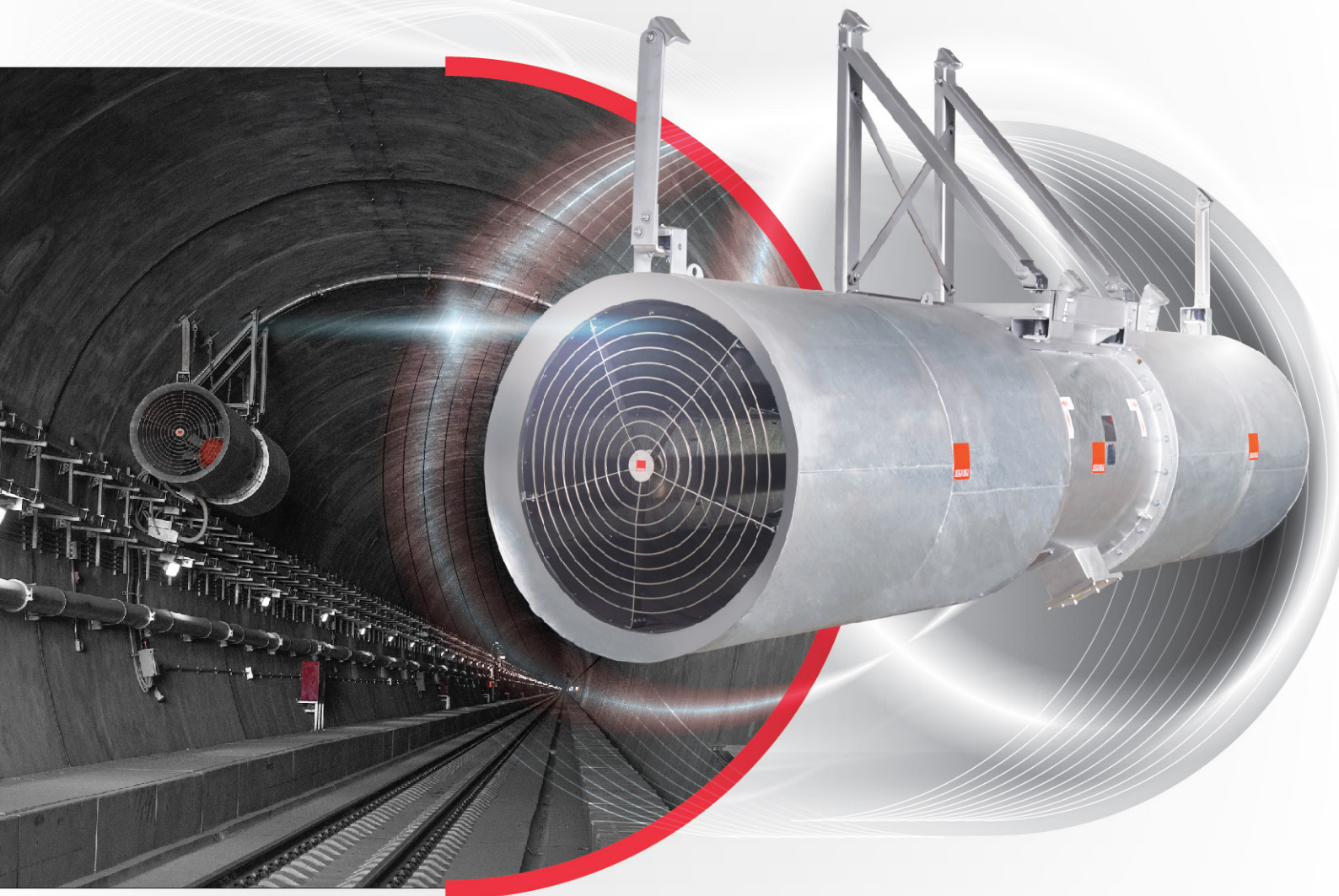




Underground Ventilation Division

KJF SERIES

TUNNEL JET FAN



Engineering the Future of
Tunnel Ventilation

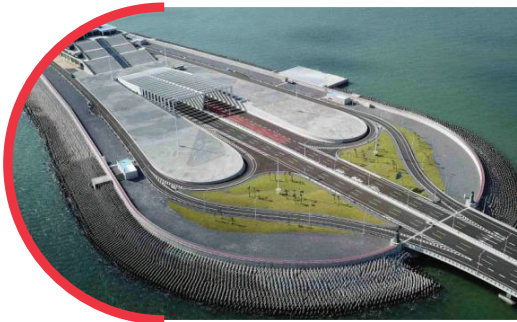


Underground Ventilation Division



Founded in 1951, Soler & Palau Ventilation Group is a global leader in ventilation solutions across residential, commercial, industrial, and underground applications. Kruger Group, established in 1985, strengthens the Group's presence in the Asia Pacific region. Since joining Soler & Palau in 2009, Kruger combines European engineering expertise with strong regional capabilities to deliver globally consistent, locally supported ventilation solutions.

S&P-Kruger and Underground Ventilation



A Trusted Partner in Tunnel Ventilation Systems

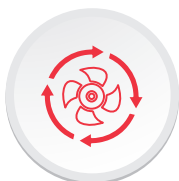
S&P Kruger Underground Ventilation Division combines the engineering expertise and global resources of Soler & Palau Ventilation Group to deliver reliable ventilation solutions for underground infrastructure worldwide.

Since 2009, Kruger has supported major tunnel projects across Asia, and today serves markets in Asia, Europe, Latin America, and North America.

With local manufacturing, five global R&D centers, and AMCA and ISO accredited laboratory, S&P Kruger delivers customized, complete ventilation packages focused on safety, performance, and long term reliability globally.



"Complete Solution for Tunnel Ventilation"



Complete
Ventilation Solution



Local Engineering
Support Across Asia



AMCA and ISO
Accredited Laboratory



Fully Customized
product

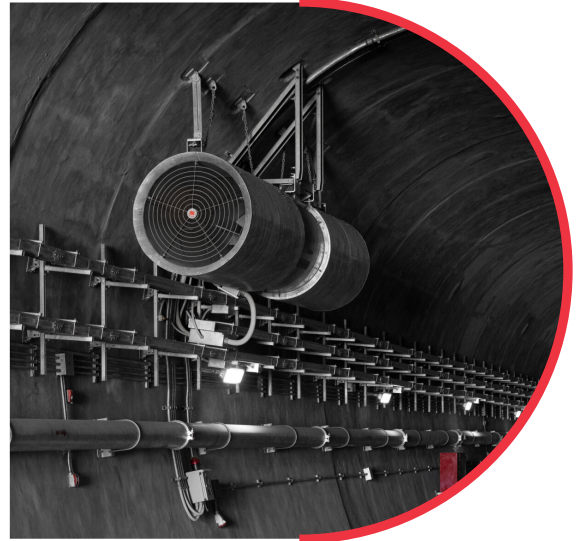


Product
certification

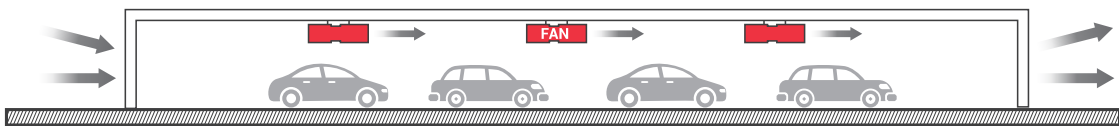
Jet fan and Tunnel Ventilation Overview

Tunnel ventilation systems, including Tunnel Jet Fans, play a crucial role in maintaining safe and efficient operations within tunnels. These systems ensure adequate air circulation, control smoke during emergencies, and maintain acceptable air quality for people.

Kruger's Tunnel Jet Fans are designed for optimal performance and reliability, meeting the stringent demands of tunnel projects worldwide. With advanced design and customization capabilities, we deliver ventilation solutions to match the unique requirements of each project, ensuring safety, efficiency, and long-term operation.

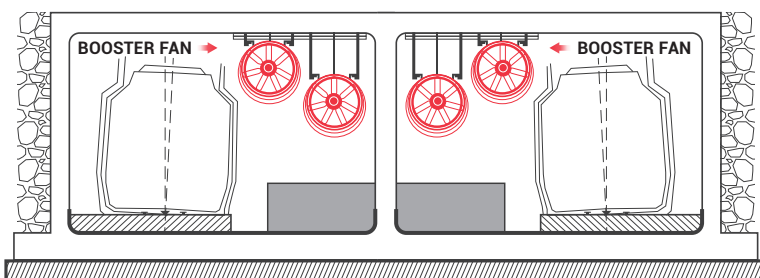


Longitudinal Ventilation with Jet fan



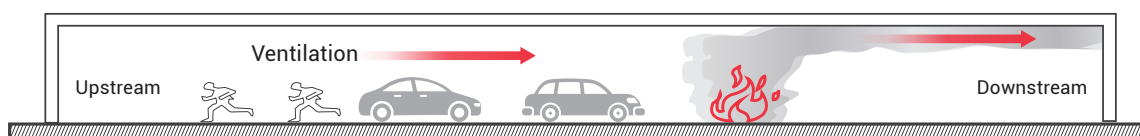
Longitudinal ventilation systems, utilizing Jet Fans, are a widely adopted solution for managing airflow in tunnels. These systems operate by inducing and directing air along the tunnel's length, effectively controlling air quality under normal conditions and managing smoke during emergencies such as fires.

Metro / MRT Tunnel Ventilation with Jet fan



In Metro and MRT (Mass Rapid Transit) systems, Tunnel Booster Fans (TBFs) play a crucial role in tunnel ventilation. Depending on the system's design, these fans may operate independently or work alongside axial fans. They are specifically designed and installed to efficiently move large volumes of air over extended distances.

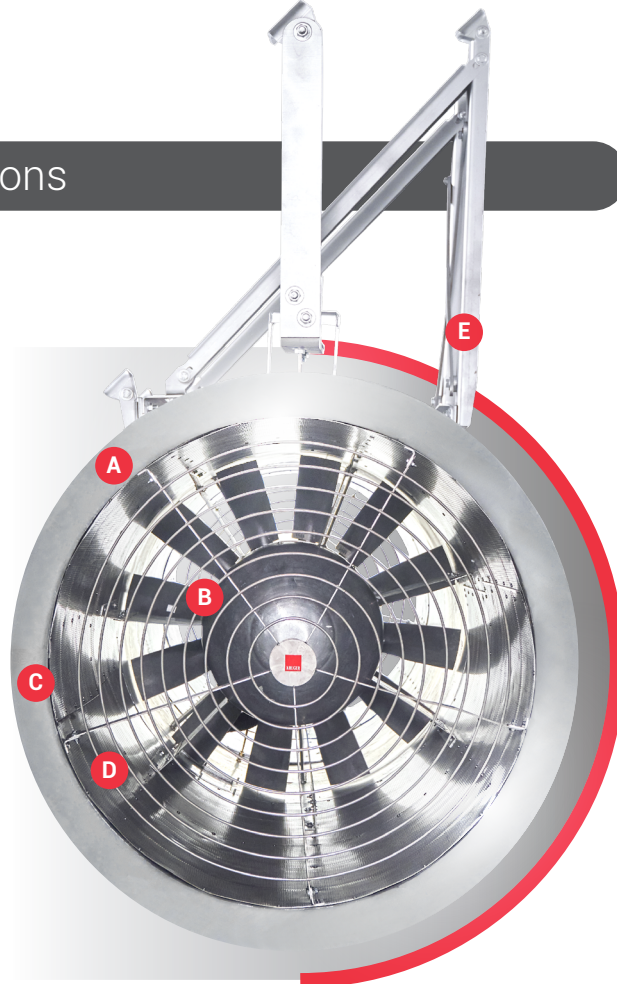
Smoke exhaust in Fire Scenario



In case of a fire, the primary role of jet fans is to control the movement of smoke and hot gases, helping to clear the tunnel for evacuation and firefighting efforts. Smoke and heat need to be directed away from evacuation routes to ensure safety.

Kruger Tunnel Jet Fan Specifications

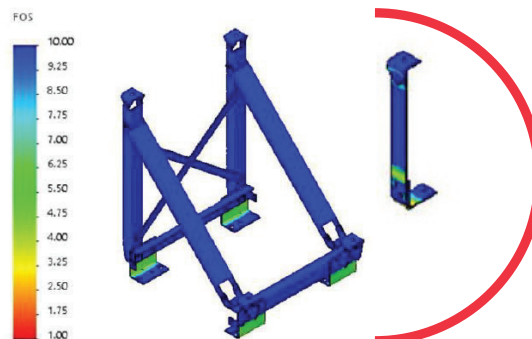
- A Casing:** High grade carbon steel / stainless steel material with robust design for long design lifetime.
- B Impeller and Blades:**
Design for unidirectional and reversible direction.
Airfoil blades for high aerodynamic efficiency.
Aluminum and stainless steel materials are available.
- C Coating:** Hot dip galvanization as per ASTM A123 / ISO 1461 for steel material. Painting can be provided upon request. Corrosion resistance up to C5M.
- D Silencers:** Specifically design to reduce sound in each band generated by Kruger jet fan. The in-fill material is non-flammable.
- E Mounting Structure:** Robust designed for long design lifetime and safety operation. Customized design to match the tunnel profile and installation conditions.



Customized designs

Kruger Tunnel Jet Fan can be customized to exactly match with the requirements of each project.

Tailored solutions backed by Finite Element Analysis (FEA) to ensure structural integrity.



Testing



Thrust and Sound Performance of Kruger Tunnel Jet Fans have been tested as per AMCA 250 and AMCA 300 by one of the largest AMCA accredited laboratory at Kruger Ventilation Asia.

Advanced Factory Acceptance Test (AFAT) can be conducted before fan dispatching to site.

Certification

Kruger Ventilation Industries Asia Co., Ltd. certifies that the KJF series shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Ratings Programs.

Certified by APPLUS and TUV SUD which are leading international service organizations focusing on consulting, testing, certification and training. KJF series was tested in accordance with EN 12101-3: 2015.

Class	Temperature (°C)	Minimum Functioning Period (minutes)
Ff250	250	120
F300	300	60
Ff300	300	120
F400	400	120



Stainless Steel Impeller



Kruger has developed the Tunnel Jet fan to enhance performance, expand the operating range, and improve durability and reliability. One key innovation is the use of a stainless steel (SS316L) impeller.

- ▶ High Tensile Strength
- ▶ Hollow blade design (light weight)
- ▶ Optimum for using at high-temperature conditions
- ▶ Excellence Corrosion Resistance
- ▶ Fatigue limit

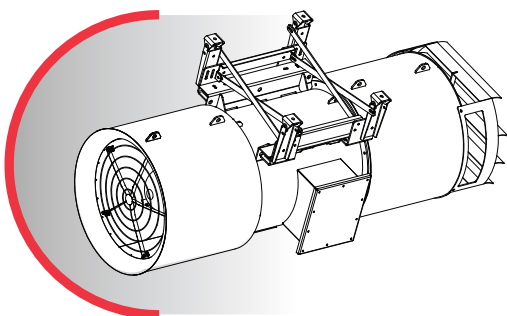
Corrosion resistance

SS316L stainless steel provides exceptional resistance to rust and corrosion, making it ideal for withstanding the salty and humid conditions i.e. marine environments. This ensures a longer lifespan for the fan.

Fan blades are designed to withstand C5M environmental conditions.



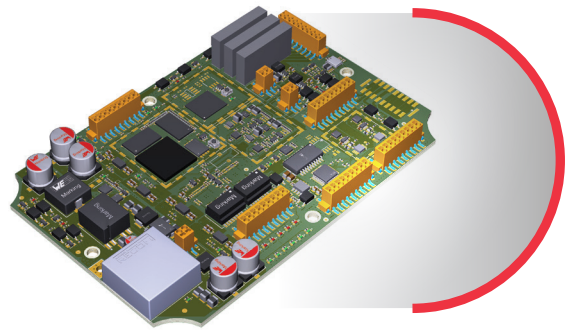
Accessories



Optional accessories such as rubber isolators, deflectors, protection nets, safety chains, vibration and RTD sensors, differential pressure transmitters, fall-down switches, and plug-and-socket outlets can be provided upon request.

KSC Smart Data acquisition card

The KSC series from Kruger seamlessly gathers all fan sensor data and transfers it to the PLC over LAN using Modbus TCP. By replacing bulky analog cabling, it reduces installation costs, eliminates signal loss, and streamlines setup with true plug-and-play convenience. With integrated data analytics and heater control, the KSC enables predictive maintenance and delivers dependable, efficient tunnel ventilation.



Product Feature

- ▶ **Fast Installation:** Plug-and-play setup minimizes time and prevents wiring errors.
- ▶ **Stable Connectivity:** High-speed Modbus TCP ensures reliable data transmission over LAN.
- ▶ **Proactive Maintenance:** Integrated analytics prevent downtime with predictive insights.
- ▶ **Motor Protection:** Automated heater control prevents moisture damage and extends motor life.
- ▶ **Global Compliance:** Fully CE-certified to meet international safety and EMC standards.
- ▶ **Durable Design:** IP55-rated enclosure ensures performance in harsh tunnel environments.



Simplified control system

- IP address for all fans in Tunnel.
- Converts analog signal to digital signal.
No analog signal loss.
- Send the collection sensor data to PLC via LAN cable.
- Built-in the control logic for the motor space heater
- Built-in the data analytic function to send
Pre-alarm/Alarm signal to PLC to notify the abnormal.



Easy Maintenance

- Continue monitoring the health of the fan and motor.
- Notification for maintenance scheduling
- Notification for predictive maintenance.
- Spectrum analyzer function to identify the root cause of the vibration in the fan.



Easy Installation

- Plug & Play connection
- Reduces installation costs.
- All the signals are connected and tested in factory.
- Avoids connection mistakes on site.

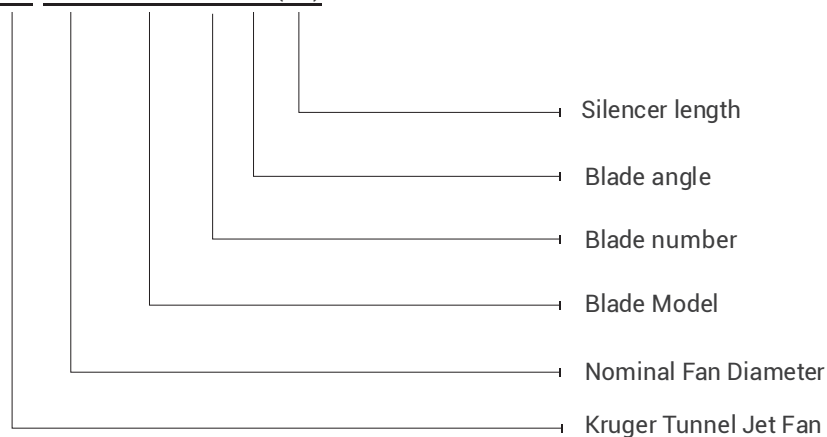


Cost Saving

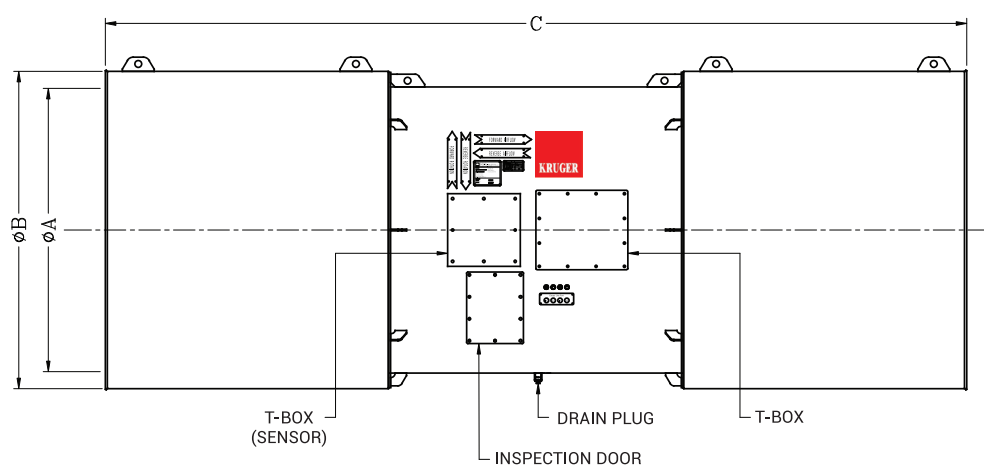
- Reduce the cabling costs by change 20 cores cable to LAN cable.
- Reduce cable length by using LAN Hub.
- Remove Analog input module for PLC.

Kruger Tunnel Jet Fan Nomenclature

MODEL: KJF 1000 -RC225 - 9 - 35 (1D)



Dimension



Model	A	B	C (1D)	C (2D)
710	710	860	2050	3470
800	800	950	2310	3910
900	900	1050	2600	4400
1000	1000	1200	2900	4900
1120	1120	1320	3140	5380
1250	1250	1450	3620	6120
1400	1400	1600	4050	6850

Technical data - Reversible Jet Fans

50 Hz															
Diameter	Model	Power	Thrust		Flow Rate		Fan Absorbed Power		Outlet Velocity		Speed	Total Sound Power Level*		Total Sound Pressure Level**	
			Forward	Reverse	Forward	Reverse	Forward	Reverse	Forward	Reverse		Forward	Reverse	Forward	Reverse
(mm)		(kW)	(N)	(N)	(m3/s)	(m3/s)	(kW)	(kW)	(m/s)	(m/s)	(rpm)	(dB(A))	(dB(A))	(dB(A))	(dB(A))
710	KJF 710-RC125-6-32 (1D)	15	520	510	13.1	13.0	14.9	14.4	33.1	32.8	2940	106	111	75	80
	KJF 710-RC125-6-34 (1D)	18.5	568	549	13.7	13.5	17.8	17.6	34.6	34.0	2940	108	110	77	79
	KJF 710-RC125-6-37 (1D)	22	630	597	14.4	14.0	21.8	21.8	36.4	35.4	2955	108	110	77	79
	KJF 710-RC125-6-40 (1D)	30	665	609	14.8	14.2	30.0	30.0	37.4	35.8	2965	110	112	79	81
710	KJF 710-RC125-9-29 (1D)	15	499	497	12.8	12.8	15.0	15.0	32.4	32.3	2940	108	111	77	80
	KJF 710-RC125-9-31 (1D)	18.5	558	557	13.6	13.6	17.8	17.9	34.3	34.2	2940	109	111	78	80
	KJF 710-RC125-9-34 (1D)	22	617	627	14.3	14.4	21.7	21.9	36.0	36.3	2955	110	113	79	82
	KJF 710-RC125-9-39 (1D)	30	723	712	15.4	15.3	29.7	29.8	39.0	38.7	2965	111	114	80	83
800	KJF 800-RC125-7-25 (1D)	18.5	642	619	16.4	16.1	18.2	17.5	32.6	32.0	2940	109	112	78	81
	KJF 800-RC125-7-28 (1D)	22	725	697	17.4	17.1	22.0	20.8	34.7	34.0	2955	110	113	79	82
	KJF 800-RC125-7-30 (1D)	30	878	853	19.2	18.9	29.9	29.4	38.2	37.6	2965	113	115	82	84
	KJF 800-RC125-7-32 (1D)	37	971	936	20.2	19.8	35.6	35.4	40.1	39.4	2965	114	116	83	85
900	KJF 900-RC125-9-23 (1D)	22	752	721	20.0	19.6	21.1	20.1	31.4	30.7	2955	112	116	81	85
	KJF 900-RC125-9-26 (1D)	30	1017	987	23.2	22.9	29.9	30.0	36.5	36.0	2965	115	118	84	87
	KJF 900-RC125-9-29 (1D)	37	1132	1108	24.5	24.2	36.8	37.0	38.5	38.1	2965	116	119	85	88
	KJF 900-RC125-9-30 (1D)	45	1286	1246	26.1	25.7	44.5	44.6	41.0	40.4	2970	117	119	86	88
1000	KJF 1000-RC225-9-35 (1D)	22	777	757	22.6	22.3	21.5	21.3	28.7	28.3	1475	103	106	72	75
	KJF 1000-RC225-9-40 (1D)	30	923	891	24.6	24.1	29.7	28.9	31.3	30.7	1475	105	108	74	77
	KJF 1000-RC225-9-44 (1D)	37	1005	961	25.6	25.1	36.6	36.3	32.7	31.9	1480	106	108	75	77
1120	KJF 1120-RC225-9-27 (1D)	22	941	947	27.8	27.9	21.8	21.9	28.2	28.3	1475	106	107	75	76
	KJF 1120-RC225-9-31 (1D)	30	1128	1135	30.4	30.5	29.7	29.9	30.9	31.0	1475	107	107	76	76
	KJF 1120-RC225-9-34 (1D)	37	1243	1226	31.9	31.7	36.7	36.3	32.4	32.2	1480	109	108	78	77
	KJF 1120-RC225-9-38 (1D)	45	1407	1352	34.0	33.3	44.8	44.9	34.5	33.8	1480	109	110	78	79
1250	KJF 1250-RC225-9-24 (1D)	30	1278	1252	36.2	35.8	29.8	29.8	29.5	29.2	1475	108	110	77	79
	KJF 1250-RC225-9-27 (1D)	37	1426	1392	38.2	37.7	36.2	35.8	31.1	30.7	1480	109	111	78	80
	KJF 1250-RC225-9-29 (1D)	45	1656	1525	41.2	39.5	45.0	43.7	33.5	32.2	1480	110	112	79	81
	KJF 1250-RC225-9-31 (1D)	55	1833	1742	43.3	42.2	55.0	53.4	35.3	34.4	1480	111	113	80	82
	KJF 1250-RC225-9-36 (1D)	75	2008	1962	45.3	44.8	74.8	72.5	36.9	36.5	1485	112	113	81	82
	KJF 1250-RC225-9-40 (1D)	90	2115	2026	46.5	45.5	89.3	87.8	37.9	37.1	1485	113	113	82	82
1400	KJF 1400-RC225-10-22 (1D)	45	1774	1704	47.7	46.8	44.6	44.9	31.0	30.4	1480	113	112	82	81
	KJF 1400-RC225-10-24 (1D)	55	1994	1903	50.6	49.4	54.9	54.9	32.9	32.1	1480	113	113	82	82
	KJF 1400-RC225-10-27 (1D)	75	2346	2275	54.9	54.0	74.3	73.0	35.6	35.1	1485	116	114	85	83
	KJF 1400-RC225-10-30 (1D)	90	2622	2529	58.0	57.0	89.8	87.5	37.7	37.0	1485	116	115	85	84

*Values shown are for total LwA sound power levels for installation type E: free inlet, free outlet without partition

**Total sound pressure level @ 10m, free field condition (1D silencer) for fan total sound testing is not licensed by AMCA International

***The A-weighted sound power ratings shown have been calculated per AMCA International Standard 301.

The AMCA Certified Ratings Program Seal applies to thrust at free delivery only. Speed shown is nominal. Performance is based on actual speed of test. Performance ratings include the effects of inlet & outlet pod cover and inlet & outlet silencer.

Project reference

No	Project's name		Type	Country	Fan Type	Impeller Ø [mm]	Motor power [kW]	Quantity	Year
1.	Malmasin Tunnels - Jet fans refurbishment and motor replacement		Road tunnel	SPAIN	Jet Fan	1.250	30.0	2	2001
2.	Ibarrekolanda / Karmelo Bernaola Tunnel		Road tunnel	SPAIN	Jet Fan	800	18.5	18	2003
3.	Somosierra Tunnel - Jet fans refurbishment and motor replacement		Road tunnel	SPAIN	Jet Fan	1.250	30.0	2	2006
4.	Bilbao South Metropolitan Motorway Bypass (Supersur)	Argalarío tunnel	Road tunnel	SPAIN	Jet Fan	1.250	45.0	39	2009
		Mesperuza tunnel				1.250	45.0	21	
		Santa Agueda tunnel				1.250	45.0	50	
		Arraiz tunnel				1.250	45.0	62	
		Larraskitu tunnel				1.250	45.0	40	
5.	Xin Zhong Zhou Tunnel		Road tunnel	CHINA	Jet Fan	630	18.5	30	2009
6.	Metro Xin Zhuang Line	CK378A	Metro / MRT	TAIWAN	Axial Fan	1.800	132.0	4	2009
					Jet Fan	1.400	55.0	4	
7.	Metro Xin Zhuang Line	CK378B	Metro / MRT	TAIWAN	Axial Fan	1.800	150.0	16	2009
					Jet Fan	1.120	37.0	4	
8.	Metro Xin Zhuang Line	CK378D	Metro / MRT	TAIWAN	Axial Fan	1.800	1,323.0	12	2009
9.	Metro Xin Zhuang Line	CK378H	Metro / MRT	TAIWAN	Axial Fan	1.800	132.0	4	2009
10.	Metro Xin Yi Line	CR 388A	Metro / MRT	TAIWAN	Axial Fan	1.800	132.0	14	2009
						1.600	55.0	1	
11.	Metro Xin Yi Line	CR 388B	Metro / MRT	TAIWAN	Axial Fan	1.800	132.0	16	2009
					Jet Fan	1.600	55.0	1	
11.	Metro Xin Yi Line	CR 388B	Metro / MRT	TAIWAN	Jet Fan	1.120	30.0	16	2009
12.	Guangzhou Luntou-Shengwudao-HEMC Tunnel		Road tunnel	CHINA	Jet Fan	710	22.0	56	2009
13.	Xiang An Tunnel		Road tunnel	CHINA	Axial Fan	2.800	250.0	4	2009
						2.800	280.0		
						2.500	450.0	2	
						2.240	280.0	2	
					Jet Fan	1.120	37.0	39	
						630	18.5	20	
14.	Altet tunnel		Road tunnel	SPAIN	Jet Fan	650	15.0	16	2010
15.	Bielsa - Aragnouet tunnel		Road tunnel	SPAIN / FRANCE	Jet Fan	650	15.0	56	2011
16.	Metro Mexico City (CDMX) Line 12 - Tunnel ventilation system		Metro / MRT	MEXICO	Axial Fan	2.000	75.0	30	2011
						2.000	125.0	2	
17.	Second Link Road Hankou Railway Station RoadTunnel		Road tunnel	CHINA	Jet Fan	560	15.0	24	2011
18.	Shan Xi Tai Yuan Tai Gu Exp'way Xi Shan Tunnel		Road tunnel	CHINA	Axial Fan	2.500	355.0	3	2011
						2.500	670.0	3	
						2.500	450.0	2	
						2.500	280.0	2	
19.	Taiwan Bagua Shan Tunnel		Road tunnel	SPAIN	Jet Fan	800	18.5	18	2011
20.	San Mames access tunnels (Phase I & Phase II)	Altamira tunnel	Road tunnel	SPAIN	Jet Fan	750	22.0	8	2012
		Bentazarra tunnel				750	22.0	24	
		Santa Ana tunnel				750	22.0	13	
		San Nikolas tunnel				750	22.0	2	
		Santiago tunnel				750	22.0	2	
21.	Ligth Metro San Sebastian / Metro Donostiladea. Section Loiola - Herrera		Metro / MRT	SPAIN	Axial Fan	2.000	132.0	6	2012
22.	Singapore Woodsville Tunnel		Road tunnel	SINGAPORE	Jet Fan	1.250	75.0	12	2012

Project reference

No	Project's name	Type	Country	Fan Type	Impeller Ø [mm]	Motor power [kW]	Quantity	Year
23.	Xin Bao Exp'way (Yun Zhong Shan Tunnel)	Road tunnel	CHINA	Axial Fan	2.500	500.0	2	2012
					2.500	350.0	2	
24.	FuJian Ning Wu Expressway (Dong Gong Shan Tunnel & Fen Shui Guan Tunnel)	Road tunnel	CHINA	Axial Fan	2.800	250.0	2	2012
					2.800	280.0	2	
					2.500	200.0	2	
				Jet Fan	1.120	30.0	50	
25.	Changping Expressway (Hong Ti Guan Tunnel)	Road tunnel	CHINA	Axial Fan	2.800	160.0	2	2012
26.	Underground station of the high-speed train inAlicante	Railway tunnel	SPAIN	Axial Fan	3.000	355.0	2	2013
27.	Xiang An Tunnel Phase II	Road tunnel	CHINA	Jet Fan	1.120	30.0	6	2013
28.	Jian Tai Expressway (Tai Ning Tunnel)	Road tunnel	CHINA	Axial Fan	3.150	280.0	2	2013
					2.500	250.0	2	
				Jet Fan	1.120	30.0	56	
29.	Taoyuan Airport CA 384	Metro / MRT	TAIWAN	Axial Fan	1.800	132.0	12	2013
					1.250	55.0	4	
30.	Metro Santiago de Chile Lines 6 and Line 3 -Forced ventilation system	Metro / MRT	CHILE	Axial Fan	2.500	250.0	34	2014
					630	18.5	4	
				Jet Fan	1.120	45.0	5	
31.	Wuhan Dong Hu Tunnel	Road tunnel	CHINA	Axial Fan	2.500	400.0	6	2014
					2.500	450.0	2	
					2.240	150.0	1	
					2.240	200.0	2	
					1.250	11.0	4	
				Jet Fan	1.000	30.0	81	
					630	18.5	8	
32.	Hai He Cross River Tunnel	Road tunnel	CHINA	Axial Fan	2.240	55.0	6	2014
					2.240	75.0	3	
					1.600	55.0	4	
				Jet Fan	800	15.0	67	
33.	JingTai Exp'way (Huang Zhu Shan Tunnel)	Road tunnel	CHINA	Axial Fan	3.150	375.0	2	2014
					3.150	400.0	2	
					3.150	250.0	1	
					3.150	280.0	1	
34.	JingTai Exp'way (Niu Yan Shan Tunnel)	Road tunnel	CHINA	Axial Fan	2.500	200.0	2	2014
					2.800	250.0	2	
					2.500	300.0	3	
					2.500	315.0	2	
					2.500	350.0	2	
					2.500	250.0	3	
35.	Yuewu Exp'way Mingtang Shan Tunnel	Road tunnel	CHINA	Axial Fan	2.240	128.0	1	2014
36.	Monterrey Ligth Rail System Line 3 (Metrorey Line 3)	Metro / MRT	MEXICO	Axial Fan	2.000	75.0	2	2015
37.	Metro Mexico City (CDMX) Line 9 - Upgrade inter-station Patriotismo - Tacubaya(Metrorey Line 3)	Metro / MRT	MEXICO	Axial Fan	2.000	75.0	2	2015
38.	Downtown Line 2	Metro / MRT	SINGAPORE	Axial Fan	1.800	132.0	40	2015
					1.800	150.0		
					2.000	150.0	8	
					2.000	185.0		
				Jet Fan	1.250	37.5	44	
					630	18.5	5	

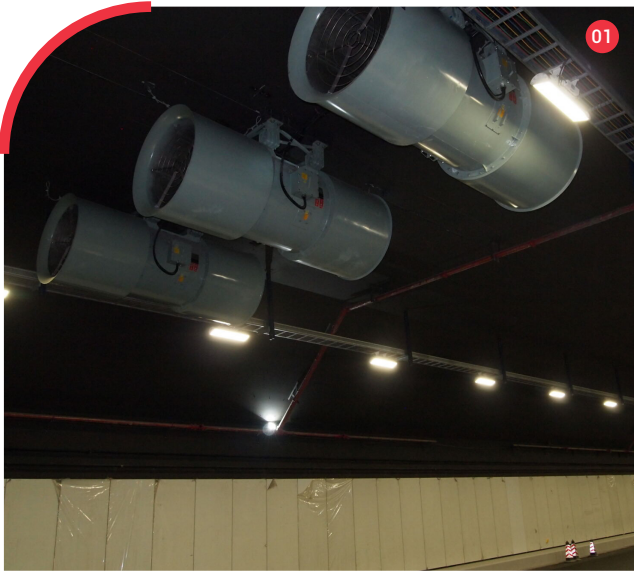
Project reference

No	Project's name	Type	Country	Fan Type	Impeller Ø [mm]	Motor power [kW]	Quantity	Year
39.	Hong Kong-Macau-Zhuhai Bridge and sub-sea Tunnel Project	Road tunnel	CHINA (Hong Kong)	Axial Fan	3.150	450.0	8	2015
					2.500	2x500.0	8	
				Jet Fan	1.250	45.0	10	
					1.120	37.0	156	
					1.250	45.0	16	
					1.250	37.0	4	
					630	15.0	11	
40.	Shen Hai Alternated Route Expressway (You CheLing Tunnel)	Road tunnel	CHINA	Axial Fan	3.150	250.0	2	2015
41.	JingTai Exp'way (Tian Long Shan Tunnel)	Road tunnel	CHINA	Axial Fan	2.500	200.0	2	2015
					3.150	220.0	1	
					2.500	280.0	4	
				Jet Fan	1.120	37.0	18	
42.	Fujian Meiyu Exp'way (Qishan Tunnel)	Road tunnel	CHINA	Axial Fan	2.800	250.0	2	2015
					2.500	315.0	2	
					2.800	315.0	2	
					3.150	670.0	2	
43.	Zhang Yong Exp'way (Guan Tian Tunnel)	Road tunnel	CHINA	Axial Fan	2.500	185.0	2	2015
				Jet Fan	1.120	37.0	2	
44.	JingTai Exp'way (Yan Qian Tunnel)	Road tunnel	CHINA	Axial Fan	2.500	250.0	6	2015
45.	Shen Hai Alternated Route Expressway (Ci GanYan Tunnel)	Road tunnel	CHINA	Axial Fan	2.800	160.0	2	2015
46.	Guadalajara Ligth Rail System Line 3	Road tunnel	MEXICO	Axial Fan	2.400	250.0	20	2016
				Jet Fan	1.120	45.0	9	
47.	Macro tunnel (Acatunnel)	Road tunnel	MEXICO	Jet Fan	1.250	45.0	14	2016
48.	Interlomas Viaduct tunnel	Road tunnel	MEXICO	Jet Fan	1.250	63.0	4	2016
49.	Coatzacoalcos Immersed tunnel	Road tunnel	MEXICO	Jet Fan	1.600	110.0	12	2016
					1.600	75.0	6	
50.	Metro Mexico City (CDMX) Line 7 -Upgrade main ventilation system	Metro / MRT	MEXICO	Axial Fan	2.000	75.0	6	2016
					2.000	75.0	2	
51.	Project Mass Rapid Transit Lembah Kelang: Jajaran Sungai Buloh - Kajang	Metro / MRT	MALAYSIA	Axial Fan	2.000	250.0	14	2016
					1.800	200.0	2	
				Jet Fan	1.120	55.0	4	
52.	Manacar Tunnel (Desnivel Insurgentes- Mixcoac)	Road tunnel	MEXICO	Jet Fan	1.120	45.0	5	2016
					1.800	200.0	2	2017
					630	18.0	3	
53.	Inter-city train tunnel Mexico City (CDMX) -Toluca	Railway tunnel	MEXICO	Jet Fan	900	22.0	36	2017
54.	Ho Chi Minh City Railway Line 1 (Opera and Bason station)	Metro / MRT	VIETNAM	Axial Fan	1.600	75.0	8	2017
					1.800	160.0	6	
					2.000	200.0	2	
55.	Morelia II Libramiento Tunnel	Road tunnel	MEXICO	Jet Fan	1.600	90.0	6	2018
					1.120	55.0	8	
56.	Metro Mexico City (CDMX) Line 7 - Upgrade mainventilation system	Metro / MRT	MEXICO	Axial Fan	2.000	75.0	26	2019
57.	Túnel El Melón II	Road tunnel	CHILE	Jet Fan	1.250	55.0	42	2019
					710	22.0	10	
58.	Metro Santiago de Chile Line 2 Extension - Forced ventilation system	Metro / MRT	CHILE	Axial Fan	2.500	250.0	8	2019
59.	Metro Santiago de Chile Line 3 Extension -Forced ventilation system	Metro / MRT	CHILE	Axial Fan	2.500	250.0	6	2019
60.	Metro Mexico City (CDMX) Line 12 Extension	Metro / MRT	MEXICO	Axial Fan	2.000	90.0	20	2019
					2.000	75.0	6	

Project reference

No	Project's name	Type	Country	Fan Type	Impeller Ø [mm]	Motor power [kW]	Quantity	Year
61.	Tesalia Tunnel	Road tunnel	COLOMBIA	Axial Fan	1.800	75.0	8	2020
62.	Metro Santiago de Chile Line 2 Extension - Forced ventilation system	Railway tunnel	THAILAND	Jet Fan	1.000	37.0	88	2020
63.	Ho Chi Minh City Railway Line 1 (Ben Thanh station)	Metro / MRT	VIETNAM	Axial Fan	2.000	160.0	1	2021
					1.600	90.0	1	
					1.400	90.0	4	
64.	Taipei City West District Gateway Plan C1/D1	Metro / MRT	TAIWAN	Axial Fan	2.800	185.0	1	2021
65.	Mumbai Metro Line 3 (Phase 1)	Metro / MRT	INDIA	Axial Fan	2.500	200.0	6	2021
					2.500	220.0		
					2.000	185.0	26	
					2.000	200.0		
					1.800	160.0	4	
					1.400	75.0	9	
					1.400	90.0		
					1.250	18.5	45	
					1.250	22.0		
					1.250	30.0		
					1.250	37.0		
					1.250	45.0		
					1.250	55.0		
					1.250	75.0		
					1.600	30.0	16	
					1.600	37.0		
					1.600	45.0		
					1.400	37.0	4	
				Jet Fan	1.400	75.0	4	
66.	Mumbai Metro Line 3 (Phase 2)	Metro / MRT	INDIA	Axial Fan	2.000	185.0	32	2021
					2.000	200.0		
					2.500	315.0	4	
					1.400	55.0	18	
					1.120	30.0	54	
					1.120	37.0		
67.	Metro Lima Line 2	Metro / MRT	PERU	Axial Fan	1.400	30.0	2	2022
					1.400	37.0	1	
					1.600	45.0	2	
					1.600	55.0	1	
					1.800	45.0	2	
68.	Metro Mexico City (CDMX) Line 1 - Integral upgrade	Metro / MRT	MEXICO	Axial Fan	2.000	75.0	16	2022
					2.000	37.0	4	
					1.800	93.0	16	
				Jet Fan	900	37.0	34	
69.	Sub-urban train tunnel Lecheria- AIFA	Railway tunnel	MEXICO	Axial Fan	2.000	75.0	20	2022
				Jet Fan	1.250	37.0	10	
					1.120	45.0	5	

Project reference



01



02

01 02 Hong Kong-Macau-Zhuhai Bridge (China - Hongkong)



03

03 Ho Chi Minh Metro Line 1 (Vietnam)



04

04 Metro Xin Zhuang Line (Taiwan)



05

05 06 MRT Lembah Kelang (Malaysia)



06

Project reference



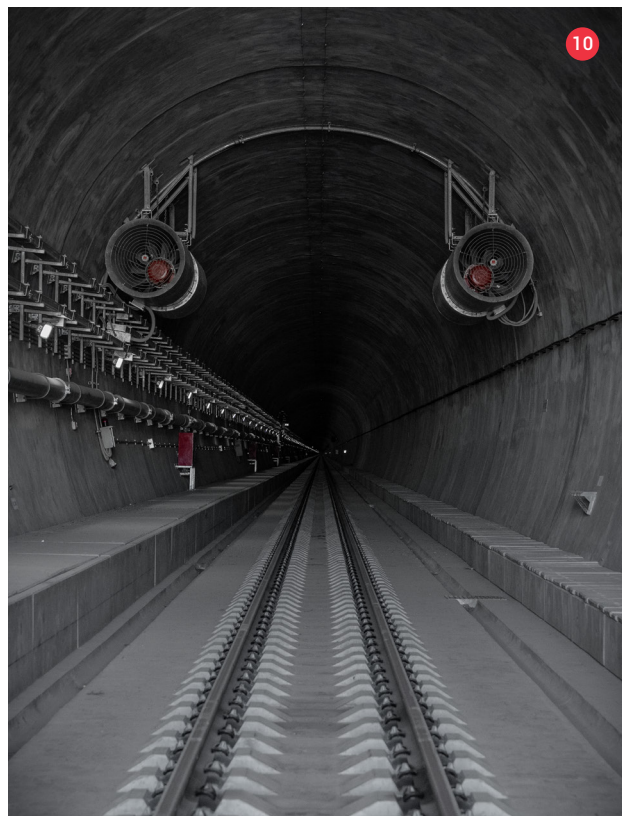
07 Mumbai Metro Line 1 (India)



08 Metro Xin Zhuang Line (Taiwan)



09 10 Double Track Railway from Map Kabao - Thanon Jira (Thailand)



THAILAND (Regional Headquarters)

KRUGER VENTILATION INDUSTRIES ASIA CO., LTD.

30/159 Moo 1, Sinsakorn Industrial Estate, Chetsadawithi Road,
Khok Kham, Mueng, Samuthsakorn 74000, Thailand
Tel: +662 1054298 Fax: +662 0248256-9
Email: mktg@krugerventasia.co.th
Website: www.krugerfan.com

INDIA (Haryana)

KRUGER VENTILATION INDUSTRIES (INDIA) PVT. LTD.

Plant-1 :Khasra No. 150/20/2/1, 151/16/2/2,
Village-Rohad, Bahadurgarh, Jajhjar, Haryana - 124507,
India Plant-2 : Khasra No.: 2-0, 14/3, 4-10, 15/1, 6-2, 20
Area: 4 Kanal 4 Marla, Khewat No.: 1007/868,
Khata No.: 1068, Killa No.: 146/6 (7-12, 7/1)
Village Rohad, Bahadurgarh-Rohtak Road,
Bahadurgarh, District Jhajjar - 124507, Haryana, India
Tel: +91 995 8991 652, +91 995 8991 660, +91 858 6966 303
Email: sales.kni@krugerindia.com

INDIA (Mumbai)

KRUGER VENTILATION INDUSTRIES (INDIA) PVT. LTD.

Village-Kalamgaon, Mumbai-Nashik Highway,
Tal-Shahapur, Dist. Thane- 421 601. Maharashtra, India
Tel. : +91 996 0558 899 / 997 5577 211
Fax : +91 2527 240075
E-mail : sales@krugerindia.com

INDIA (Chennai)

KRUGER VENTILATION INDUSTRIES (INDIA) PVT. LTD.

Plot No: E-23/1, Survey No – 279, SIPCOT Industrial Park,
Irungattukottai, Sriperumbudur Taluk, Kancheepuram District,
Tamil Nadu, Pin – 602117, India.
Tel. : +91 978 9982 290
E-mail : giriprabu@krugerindia.com

MIDDLE EAST

CONTACT : KRUGER VENTILATION INDUSTRIES (INDIA) PVT. LTD.

Tel. : +91 9766323730 / +91 9975577211
Email : rahul@krugerindia.com

MALAYSIA

KRUVENT INDUSTRIES (M) SDN. BHD.

Lot 850, Jalan Subang 7, Taman Perindustrian Subang,
47500, Subang Jaya, Selangor D.E., Malaysia
Tel: +603 80743399 Fax: +603 80743388
Email: mktg@kruger.com.my

INDONESIA

PT. KRUGER VENTILATION INDONESIA

Jl. Teuku Umar No. 20, Karawaci,
Tangerang 15115, Indonesia
Tel: +62 21-5512288
Fax: +62 21-5513502
Email: mktg@krugerindo.co.id

AUSTRALIA

S&P-KRUGER AUSTRALIA PTY. LTD.

2 Cunningham St, Moorebank N.S.W. 2170
Tel: +612-98227747
Fax: +612-98227757
Email: info@sandpkruger.com.au

VIETNAM

KRUGER VENTILATION INDUSTRIES (VIETNAM) CO., LTD.

Lot A7, 2-4, C2 Road, Thanh Thanh Cong IZ,
Trang Bang District, Tay Ninh Province, Vietnam
Tel: +84-276 3585200/01/02 Fax: +84-276 3585199
Email: mktg@krugervn.com

CHINA (Shanghai)

SHANGHAI KRUGER VENTILATION CO., LTD.

No. 500 Yuanguo Road, Anting, Jiading District,
Shanghai 201814, P.R. China
Tel: +86 21-69573266 Fax: +86 21-69573296
Email: ksh@krugerfan.com.cn
Website: www.krugerfan.com.cn

CHINA (Tianjin)

TIANJIN KRUGER VENTILATION CO., LTD.

Jingjin Science and Technology Park,
Wuqing District, Tianjin 301700, P.R. China
Tel: +86 22-22143480 Fax: +86 22-22143482
Email: ktj@krugerfan.com.cn

CHINA (Guangzhou)

GUANGZHOU KRUGER VENTILATION CO., LTD.

No. 9 Huahui Road, Huashan Town,
Huadu District Guangzhou 510880, P.R. China
Tel: +86 20-66356635 Fax: +86 20-86786001/86786500
Email: kgv@krugerfan.com.cn

CHINA (Wuhan)

WUHAN KRUGER VENTILATION CO., LTD.

No. 805 Huian Avenue, Dongxihu District Wuhan,
Hubei 430040, P.R. China
Tel: +86 27- 83248840
Fax: +86 27- 83261886
Email: kwv@krugerfan.com.cn

HONG KONG

KRUGER VENTILATION (HONG KONG) LIMITED.

Flat E, 8/F, Yeung Yiu Chung (No.8) Industrial Building,
20 Wang Hoi Road, Kowloon Bay, Kowloon, Hong Kong
Tel: +852 22469182 Fax: +852 22469187
Email: info@kruger.com.hk

TAIPEI

KRUGER VENTILATION (TAIWAN) CO., LTD.

No. 157, Ping-an Rd, Hengfeng Village,
Dayuan Shiang Taoyuan County 337, Taiwan
Tel: +886 3-3859119 Fax: +886 3-3859118
Email: sales@krugertwn.com.tw

KOREA

NEOMATE CO., LTD.

80, Seogeunnae-gil, Paltan-myeon, Hwaseong-si,
Gyeonggi-do 18575, Korea
Tel: +82-2-2679-2052 Fax: +82-2-2679-2174
Email: y7890@neomate.co.kr

PHILIPPINES

KRUGER M & E INDUSTRIES CORP.

B3 Welborne Industrial Park, Bancal, Carmona,
Cavite, Philippines 4116
Tel: +63-917-561-9088, +63-917-596-7288,
+63-917-712-8438, +63-917-306-8288 Fax: -
Email: mktg.ph@krugerfan.com

SINGAPORE

KRUGER ENGINEERING PTE. LTD.

2 Venture Drive #20-23, Vision Exchange,
Singapore 608526.
Tel: +65 68631191 Fax: +65 68631151
Email: mktg@krugerfan.com

A member of



Underground Ventilation Division

Kruger Ventilation Industries Asia Co., Ltd.

30/159 Moo 1, Sinsakorn Industrial Estate
Chetsadawithi Road, Khok Kham Mueng,
Samuthsakorn 74000, Thailand
Tel. +662 1054298 - Fax. +662 0248256-9
Website: www.krugerfan.com
CAT082.E0.ED0 July 2026

A member of

