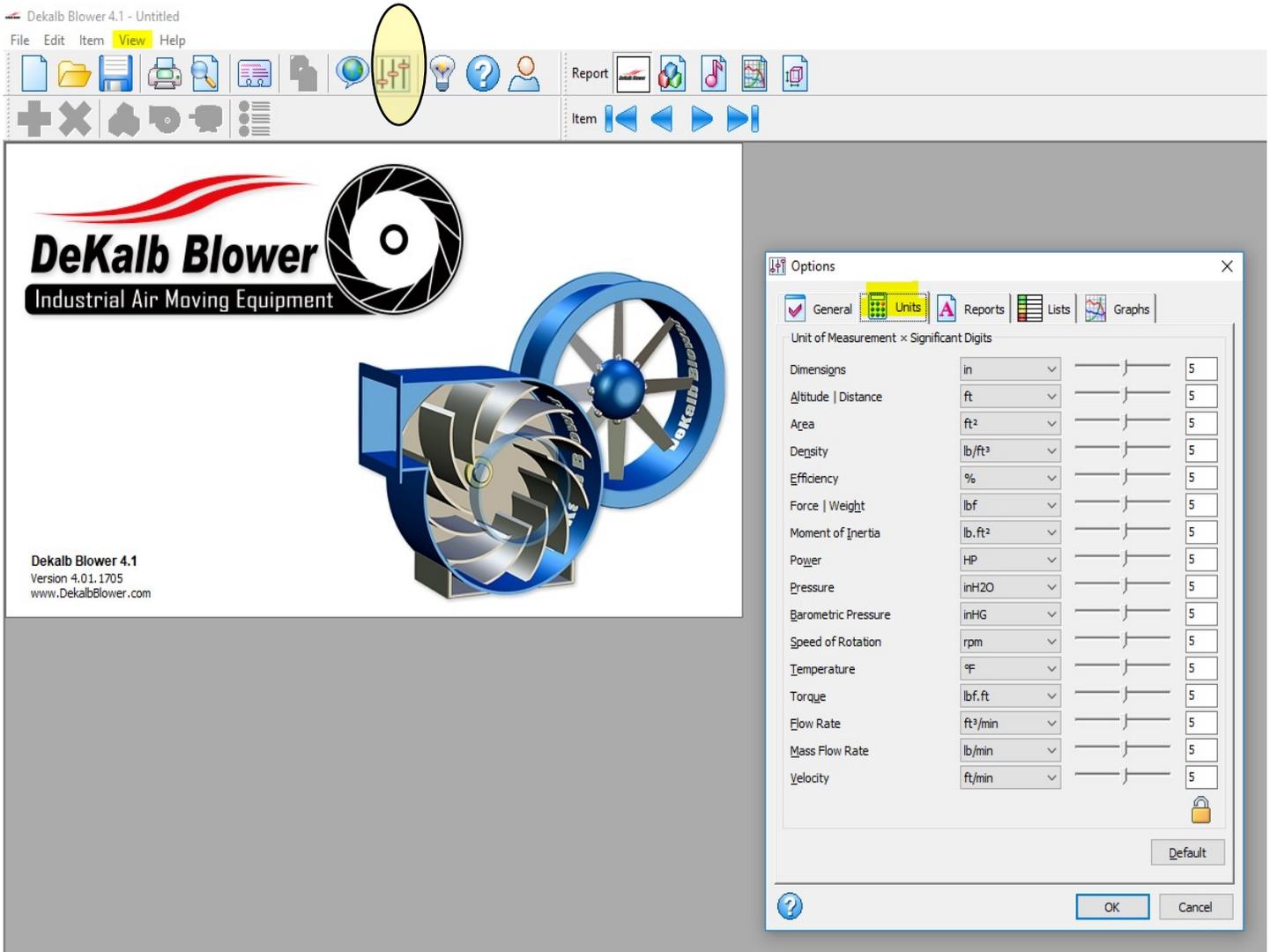
## **STEP 3:**

REGISTER THE SOFTWARE BY FOLLOWING THE HELP TAB ON THE TOOLBAR (OPTIONAL)



## **STEP 4:**

IMPORTANT, SELECT VIEW ON THE TOOLBAR, SELECT ON OPTIONS, MAKE SURE THAT THE SOFTWARE IS SET DEFAULT TO THE UNITS OF MEASURE PERTAINING TO YOUR PREFERENCE. OR YOU CAN SELECT THE OPTIONS LINK DIRECTLY FROM THE HEADER BAR.



## **STEP 5:**

WE ARE READY TO USE THE SOFTWARE. LETS GET BACK OVER TO THE HOME SCREEN TO INPUT OUR PROJECT INFO. (OPTIONAL)

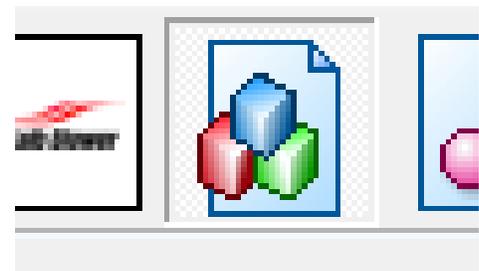
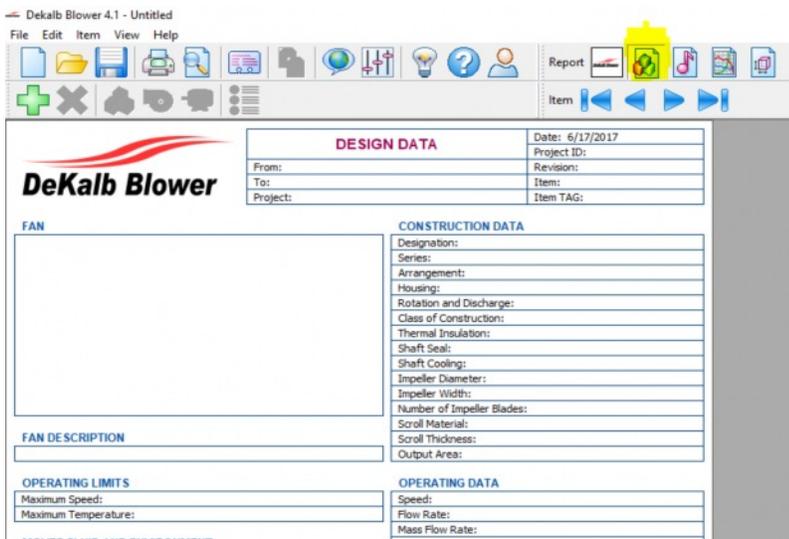
## **STEP 5 CONTINUED:**

SELECT THE FILE TAB AND SELECT “NEW PROJECT” OR SIMPLY CLICK ON THE INDEX CARD ON THE TOOLBAR BANNER



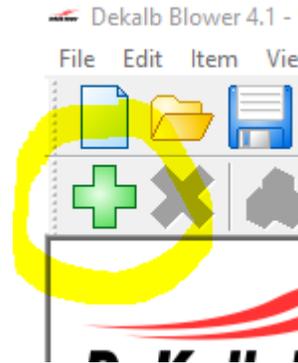
## **STEP 6:**

WE ARE READY TO INPUT OUR SYSTEM PERFORMANCE REQUIREMENTS. TO DO THIS, WE WILL CLICK THE DESIGN DATA ICON ON THE REPORT TOOLBOX BANNER.



## **STEP 7:**

CLICK THE “GREEN PLUS” ICON ON THE TOP LEFT CORNER OF THE SCREEN. LOCATED BELOW THE FILE AND NEW DOCUMENT ICON



## **STEP 8:**

AFTER CLICKING THE “GREEN PLUS” ICON, THE CONSTRUCTION DATA AND OPERATING DATA BOX APPEAR. HERE, ADD THE REQUIRED CFM, STATIC PRESSURE VALUE, TEMPERATURE- (TEMPERATURE CAN BE SELECTED AS 70 DEG.F FOR STD. AIR OPERATING CONDITIONS), OR USER MAY ENTER THE OPERATION TEMPERATURE OF THE SYSTEM TO SEE THE FANS PERFORMANCE AT OPERATING TEMPERATURE. THE SOFTWARE AUTOMATICALLY DE-RATES THE VALUES. VERY HANDY ON VFD SYSTEMS. ALTITUDE MAY ALSO BE ADJUSTED HERE AS WELL TO GET PRECISE PERFORMANCE DATA. ALSO, IF NEEDED... THE INSTALLATION AND NOISE TAB MAY BE SELECTED NEXT TO THE CONSTRUCTION DATA AND OPERATING DATA TAB TO ADJUST AND INPUT THE OPERATING SCENARIO AND DISTANCES TO ACCOMMODATE THE SOUND SPECTRUM.

A screenshot of the DeKalb Blower software interface. The 'Fan Data - New Item' dialog box is open, showing the 'Construction Data and Operating Data' tab. The 'Installation and Noise' tab is also visible and circled in yellow. The dialog box contains fields for 'Item TAG', 'Fan Description', 'Flow Rate', 'Static Pressure', 'Temperature', and 'Altitude'. The 'Construction Data' section includes dropdown menus for 'Series', 'Arrangement', 'Housing', 'Rotation and Discharge', 'Class of Construction', 'Thermal Insulation', 'Shaft Seal', 'Shaft Cooling', and 'Designation'. The 'Installation and Noise' section includes fields for 'Fan Installation', 'Duct Installation', 'Hearing Distance', and 'Distance'. The background shows the main software interface with the 'DeKalb Blower' logo and various design data fields.

## STEP 9:

NOW WE NEED TO SELECT THE TYPE OF IMPELLER DESIRED PER THE APPLICATION OF THE FAN OR BLOWER. IF ASSISTANCE IS NEEDED AT THIS POINT, FEEL FREE TO VISIT [WWW.DEKALBBLOWER.COM](http://WWW.DEKALBBLOWER.COM) FOR A COMPLETE LIST AND DESCRIPTION OF ALL PRODUCTS. ALL PRODUCTS CATALOGS ARE ALSO EASILY ACCESSIBLE THROUGH THE WEBSITE FOR FURTHER DETAIL. IF AT ANY POINT ASSISTANCE IS NEEDED, FEEL FREE TO CONTACT US DIRECTLY TO DISCUSS. THE SOFTWARE WILL ALSO AUTOMATICALLY DE RATE THE PERFORMANCE OF THE FAN IF OPERATING IN NON-CATALOGED CONDITIONS, OR IF OPERATING IN AN AIR DIFFUSER OR DUAL OUTLET SCROLL CONSISTING OF MULTIPLE OPENING ORIFICES AND DETERMINE PROPER PRESSURE LOSSES FOR EXACT PERFORMANCE DATA IN ALL SCENARIOS. THE SOFTWARE WILL ALSO GIVE THE USER THE OPTIONS OF ROTATION, CONSTRUCTION CLASS, THERMAL WALL, OR INSULATED PLUG INSULATION THICKNESS, SHAFT SEAL ARRANGEMENTS FOR CONTROLLED ATMOSPHERES, AND SHAFT COOLING ARRANGEMENTS.

DeKalb Blower 4.1 - Untitled

File Edit Item View Help

Report

Item

**DeKalb Blower**

**DESIGN DATA**

Date: 6/17/2017  
Project ID:  
Revision:  
Item:  
Item TAG:

From:  
To:  
Project:

FAN

FAN DESCRIPTION

OPERATING LIMITS

Maximum Speed:  
Maximum Temperature:

MOVED FLUID AND ENVIRONMENT

Type of Fluid:  
Temperature:  
Density:  
Altitude:  
Barometric Pressure:

INSTALLATION AND NOISE

Fan Installation:  
Duct Installation:  
Hearing Distance:  
Distance:

ELECTRIC MOTOR

Power:  
Frequency:  
Number of Poles:  
Speed:

Fan Data - New Item

Construction Data and Operating Data | Installation and Noise

Item Identification

Item TAG  
Fan Description

Operating Data

Flow Rate: 5500 ft<sup>3</sup>/min  
Static Pressure: 2.5 inH<sub>2</sub>O  
Temperature: 70 °F  
Altitude: 0 ft

Construction Data

Series: BT - Backward Inclined Impeller  
Arrangement: AMCA 9 - Plug  
Housing: No Housing - Fixed Flange  
Rotation and Discharge: Clockwise - CW  
Class of Construction: Design 800  
Thermal Insulation: No Insulation  
Shaft Seal: No Seal  
Shaft Cooling: No Cooling  
Designation: BT-P9-FF-CW-D800

OK Cancel

## STEP 10:

THE SOFTWARE NOW OUTPUTS ALL DESIRED PRODUCT THAT WILL SUIT THE APPLICATION. HOWEVER, WE DO UNDERSTAND THAT ALL CONDITIONS OR INSTALLATIONS ARE NOT IDEAL, SO THE SOFTWARE GIVES THE OPTION OF ALTERNATE DESIGNATIONS AS REFERENCE. IN SOME CIRCUMSTANCES A NARROWER WIDTH IMPELLER IS MORE IDEAL DUE TO SIZING CONSTRAINTS. OR BY SELECTING ANY OF THE DESIGNATIONS ON THE TOP TABLE TOOLBAR, REQUIREMENTS CAN BE MET FROM SPEED TO HP TO SOUND PRESSURE AND TOTAL EFFICIENCY. THE USER JUST NEEDS TO SELECT THE APPROPRIATE TAB FOR QUICK REFERENCE. ON THE LEFT SIDE OF THE TOOL BOX BANNER IS ALSO FILTERS FOR FANS THAT WILL BEST FIT, TO YELLOW FILTERS THAT THE FAN WILL HAVE SOME NON-IDEAL ISSUES, AND RED WHICH MEANS THE FAN WILL NOT FIT THE APPLICATION. AFTER NAVIGATING AND BEST SELECTING THE FAN THAT SUITS THE APPLICATION, HIGHLIGHT OVER THE SELECTED FAN SO THE SELECTION IS HIGHLIGHTED BLUE, THEN SELECT THE “OK” ICON OR SIMPLY DOUBLE CLICK ON THE SELECTED FAN.

DeKalb Blower 4.1 - Untitled

File Edit Item View Help

Report

Item

Fan - Item 2 of 2

OK Cancel

Designation	Speed [rpm]	Output Velocity [ft/min]	Flow Rate [ft <sup>3</sup> /min]	Static Pressure [inH <sub>2</sub> O]	Total Pressure [inH <sub>2</sub> O]	Power [HP]	Static Efficiency [%]	Total Efficiency [%]	Sound Pressure [dBA]
FHD-245-100-P9-LF	725.57	961.19	7000	3	3.0574	5.9485	55.654	56.719	78.9
FHD-300-066-P9-LF	592.55	961.37	7000	3	3.0575	5.9485	55.654	56.72	78.9
FHD-330-050-P9-LF	540.5	1058.3	7000	3	3.0696	5.9871	55.295	56.579	79
FHD-222-100-P9-LF	809	1165.3	7000	3	3.0844	6.1297	54.009	55.529	79.4
FHD-270-066-P9-LF	668.42	1188.4	7000	3	3.0878	6.172	53.639	55.209	79.4
FHD-300-050-P9-LF	608.79	1277	7000	3	3.1014	6.3678	51.989	53.747	79.8
FHD-200-100-P9-LF	939.38	1442	7000	3	3.1293	6.8497	48.332	50.414	80.8
FHD-245-066-P9-LF	768.76	1455.1	7000	3	3.1316	6.8936	48.024	50.131	80.8
FHD-270-050-P9-LF	716.32	1584.5	7000	3	3.1561	7.3682	44.93	47.268	81.6
FHD-182-100-P9-LF	1091.2	1715.2	7000	3	3.1829	7.9165	41.819	44.368	82.8
FHD-222-066-P9-LF	901.83	1747.9	7000	3	3.19	8.0637	41.055	43.655	82.7
FHD-245-050-P9-LF	854.08	1922.4	7000	3	3.2298	8.9136	37.141	39.985	83.8
FHD-165-100-P9-LF	1326.4	2102.3	7000	3	3.2748	9.8992	33.443	36.506	85.2
FHD-200-066-P9-LF	1114.9	2175.3	7000	3	3.2942	10.331	32.044	35.187	85.7
FHD-222-050-P9-LF	1042.7	2330.6	7000	3	3.3377	11.306	29.28	32.576	86.6
FHD-150-100-P9-LF	1637.9	2554.1	7000	3	3.4056	12.849	25.764	29.248	87.8
FHD-182-066-P9-LF	1363.7	2604.6	7000	3	3.4218	13.221	25.041	28.562	88.1
FHD-200-050-P9-LF	1335.4	2884.1	7000	3	3.5172	15.423	21.465	25.165	89.5
FHD-135-100-P9-LF	2121.7	3168.9	7000	3	3.6244	17.923	18.471	22.315	90.5
FHD-165-066-P9-LF	1738.4	3174.8	7000	3	3.6267	17.977	18.415	22.262	90.9
FHD-182-050-P9-LF	1669.9	3430.5	7000	3	3.7317	20.444	16.194	20.143	92
FHD-165-050-P9-LF	2188.5	4204.5	7000	3	4.0991	29.144	11.359	15.521	94.6

FAN DESCRIPTION

OPERATING LIMIT

Maximum Speed:

Maximum Temperature:

MOVED FLUID AND

Type of Fluid: Air

Temperature: 70 °F

Density: 0.074928 lb/ft<sup>3</sup>

Altitude: 0 ft

Barometric Pressure:

INSTALLATION AND

Fan Installation: Fan

Duct Installation: Ty

Hearing Distance: Af

Distance: 5 ft

# STEP 11:

AFTER SELECTING THE FAN, THE MOTOR SELECTION BOX APPEARS. HERE WE NEED TO SELECT AN ELECTRIC MOTOR THAT WILL BEST SUIT THE CONDITIONS. IF A PREFERRED MOTOR IS DESIRED, SIMPLY ENTER IT INTO THE ELECTRICAL MOTOR DESCRIPTION. NEXT SELECT YOUR STANDARDS (NEMA) OR (IEC) THE POWER SUPPLY AND FREQUENCY, HZ, POLES, etc. IF AT ANYTIME ASSISTANCE IS NEEDED PLEASE FEEL FREE TO CONTACT US DIRECTLY.

DeKalb Blower 4.1 - Untitled

File Edit Item View Help

Report

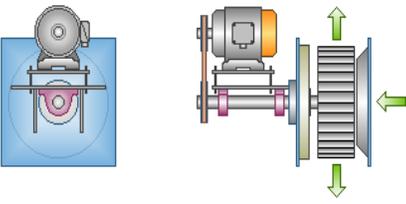
Item



**DESIGN DATA**

Date:	6/17/2017
Project ID:	
From:	
To:	
Project:	
Revision:	
Item:	2 of 2
Item TAG:	

**FAN**



**FAN DESCRIPTION**

**OPERATING LIMITS**

Maximum Speed:	1150 rpm
Maximum Temperature:	1550 °F

**MOVED FLUID AND ENVIRONMENT**

Type of Fluid:	Air
Temperature:	70 °F
Density:	0.074928 lb/ft³
Altitude:	0 ft
Barometric Pressure:	29.921 inHG

**INSTALLATION AND NOISE**

Fan Installation:	Fan on the floor, wall or ceiling of the room
Duct Installation:	Type A - Free Inlet - Free Outlet
Hearing Distance:	AMCA standard distance - American System
Distance:	5 ft

**ELECTRIC MOTOR**



**CONSTRUCTION DATA**

Designation:	FHD-330-050-P9-LF-CW-D1550-T7-XA-ZA
Series:	FHD - Forward Curved Impeller - High Temperature
Arrangement:	AMCA 9 - Plug
Housing:	No Housing - Loose Flange
Rotation and Discharge:	Clockwise - CW
Class of Construction:	Design 1550
Thermal Insulation:	Layer Thickness - 7 inches
Shaft Seal:	Air Dam Seal
Shaft Cooling:	Air Cooling - Heat Slinger
Impeller Diameter:	33 in
Impeller Width:	9.1875 in
Number of Impeller Blades:	48
Scroll Material:	
Scroll Thickness:	0 in
Output Area:	6.6145 ft²

**OPERATING DATA**

Speed:	540.5 rpm
Flow Rate:	7000 ft³/min
Mass Flow Rate:	524.5 lb/min
Static Pressure:	3 inH2O
Velocity Pressure:	0.069632 inH2O
Total Pressure:	3.0696 inH2O
Power:	5.9871 HP
Static Efficiency:	55.295 %
Total Efficiency:	56.579 %
Tip Velocity:	4669.6 ft/min
Output Velocity:	1058.3 ft/min
Sound Pressure Level:	79 dBA
Minimum Flow Rate at Speed:	6289.3 ft³/min
Maximum Flow Rate at Speed:	14674 ft³/min
Maximum Power at Speed:	15.386 HP

**CONSTRUCTION DATA**

Power:	
Frequency:	
Number of Poles:	
Speed:	

**Electric Motor - Item 2 of 2**

Electric Motor - Alternating Current - Asynchronous - Low Voltage

Electric Motor Description

Standards Organization: NEMA - National Electrical Manufacturers Association

Motor Type - Enclosure: Three Phase - General Purpose - TEFC

Frequency: 60 Hz

Number of Poles: 4 poles

Power: 7.5 HP

Speed: 1740 rpm

Motor Frame: 213T

Shaft Diameter: 1.375 in

Shaft Connection: ANSI B17.1 - Parallel Key

Key Size [in]: 0.3125 x 0.3125

Selection Status:  OK. However, the speed of the electric motor is higher than the recommended spe

OK Cancel

## STEP 12:

WE ARE NOW COMPLETE, WE CAN ALSO NOW UTILIZE THE OTHER POWERFUL TOOLS THAT CAN BE PROVIDED FOR THE SELECTED FAN SUCH AS SOUND SPECTRUM, PERFORMANCE GRAPH, AND DRAWINGS. AT ANYTIME, THE FILE CAN BE SAVED, PRINTED, OR EVEN EMAILED DIRECT AS AN ATTACHMENT TO [SALES@DEKALBBLOWER.COM](mailto:SALES@DEKALBBLOWER.COM) EMAIL FOR AN **INSTANT QUOTE**.

Dekalb Blower 4.1 - Untitled

File Edit Item View Help

DESIGN DATA	
Date:	6/17/2017
Project ID:	
From:	Revision:
To:	Item: 2 of 2
Project:	Item TAG:

**DeKalb Blower**

**FAN**

**CONSTRUCTION DATA**

Designation:	FHD-330-050-P9-LF-CW-D1550-T7-XA-ZA
Series:	FHD - Forward Curved Impeller - High Temperature
Arrangement:	AMCA 9 - Plug
Housing:	No Housing - Loose Flange
Rotation and Discharge:	Clockwise - CW
Class of Construction:	Design 1550
Thermal Insulation:	Layer Thickness - 7 inches
Shaft Seal:	Air Dam Seal
Shaft Cooling:	Air Cooling - Heat Slinger
Impeller Diameter:	33 in
Impeller Width:	9.1875 in
Number of Impeller Blades:	48
Scroll Material:	
Scroll Thickness:	0 in
Output Area:	6.6145 ft <sup>2</sup>

**FAN DESCRIPTION**

**OPERATING LIMITS**

Maximum Speed:	1150 rpm
Maximum Temperature:	1550 °F

**MOVED FLUID AND ENVIRONMENT**

Type of Fluid:	Air
Temperature:	70 °F
Density:	0.074928 lb/ft <sup>3</sup>
Altitude:	0 ft
Barometric Pressure:	29.921 inHG

**INSTALLATION AND NOISE**

Fan Installation:	Fan on the floor, wall or ceiling of the room
Duct Installation:	Type A - Free Inlet - Free Outlet
Hearing Distance:	AMCA standard distance - American System
Distance:	5 ft

**ELECTRIC MOTOR**

NEMA - National Electrical Manufacturers Association
Three Phase - General Purpose - TEFC
Alternating Current
Asynchronous
Low Voltage

**CONSTRUCTION DATA**

Power:	7.5 HP
Frequency:	60 Hz
Number of Poles:	4 poles
Speed:	1740 rpm
Motor Frame:	213T
Shaft Connection:	ANSI B17.1 - Parallel Key
Shaft Diameter:	1.375 in
Key Size:	0.3125 in × 0.3125 in

**OPERATING DATA**

Speed:	540.5 rpm
Flow Rate:	7000 ft <sup>3</sup> /min
Mass Flow Rate:	524.5 lb/min
Static Pressure:	3 inH2O
Velocity Pressure:	0.069632 inH2O
Total Pressure:	3.0696 inH2O
Power:	5.9871 HP
Static Efficiency:	55.295 %
Total Efficiency:	56.579 %
Tip Velocity:	4669.6 ft/min
Output Velocity:	1058.3 ft/min
Sound Pressure Level:	79 dBA
Minimum Flow Rate at Speed:	6289.3 ft <sup>3</sup> /min
Maximum Flow Rate at Speed:	14674 ft <sup>3</sup> /min
Maximum Power at Speed:	15.386 HP

**ELECTRIC MOTOR DESCRIPTION**

**NOTES**

IF AT ANYTIME YOU HAVE ANOTHER FAN TO INPUT,  
 SELECT THE GREEN PLUS TAB, AND FOLLOW THE SAME STEPS TO  
 CREATE A NEW REPORT.

IF SELECTED A FAN, BUT FORGOT CERTAIN PARAMETERS OR  
 MIS-TYPED INFORMATION, OR TO SEE OTHER POSSIBLE SELECTIONS,  
 SELECT THE BLOWER ICON OR THE ELECTRICAL MOTOR  
 ICON HIGHLIGHTED BELOW TO MAKE ANY EDITS. THE SOFTWARE  
 WILL QUICKLY RE-CALCULATE THE NEW PARAMETERS. AFTER  
 SELECTION IS MADE, VISIT [WWW.DEKALBBLOWER.COM](http://WWW.DEKALBBLOWER.COM) FOR  
 FULL 3D AND 2D SCALED MODELS DOWNLOADABLE DIRECT  
 FROM THE WEB PAGE.

Dekalb Blower 4.1 - Untitled

File Edit Item View Help

**DeKalb Blower**

DESIGN DATA	
Date:	6/17/2017
Project ID:	
Revision:	
Item:	2 of 2
Item TAG:	

**FAN**

**FAN DESCRIPTION**

**OPERATING LIMITS**

Maximum Speed:	1150 rpm
Maximum Temperature:	1550 °F

**CONSTRUCTION DATA**

Designation:	FHD-330-050-P9-LF-CW-D1550-T7-XA-ZA
Series:	FHD - Forward Curved Impeller - High Temperature
Arrangement:	AMCA 9 - Plug
Housing:	No Housing - Loose Flange
Rotation and Discharge:	Clockwise - CW
Class of Construction:	Design 1550
Thermal Insulation:	Layer Thickness - 7 inches
Shaft Seal:	Air Dam Seal
Shaft Cooling:	Air Cooling - Heat Slinger
Impeller Diameter:	33 in
Impeller Width:	9.1875 in
Number of Impeller Blades:	48
Scroll Material:	
Scroll Thickness:	0 in
Output Area:	6.6145 ft <sup>2</sup>

**OPERATING DATA**

Speed:	540.5 rpm
Flow Rate:	7000 ft <sup>3</sup> /min
Mass Flow Rate:	524.5 lb/min

DOUBLE DUTY™



# Other **DeKalb Blower**™ fans for INDUSTRIAL APPLICATIONS

## RB — RADIAL BLADE FANS

- Self cleaning blade where dust or light particles are in air stream
- For applications requiring higher pressures at lower air capacities
- Temperatures to 1800 Deg F.

**THERMAL-MAXX**™ **THERMAL-FLO**™

## BT — BACKWARD INCLINED FANS

- Maximum efficiency for air supply and exhaust applications
- Non-overloading design ideal for systems with fluctuating system resistance
- Temperatures to 1300 Deg F.

**THERMAL-MAXX**™ **THERMAL-FLO**™

## PAX — AXIAL FLOW FANS

- One way or reversible flow designs
- For applications requiring high air volumes at low pressures
- Temperatures to 1800 Deg F.

**THERMAL-MAXX**™ **THERMAL-FLO**™



**THERMAL-MAXX**™

HIGH TEMPERATURE DESIGN FANS TO 2200 DEG F

**THERMAL-FLO**™

STANDARD DESIGN FANS TO 800 DEG F

[www. DeKalb Blower .com](http://www.DeKalbBlower.com)

Tel:630-553-8831 • Yorkville, IL USA

[SALES@DEKALBBLOWER.COM](mailto:SALES@DEKALBBLOWER.COM)



Designed and Engineered  
IN THE USA