

**LEADING PROVIDER OF
WINDOW OPENING
GEAR AND
VENTILATION
TECHNOLOGY.**

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GENERAL INFORMATION

Operable Window Technologies is one of the New Zealand based company located in Auckland since 2011.

Operable Window Technologies supply and install high-level window opening mechanisms, from simple manual shaft & lever to electric and to fully integrated smoke, BMS, and ventilation systems.

We have considerable experience and many successful installations particularly in education, community, aged care, commercial & residential sectors.

Operable Window Technologies have worked on some notable large projects in the last 10 years. Other sectors in which we have work include churches, hospitals & recreation facilities.

Our experience and expertise enable us to work closely with our clients to determine the best solution that meets their operational & aesthetic requirements within budget and within their time frames

This company has completed many renowned projects in different parts of the country:



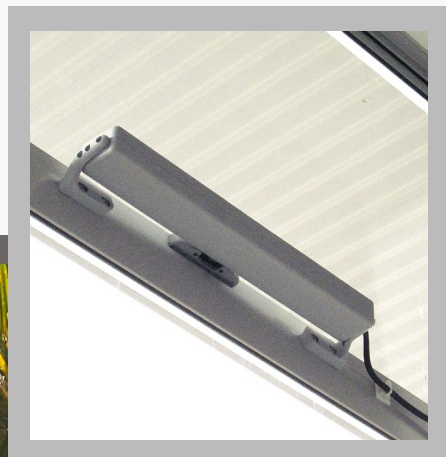
ACG Tauranga -
Electric shaft and lever gearing



Papamoa College -
Manual shaft and lever gearing



Govenors Cafe - New Plymouth -
Window Master Chain Drives -
24Volt



Ocean house -
KATO chain drives



MANUAL SHAFT AND LEVER GEARING



MANUAL SHAFT AND LEVER GEARING

OWT supply and install shaft and lever window control gearing. This is the most robust and reliable manual window control option, having been tried and proven over decades of use, particularly in schools. This option is economical and practical for use on high level windows and louvres.

PRACTICALITY OF MANUAL GEAR

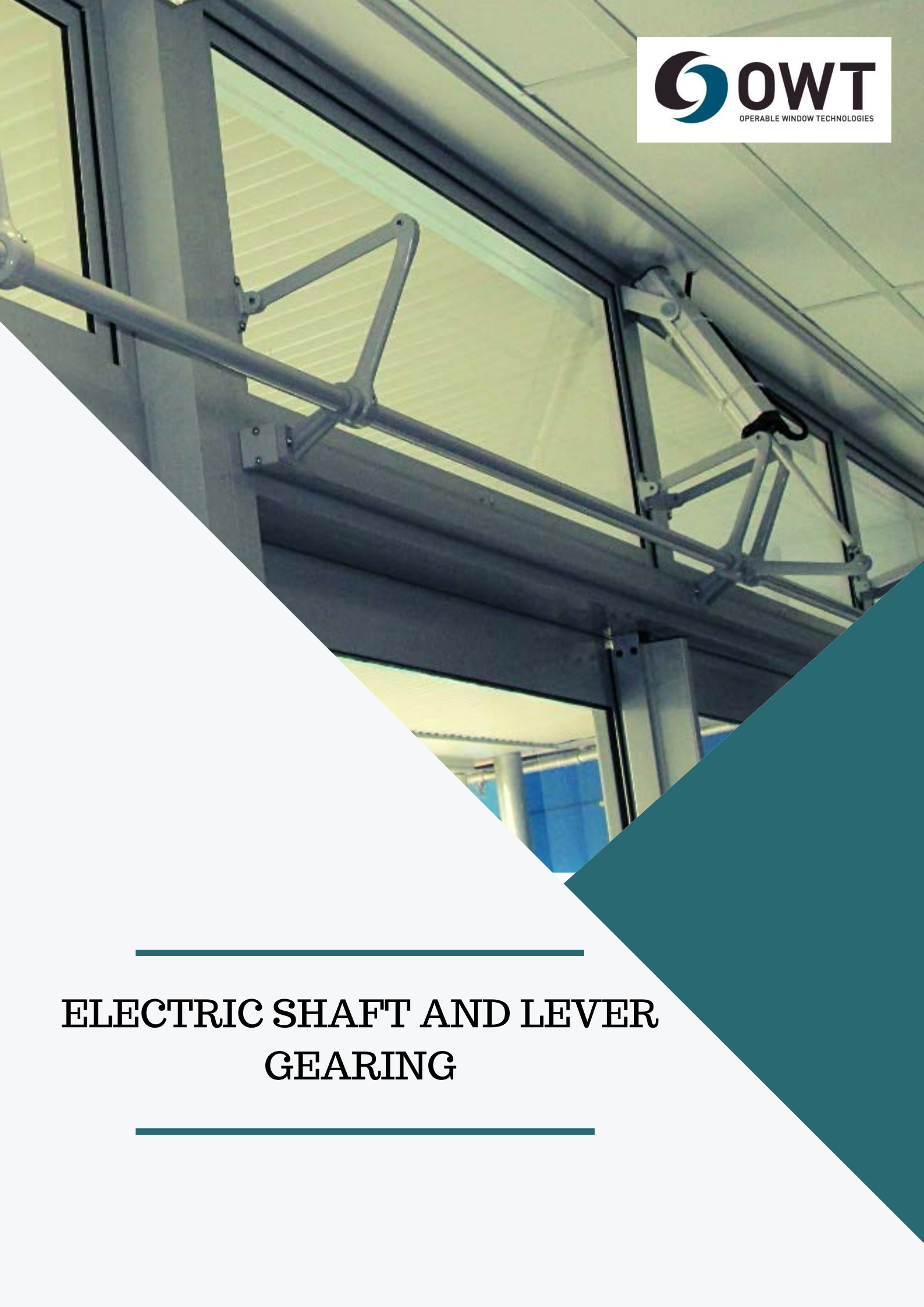
- Extremely strong and robust
 - Suitable for large and heavy sashes
 - High wind resistance
 - Economical window gearing solution
 - Powdercoated to match the joinery
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DESIGN REQUIREMENTS OF MANUAL GEAR

- Maximum number of sashes 7 (if sashes < 850mm wide).
- Maximum horizontal shaft length 7500mm and vertical riser height 5400mm.
- Sashes must be top hung or on frictionless stays.
- Restrictor stays must not be fitted to sashes.
- Not suitable for windows at head height, as the gearing protrudes into the room when closed.

OPERATIONS OF MANUAL GEAR

- The windows are operated by a vertical shaft and gearbox with handle, positioned at an easy to reach height.
 - No cabling is required.
 - Gearboxes and vertical drive mechanisms must be mounted on solid walls below the windows.
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ELECTRIC SHAFT AND LEVER GEARING



ELECTRIC SHAFT AND LEVER GEARING

OWT recommends Electric shaft and lever, if there are groups of windows in one room. This gearing minimal the extra investment over manual, especially if the sashes are very high. The windows are operated by a 230 volt electric linear actuator motor.

We use motors from the Italian GIESSE range, a quality and economical solution for operating window controls.

PRACTICALITY OF ELECTRIC GEAR

- Fast and very quiet.
 - Can be installed everywhere.
 - Takes up little space.
 - Economical solution for a quality product.
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DESIGN REQUIREMENTS OF ELECTRIC GEAR

- 230 volt is the standard voltage of all cabling, so no special wiring or controllers are required.
 - Electric motors are finished with a natural anodised body with black plastic fittings.
 - Electric linear actuators must be mounted on solid walls.
 - At installation we set up the motors and limit switches and leave the cable hanging for final connection by the electricians. They are not to be permanently hard wired.
 - The registered electrical contractor supplies all electrical wiring.
 - The switches must have a neutral position to which the switch returns, so that power is not permanently supplied to the motors.
 - Electric linear actuator motors can be wired in parallel.
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ELECTRIC CHAIN WINDERS

TOPP C20 CHAIN WINDERS



C20

Chain Actuator
Thrust force 300 N
Max stroke 360 mm

TOPP C₂₀ CHAIN WINDERS

These units are Italian designed and manufactured, and used extensively throughout Europe and Australasia. They are robust, safe and come in 230 volt & 24 volt options.

OWT has extensive experience with chain drives, installed in many situations from schools, churches, community and residential buildings, particularly where blinds or curtains are to be used.

With all electric systems, we also offer rain, smoke, temperature sensors, and remote controls, or we can offer fully integrated systems.

A chain actuator, designed and constructed to respond all the application needs of modern window hardware, from the automation of every type and size of windows.

PRACTICALITY OF TOPP C₂₀

- Incredibly discreet and unobtrusive.
 - Take up very little space.
 - Do not interfere with any window treatments such as curtains or blinds.
 - Economical.
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TOPP C₂₀ TECHNICAL SPECIFICATIONS

Electric actuator TOPP, model C20 with double link articulated chain, contained in a suitable casing, complete with support and fitting accessories for top and bottom hung windows. Operation at 230V 50Hz or, as an alternative, at 24V DC. Maximum applicable load 300N. Rapid hooking system for the adjustment to the frame. Stroke adjustable at 240 or 360 mm by an external selector. CE marked device.

TECHNICAL CHARACTERISTICS	C20 230V	C20 24V
Power supply voltage	230V ~ 50Hz	min 21V ~ max 28V
Max applicable load in thrust	300 N	
Max applicable load in traction	200 N	
Stroke	240 and 360 mm	
Absorbed current	0,12 A	0,43 A
Idle translation speed	8 mm/s	7,5 mm/s
Duration of the idle stroke	46 s	48 s
Double electrical insulation	YES	-
Service type		S2 of 4 min
Operating temperature		- 5°C + 50°C
Protection degree of electric devices		IP 30
Stroke end regulation in closing		not necessary
Parallel connection of two or more C20		YES
Stroke end	Electronic in opening, by amperometric absorption in closing	
Dimensions	362x48x34 mm	
Weight*	0,970 kg	0,940 kg

* The weight may vary according to the chosen accessories

ACK 4 - CHAIN WINDERS



ACK₄ CHAIN WINDERS

ACK₄ are Italian designed, manufactured and used extensively throughout Europe and Australasia. They are robust, safe and have been installed in many schools, particularly where blinds or curtains are to be used.

Being 230 volt means the cabling is very simple, and eliminates the need for transformers and controllers, which makes them even more economical.

They can be wired in parallel. They are also available in 24 volt, if required. With all electric systems, we also offer rain, smoke, temperature sensors and remote controls. We can also offer fully integrated systems.

PRACTICALITY OF TOPP ACK₄

- Very discreet and unobtrusive, Very robust and fast
 - Do not interfere with any window treatments such as curtains or blinds
 - Suitable for sashes up to 1500mm wide - IP rating of 55
 - Economical - more economical than manual gearboxes for single sash windows.
 - Available 230 volt, so can be wired directly from switch to chain drive, without transformers or controllers, making cabling easy and economical.
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ACK4 TECHNICAL DATA

CODE	ACK4230	ACK424
VOLTAGE	230VAC	24VDC
STROKE	100-400mm	100-400mm
THRUST FORCE	300N	300N
ABSORBED CURRENT	0.32A	1.35A
SPEED	27mm/s	17mm/s
PROTECTION CLASS	IP55	IP55
FLEX	1.5m (3 CORE)	1.5m (2 CORE)
COLOURS	WHITE / BLACK / GREY	WHITE / BLACK / GREY
LIMIT STOP	ELECTRONIC	ELECTRONIC
SAFETY STOP	ELECTRONIC	ELECTRONIC
MAX WINDOW WIDTH	<1.5m	<1.5m



KATO - CHAIN WINDERS



KATO CHAIN WINDERS

These units are Italian designed and manufactured, and used extensively throughout Europe and Australasia.

They are robust, safe, and have been installed in many schools, libraries, and other environments, particularly where blinds or curtains are to be used.

Being 230 volt means the cabling is very simple, and eliminates the need for transformers and controllers, which makes them even more economical.

They can be wired in parallel. Also available in 24 volt, if required.

PRACTICALITY OF KATO

- Very discreet and unobtrusive
 - Take up little space
 - Do not interfere with any window treatments such as curtains or blinds
 - Also available with stainless steel chains for coastal areas
 - Economical – single chain drives more economical than manual gearboxes for single sash windows.
 - Available 230 volt, so can be wired directly from switch to chain drive without transformers or controllers, making cabling easy and economical.
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KATO TECHNICAL DATA

Model	KATO 230V	KATO 24V	KATO SYNCR0 ³ 230V	KATO SYNCR0 ³ 24V
Force exerted by thrust and traction	300N		300N	
Strokes (<i>can be selected at any time</i>)	110, 200, 300, 400 mm		100, 200, 400 mm	
Power supply voltage	110/230V~	24V=	110/230V~	24V=
Rated absorbed current	0,115A	0,950A	0,115A	0,950A
Power absorbed at nominal load	~25 W	~23 W	~25 W	~25 W
No load speed	12,5 mm/s	12,5 mm/s	8,5 mm/s	8,5 mm/s
Duration of no load stroke (400 mm)	32 s	32 s	48 s	48 s
Double electrical insulation	Yes	Low tension	Yes	Low tension
Type of service	S ₂ of 3 minutes		S ₂ of 3 minutes	
Operating temperature	- 5 + 65 °C		- 5 + 65 °C	
Protection index for electrical devices	IP30		IP30	
Adjustment of connection to window frame	Automatic definition of position		Automatic definition of position	
Parallel powering of two or more motors	Yes	Yes	Yes	Yes
Synchronised function	No	No	Yes	Yes
Static hold force	1.700 N		1.700 N	
Stroke-end at opening	Electronic with regulation by means of dip-switches		Electronic with regulation by means of dip-switches	
Stroke-end at closing	At absorption of power		At absorption of power	
Signalling 'window open/window closed'	No	No	No	No
Length of power cable	2 m	2 m	2,5 m	2,5 m
Dimensions	386,5x59x37 mm		386,5x59x37 mm	
Weight (Kg)	0,970	0,940	1,180	1,150

Any information reported in this table is not binding and may be susceptible to variations without notice.