



Turnkey Dust Collection Solutions for

BATTERY PRODUCTION

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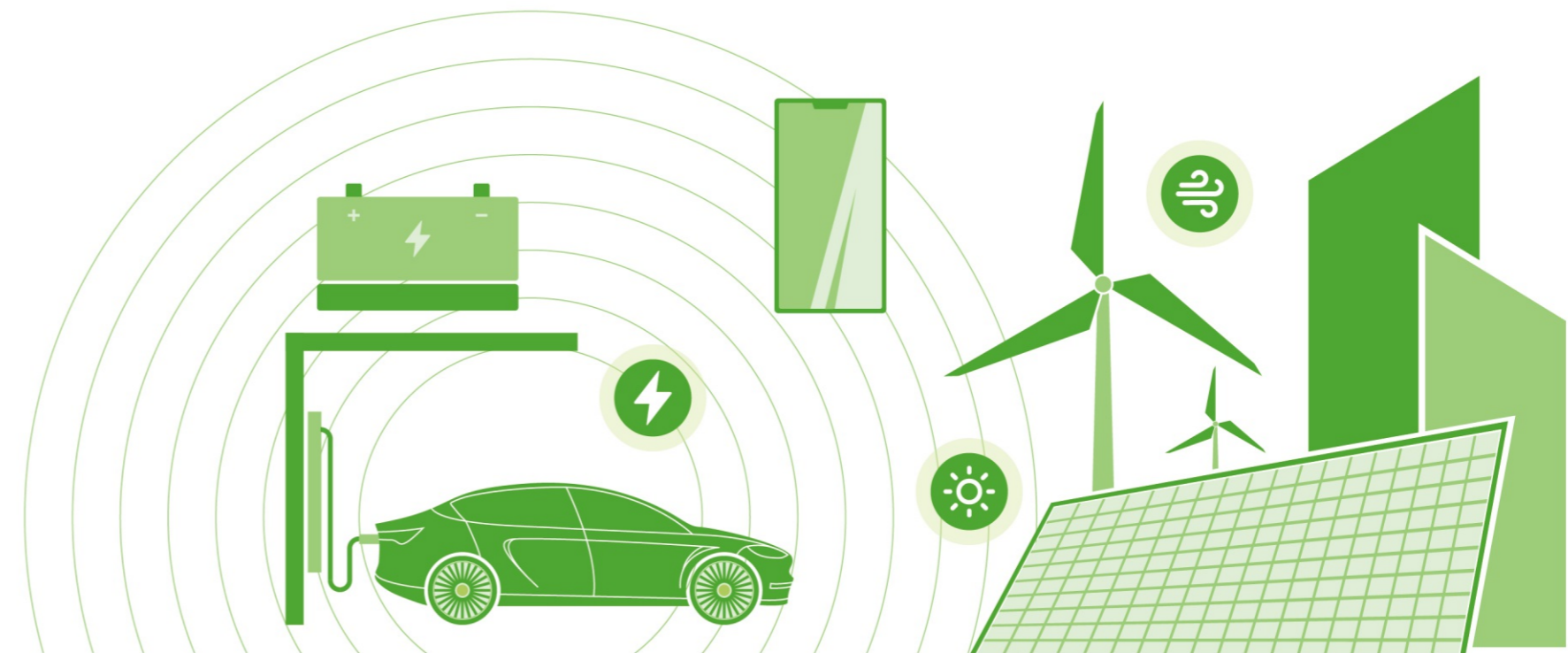
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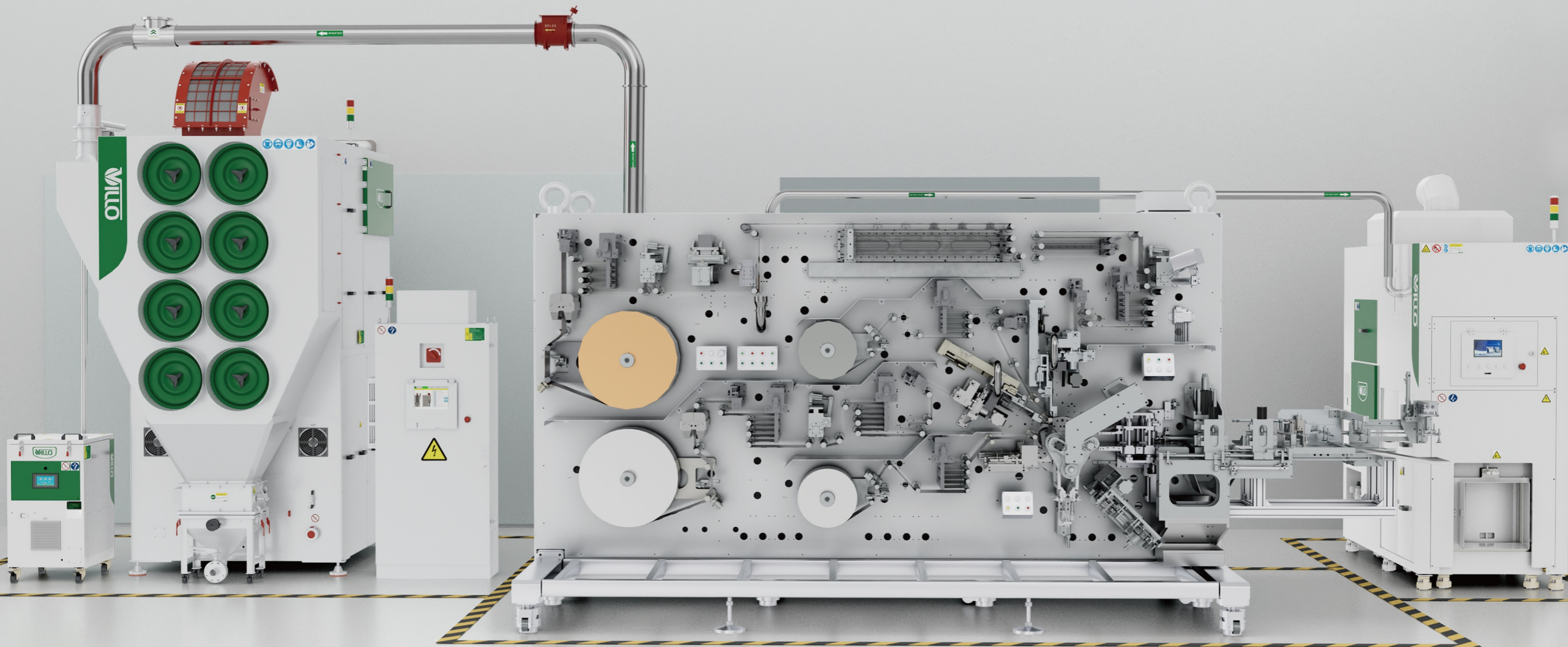
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Turnkey Dust Collection Solutions for Battery Production





 17+ Years Experience	 100,000+ Installations	 80% Top Battery Brands' Choice
 600 R&D Engineers & Technicians	 100+ Countries & Areas' Presence	 100,000+ m2 Manufacturing Base

COMPANY PROFILE

Villo, Leading Dust Collection Solutions Provider

Established in 2007, Villo is a leading solution provider for industrial dust control and explosion protection system, serving for manufacturers of lithium-ion battery, 3D printing, photovoltaic etc.

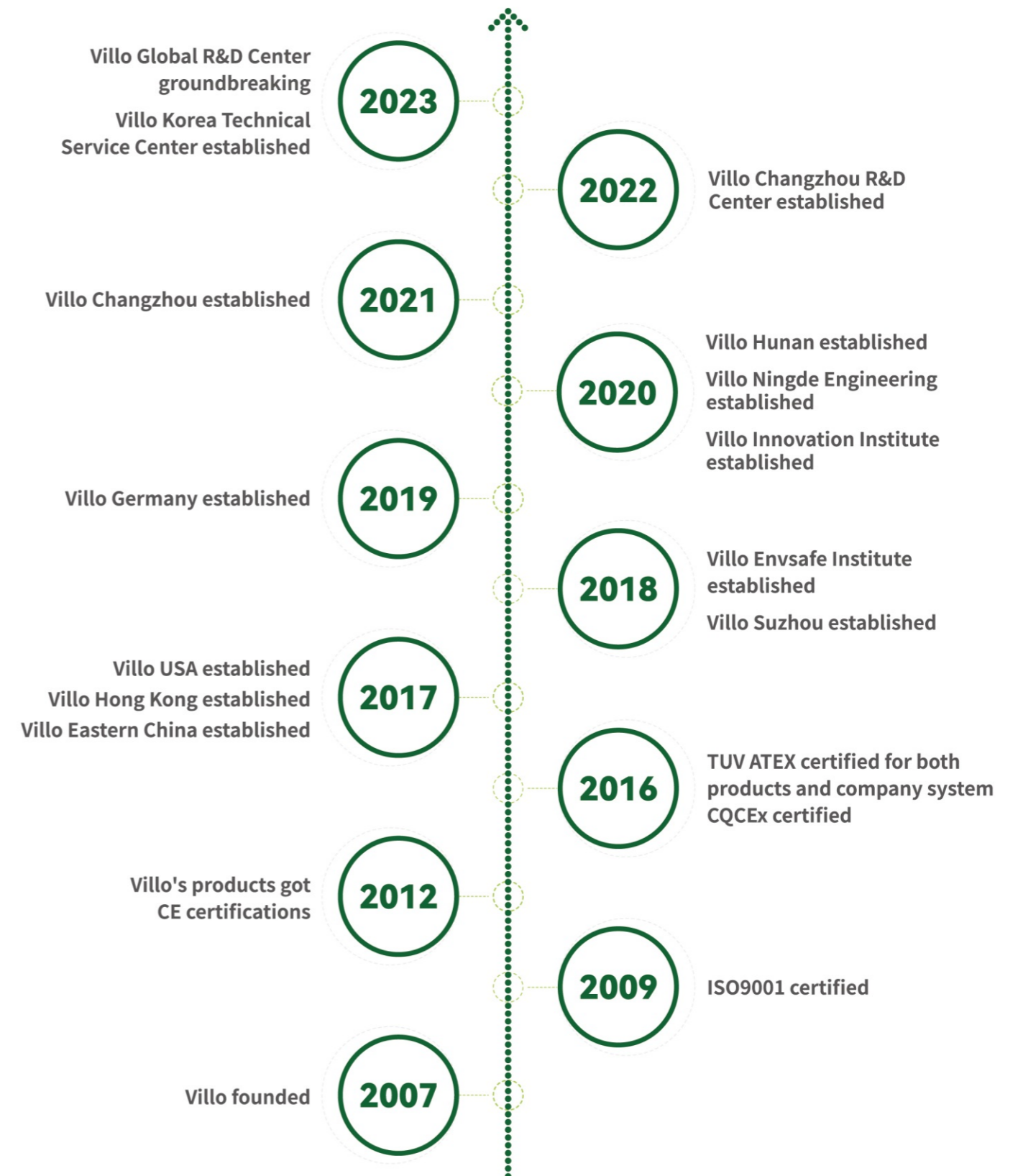
Headquartered in China's manufacturing hub — Dongguan city, Villo has two factories covering 100,000 square meters in South and East China, producing a wide breadth of product offerings including industrial dust collectors, vacuum cleaners and explosion protection devices.

Backed by its strong production capability, a professional R&D team with over 600 experienced engineers, and most importantly, more than 100,000 successful installations in the past years, Villo is capable to tailor-made ideal solutions to help you solve your dust, fume and mist collection challenges and thus produce dustless and safely.

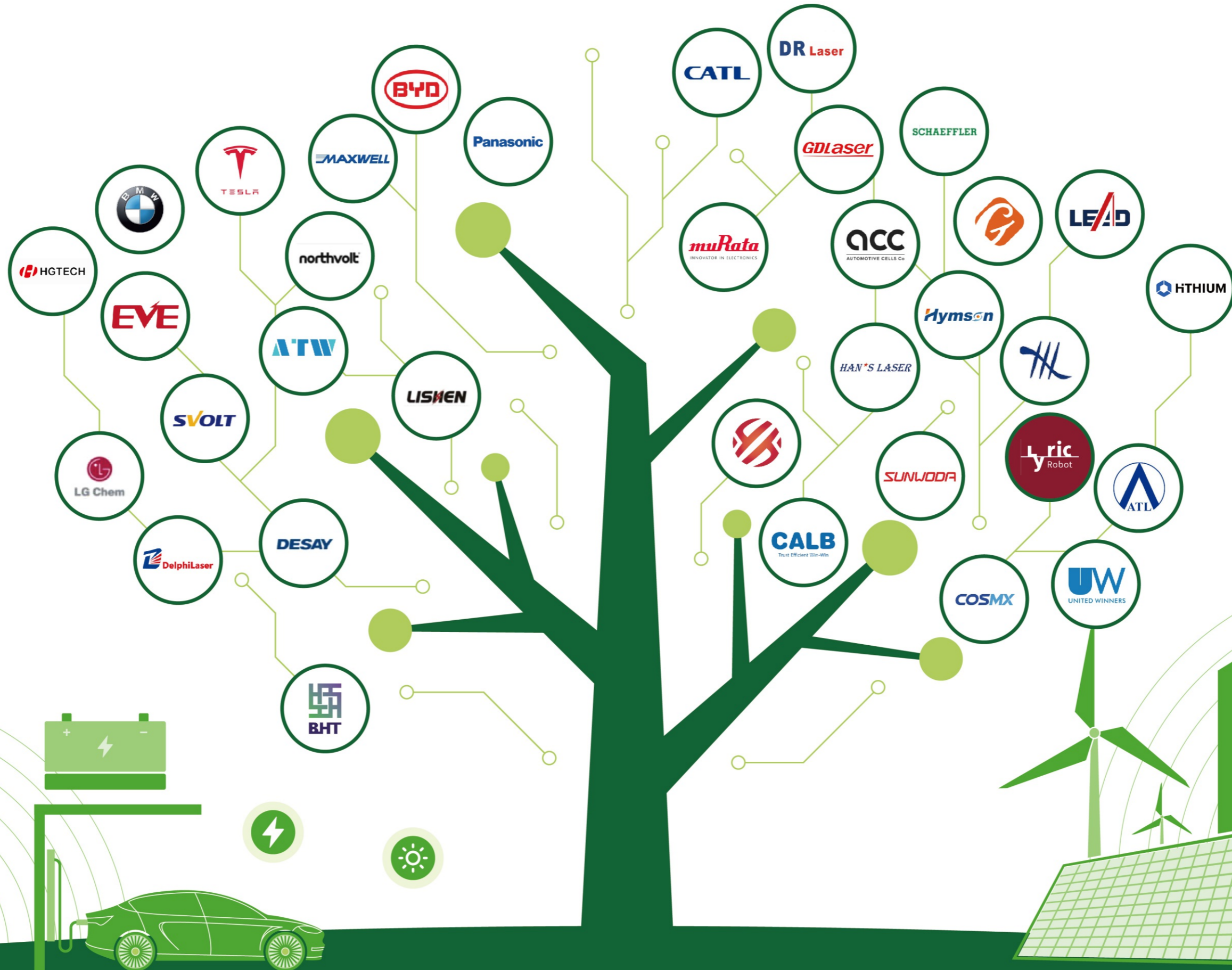
Certified internationally by ATEX, UL, CE and etc., Villo's products manage to help your production line meet local regulations of your area. Villo's branches in Euro, the U.S. and Asia are also ready to provide instant and on-site service to you.

www.villotech.com

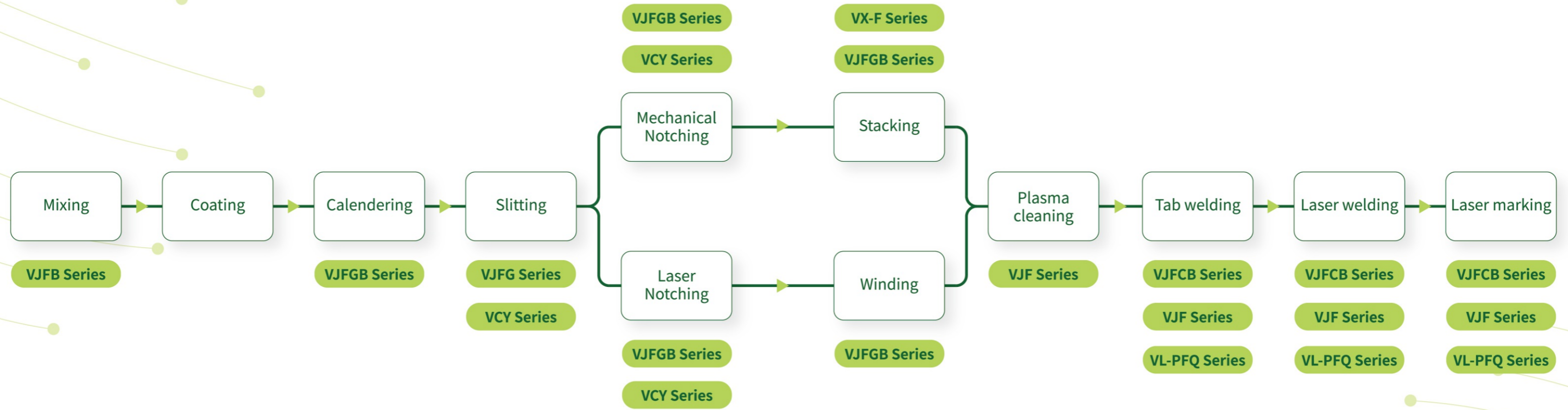
Villo Timeline



CUSTOMERS



TURNKEY DUST COLLECTION SOLUTIONS FOR LITHIUM BATTERY MANUFACTURING



VJF Series



VJFG Series



VJFB Series



VX Series



VCY Series



VL-PFQ Series



VJFCB Series



VJFGB Series

VJF Series

Pulse Jet Cleaning Dust Collector



• Product Description

- > Large Airflow
- > Pulse Jet Cleaning
- > Small Footprint
- > H14 Filtration Efficiency

• Application

- > Plasma Cleaning
- > Slitting



• Technical Parameters

Model	VJF-1.5	VJF-2.2	VJF-3.0	VJF-4.0	VJF-5.5	VJF-7.5
Voltage (V / Hz)	380 / 50					
Power(kW) / (HP)	1.5 / 2.0	2.2 / 3.0	3.0 / 4.0	4.0 / 5.5	5.5 / 7.5	7.5 / 10
Starting current (A)	25	40	50	56	65	95
Rated current (A)	3.2	4.4	6	7.7	10.5	14.1
Max air flow (m ³ /h) / (CFM)	1500/883	2200/1294	3000/1765	4000/2353	5300/3118	7100/4176
Filter area (m ²) / (sq.ft)	11 / 118.5	22 / 237	22 / 237	44 / 474	44 / 474	66 / 710
Filter efficiency	>99%					
IE level	IE3 or above					
Dust container capacity (L) / (gal)	30 / 7.9	50 / 13.2		60 / 15.9 (2pcs)		80 / 21.2(2pcs)
Noise dB (A)	73±2	75±2	76±2	76±2	78±2	79±2
Filter cleaning method	Pulse jet					
Air inlet Dia. (mm) / (in)	Ø150 / 6		Ø200 / 8	Ø250 / 10		Ø300 / 12
Dimensions【LxWxH】(mm) / (in)	795*630*1730 / 31.3*24.8*68.1	995*725*1860 / 39.2*28.6*73.3		1060*925*1950 / 41.7*36.4*76.8	1060*925*2050 / 41.7*36.4*80.7	1450*955*2050 / 57.1*37.6*80.7
Weight (kg) / (lb)	180 / 397	260 / 574	280 / 618	430 / 948	450 / 992	600 / 1323

*The mentioned values of airflow and the pressure may vary slightly with change in air inlet size. It is normal that the current value may fluctuate in a small range voltage and frequency will affect the current value.

VJFG Series

Medium High Pressure Dust Collector



• Product Description

- > Medium High Pressure
- > Pulse Jet Cleaning
- > Small Footprint
- > H14 Filtration Efficiency

• Application

- > Slitting



• Technical Parameters

Motor blades can be replaced with larger negative pressure

Model	VJFG-3.0	VJFG-4.0	VJFG-5.5	VJFG-7.5
Voltage (V / Hz)	380/50			
Power (kW) / (HP)	3.0 / 4	4.0 / 5.5	5.5 / 7.5	7.5 / 10
Starting current (A)	50	60	65	95
Rated current (A)	6	7.7	10.5	14.1
Max air flow (m ³ /h) / (CFM)	1875 / 1104	2416 / 1422	3656 / 2152	4116 / 2423
Filter area (m ²) / (sq.ft)	15/161		30/323	
Filter efficiency	99%			
IE level	IE3 or above			
Dust container capacity (L) / (gal)	60 / 15.9		108 / 28.5	
Noise dB(A)	78±2	80±2	82±2	83±2
Filter cleaning method	Pulse jet			
Dia. air inlet (mm) / (in)	Φ150 / 6		Φ200 / 8	
Dimension【LxWxH】(mm) / (in)	900*857*1920		1120*1085*1934	
Weight (kg) / (lb)	320 / 705	350 / 772	450 / 992	480 / 1058

*The mentioned values of airflow and the pressure may vary slightly with change in air inlet size. It is normal that the current value may fluctuate in a small range voltage and frequency will affect the current value.

VJFB Series

Explosion-Proof Industrial Dust Collector



• Product Description

- › Explosion-Proof
- › Pulse Jet Cleaning
- › Small Footprint
- › H14 Filtration Efficiency

• Application

- › Feeding
- › Mixing



• Technical Parameters

Model	VJFB-1.5	VJFB-2.2	VJFB-3.0	VJFB-4.0	VJFB-5.5	VJFB-7.5
Voltage (V / Hz)	380 / 50					
Power(kW) / (HP)	1.5 / 2.0	2.2 / 3.0	3.0 / 4.0	4.0 / 5.5	5.5 / 7.5	7.5 / 10
Starting current (A)	25	40	50	56	65	95
Rated current (A)	3.2	4.4	6	7.7	10.5	14.1
Max air flow (m ³ /h) / (CFM)	1500 / 883	2200 / 1294	3000 / 1765	4000 / 2353	5300 / 3118	7100 / 4176
Filter area (m ²) / (sq.ft)	11 / 118.5	22 / 237	22 / 237	44 / 474	44 / 474	66 / 710
Filter efficiency	99%					
IE level	IE3 or above					
Dust container capacity (L) / (gal)	30 / 7.9	50 / 13.2		60 / 15.9 (2pcs)		80 / 21.2 (2pcs)
Noise dB (A)	73±2	75±2	76±2	76±2	78±2	79±2
Filter cleaning method	Pulse jet					
Air inlet Dia. (mm) / (in)	Ø150 / 6		Ø200 / 8	Ø250 / 10		Ø300 / 12
Dimensions【LxWxH】(mm) / (in)	795*680*1730 / 31.3*26.8*68.1	995*775*1860 / 39.2*30.5*73.3		1060*975*1950 / 41.7*38.4*76.8	1060*975*2050 / 41.7*38.4*80.7	1450*1000*2050 / 57.1*39.4*80.7
Weight (kg) / (lb)	200 / 441	280 / 618	300 / 662	450 / 992	470 / 1036	620 / 1367

*The mentioned values of airflow and the pressure may vary slightly with change in air inlet size. It is normal that the current value may fluctuate in a small range voltage and frequency will affect the current value.

VX Series

Cabinet Type High Pressure Dust Collector



• Product Description

- › High Pressure
- › Cabinet Type
- › Pulse Jet Cleaning
- › Flexible Movement
- › H14 Filtration Efficiency

• Application

- › Winding
- › Tab welding



• Technical Parameters

Model	VX-150F	VX-220F	VX-300F	VX-400F	VX-550F	VX-750F
Voltage (V / Hz)	380 / 50					
Starting current (A)	25	30	40	60	85	100
Rated current (A)	4.3	5.6	7.2	9	12.9	16.7
Power (kW) / (HP)	1.6 / 2.15	2.2 / 3.0	3.0 / 4.0	4.0 / 5.5	5.5 / 7.5	7.5 / 10.0
Max air flow (m ³ /h) / (CFM)	188 / 110	245 / 144	285 / 168	385 / 226	432 / 254	600 / 353
Max vacuum (mmH ₂ O) / (kpa)	1500 / 14.7	1600 / 15.7	1800 / 17.7	2000 / 19.6	2000 / 19.6	2000 / 19.6
Air inlet Dia. (mm) / (in)	Ø 50/2					
Filter efficiency	>99%					
IE level	IE3 or above					
Filter area (m ²) / (sq.ft)	2 / 21.5			5.3 / 57		
Capacity of collection barrel (L) / (gal)	10 / 2.6		12 / 3.2		15 / 4.0	
Dimensions【LxWxH】(mm) / (in)	670*540*1230 / 26.4*21.3*48.4		680*640*1410 / 26.8*25.2*55.5		760*680*1540 / 29.9*26.8*60.6	

*The mentioned values of airflow and the pressure may vary slightly with change in air inlet size. It is normal that the current value may fluctuate in a small range voltage and frequency will affect the current value.



VCY Series

Electrode Scrap Compressor

• Product Description

- > 24-hour Continuous Working
- > Maximum Compression Ratio
- > PLC Intelligent Control
- > Built-in Filter

• Application

- > Notching
- > Slitting
- > Winding
- > Scrap Collection



• Technical Parameters

Model	VCY-DGYS-T-800-CE
Voltage (V / Hz)	400 / 50
Total power (kW)	7.5
Cutting parameters	Width: ≤50mm
	Thickness: ≤100μm
	Cutting speed: ≤90m/min
	Quantity: ≤2 continuous or segmented
Air speed requirement of exhaust port (m/s)	≥25
Compressed air pressure (Mpa)	0.5-0.6
Noise dB(A)	≤75
Inlet diameter (mm)	custom made
Number of filter cartridges (pcs)	2
Collection interval (H)	4~8
Dimensions [LxWxH] (mm)	3335*1270*2900

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VL-PFQ Series

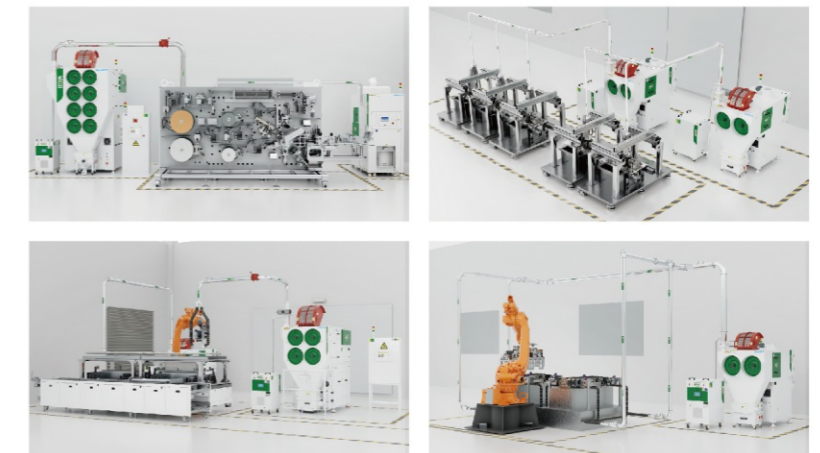
Inert Powder Feeder

• Product Description

A tailor-made device used in conjunction with Viljo's dust collectors, to reduce the risk of explosion by inerting combustible dust in the dust collection system.

• Application

- > Calendering
- > Notching
- > Stacking
- > Winding
- > Welding



• Technical Parameters

Model	VL-PFQ-30L-6TP	VL-PFQ-30L-6TP(Simple)	VL-PFQ-30L-6	VL-PFQ-30L-6(Signal)
Voltage (V / Hz)	220/50			
Power (W) / (HP)	25	25	120	120
Maximum powder output (g/h)	2000			
Powder way	Screw conveying	Screw conveying	Twin screw conveying	Twin screw conveying
Maximum powder storage capacity (kg)	25			
Powder method	Artificial powder			
Outlet diameter (mm)/(in)	Φ32 / 1.26 (customized)			
Mobility	Swivel caster with brake			
Dimension [LxWxH] (mm)/(in)	645*532*1043 / 25.4*20.9*41.1			

VJFCB Series

High Pressure Explosion Proof Dust Collector



• Product Description

- > Explosion-Proof
- > High Pressure Motor
- > Pulse Jet Cleaning
- > H14 Filtration Efficiency

• Application

- > Welding



• Technical Parameters

Model	VJFCB-1.5	VJFCB-2.2	VJFCB-3.0	VJFCB-4.0	VJFCB-5.5	VJFCB-7.5
Voltage (V / Hz)	380 / 50					
Power(kW) / (HP)	1.5 / 2.0	2.2 / 3.0	3.0 / 4.0	4.0 / 5.5	5.5 / 7.5	7.5 / 10
Starting current (A)	25	30	40	60	85	100
Rated current (A)	4.3	5.6	7.2	9	12.9	16.7
Max air flow (m ³ /h) / (CFM)	188 / 110	245 / 144	285 / 168	385 / 226	432 / 254	600 / 353
Max air pressure (mmH ₂ O) / (kPa)	1700 / 16.7	1800 / 17.7	1800 / 17.7	1800 / 17.7	1900 / 18.6	2000 / 19.6
Filter efficiency	99%					
Filter area (m ²) / (sq.ft)	7.7 / 82.8			10.4 / 112		
Filter cleaning method	Pulse jet					
Air inlet Dia. (mm) / (in)	Ø 50 / 2	Ø 50 / 2	Ø 50 / 2	Ø 50 / 2	Ø 75 / 3	Ø 75 / 3
Dimensions [LxWxH] (mm) / (in)	850*780*1789 / 33.5*30.7*70.5				1020*830*1945 / 40.2*33*76.6	

*The mentioned values of airflow and the pressure may vary slightly with change in air inlet size. It is normal that the current value may fluctuate in a small range voltage and frequency will affect the current value.

VJFGB Series

Medium High Pressure Explosion Proof Dust Collector



• Product Description

- > Explosion-Proof
- > Medium High Pressure Motor
- > Pulse Jet Cleaning
- > H14 Filtration Efficiency

• Application

- > Pressing & Slitting
- > Notching
- > Stacking
- > Winding
- > Welding



• Technical Parameters

Model	VJFGB-1.5	VJFGB-2.2	VJFGB-3.0	VJFGB-4.0	VJFGB-5.5	VJFGB-7.5
Voltage (V / Hz)	380 / 50					
Power(kW) / (HP)	1.5 / 2.0	2.2 / 3.0	3.0 / 4.0	4.0 / 5.5	5.5 / 7.5	7.5 / 10
Starting current (A)	25	40	50	60	65	95
Rated current (A)	3.2	4.4	6.0	7.7	10.5	14.1
Max air flow (m ³ /h) / (CFM)	1231 / 725	1550 / 912	1875 / 1104	2416 / 1422	3656 / 2152	4116 / 2423
Filter efficiency	99%					
Filter area (m ²) / (sq.ft)	15 / 161			30 / 323		
Filter cleaning method	Pulse jet					
Air inlet Dia. (mm) / (in)	Ø 150 / 6			Ø 200 / 8		
Dimensions [LxWxH] (mm) / (in)	900*857*1920/35.4*33.7*75.6				1120*1085*1934/44.1*42.7*76.1	

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VJFCB-W Series

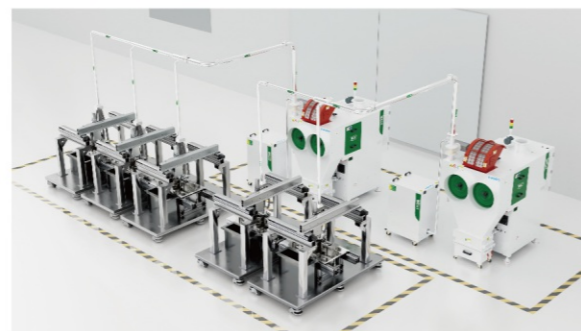
High Pressure Explosion-Proof Dust Collector

• Product Description

- > Explosion-Proof
- > High Pressure Motor
- > Pulse Jet Cleaning
- > H14 Filtration Efficiency

• Application

- > Welding

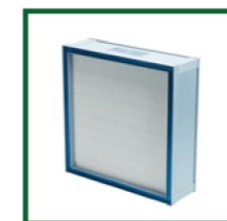


• Optionals



Spark trap

The dusty air passes through the curve of sheet metal, collide with each other, to extinguish the spark and eliminate hidden dangers.



HEPA filter

High efficiency filter with higher filtration precision



Moderate-high pressure motor

Compared with the high negative pressure fan, it has a larger air volume.



Filter differential pressure monitoring

Monitor the pressure difference of the filter cartridge, when the pressure difference is constant, the filter cartridge needs to be cleaned



Rotary valve

Shut off the rotary valve when discharging, then take out the container, to prevent dust from falling to the ground.



Level monitoring

Monitor the dust accumulation in the collection box and alarm when it is about to overflow



Temperature monitoring

Monitor the internal temperature of the machine and alarm when the temperature is too high

• Technical Parameters

Model	VJFCB -7.5W	VJFCB-11W	VJFCB-15W
Voltage (V / Hz)		380 / 50	
Power(kW) / (HP)	7.5 / 10	11 / 15	15 / 20
Max air flow (m ³ /h) / (CFM)	600 / 353	900 / 529	1100 / 647
Max air pressure (mmH ₂ O) / (kPa)	2000 / 19.6	2000 / 19.6	2000 / 19.6
Filter efficiency		99%	
Filter area (m ²) / (sq.ft)		22 / 236.7	
Filter cleaning method		Pulse jet	
IE level		IE3 or above	
Dia. air inlet (mm) / (in)	Ø 75 / 3	Ø 100 / 4	Ø 100 / 4
Dimensions [LxWxH] (mm) / (in)	1850*1130*2025 / 72.8*44.5*79.7	2000*1120*2055 / 78.7*44.1*80.9	2125*1180*2075 / 83.7*46.5*81.7

*The mentioned values of airflow and the pressure may vary slightly with change in air inlet size. It is normal that the current value may fluctuate in a small range voltage and frequency will affect the current value.



VJFGB-W Series

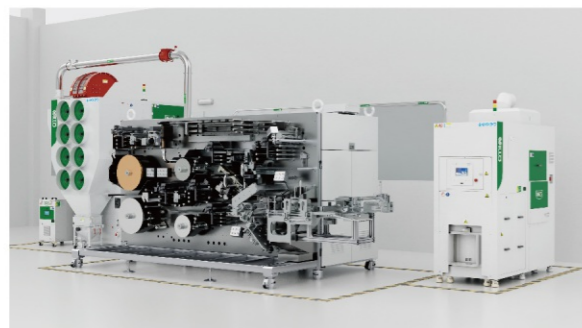
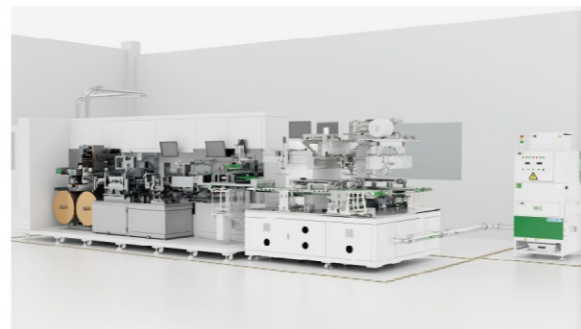
Medium High Pressure Explosion-Proof Dust Collector

• Product Description

- > Explosion-Proof
- > Medium High Pressure Motor
- > Pulse Jet Cleaning
- > H14 Filtration Efficiency

• Application

- > Pressing & Slitting
- > Notching
- > Stacking
- > Winding
- > Welding



• Optionals



Butterfly valve inlet

Offline pulse jet: Turn off the motor, shut off the butterfly valve, turn on the pulse jet, enhance the effect of dust cleaning, for avoiding dust intrusion.



Gas-cap drive container

Through the movement of the cylinder, the container is driven to move up and down to discharge.



Explosion isolation valve

Block the leakage of sparks and ensure the safety of personnel when explosion happened



Flameless explosion venting

Reduce the damage caused by the explosion and ensure the safety of personnel to the greatest extent.



Negative pressure monitoring

Monitor the negative pressure value at the air inlet



Airspeed monitoring

Monitor the airspeed value at the air inlet



Motor temperature monitoring

Monitor fan temperature, alarm when fan temperature is too high

• Technical Parameters

Model	VJFGB -5.5W	VJFGB -7.5W	VJFGB-11W	VJFGB-15W
Voltage(V / Hz)	380 / 50			
Power(kW) / (HP)	5.5 / 7.5	7.5 / 10	11 / 15	15 / 20
Max air flow (m ³ /h) / (CFM)	3656 / 2152	4116 / 2423	4500 / 2649	5400 / 3178
Filter efficiency	99%			
IE level	IE3 or above			
Filter area (m ²) / (sq.ft)	44 / 473	44 / 473	44 / 473	44 / 473
Filter cleaning method	Pulse jet			
Dia. air inlet (mm) / (in)	Ø 200 / 8	Ø 200 / 8	Ø 250 / 10	Ø 250 / 10
Dimension [LxWxH] (mm) / (in)	2450*1260*2700 / 96.5*49.6*106.3	2450*1260*2700 / 96.5*49.6*106.3	2350*1400*2250 / 92.5*55.1*88.6	2450*1700*2300 / 96.5*66.9*90.6

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ACCESSORIES



Explosion Venting Panel



Flameless Explosion Venting (Fan)



Flameless Explosion Venting (Cylinder)

ACCESSORIES



Siemens Inverter



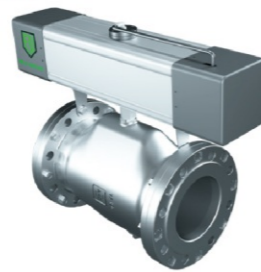
Differential Pressure Transmitter



Differential Pressure Switch



Explosion Isolation Valve



Explosion Isolation Pinch Valve



Pressure Gauge Valve



Level Monitoring



Temperature Sensor



HEPA Filter



Spark Detection & Extinguishing System



Chemical Agent Suppression System



Spark Trap



Filter Cartridge / Bag



Dust Concentration Detector



Air Speed Sensor