



High-speed drive system for ultra-long life Vacuum Capacitors

Ultra Life

Increase the reliability and useful lifetime of your Impedance Matching Network with the best choice of Vacuum Capacitors along with the latest drive system technology.

The expected lifetime of a Vacuum Capacitor is determined by the drive system and bellows design. Comet's field proven bellows have been recognized as the leading designs for RF stability and lifetime. With the introduction of Ultra Life, the drive system components now last at least three times longer.

Avoid system breakdowns

Friction in the drive system may cause particle formation, increased torque, leading to sticktion and finally result in failure.

Comet Ultra Life drive systems enhance the lifespan of Vacuum Capacitors and therefore, Impedance Matching Networks, by at least threefold compared to current products. Comet improvements ensure trouble free operation and lifetime up to 100 million turns.

Benefits

- Designed for 600 and 1200 RPM for fast match tuning
- Lifetime up to 100 million turns
- RoHS compliant
- Available for most Comet Vacuum Capacitors
- Customized types available



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Led by experience. Driven by curiosity.

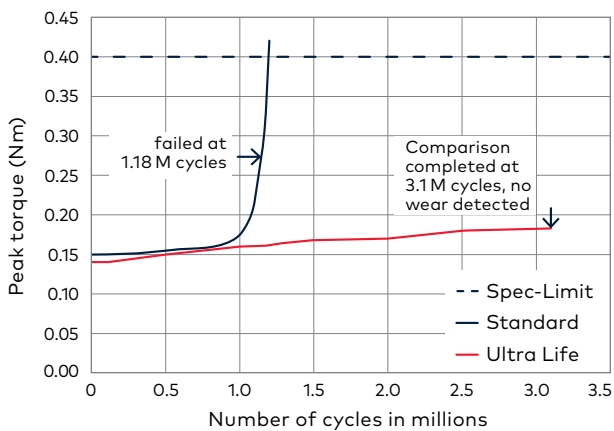
Comet high performance Vacuum Capacitors

Comet's advanced Ultra Life drive systems offer unbeaten durability and performance during sophisticated application and production processes, especially at high tuning speeds. Most Comet Vacuum Capacitors used for semiconductor applications can be equipped with the RoHS compliant Ultra Life drive system:



Basic-Con Hexa-Con Uni-Con Tetra-Con Uni-Select Power-Con

Comparison life cycle test Hexa-Con series



The results of specific life cycle tests with different drive systems are available on request. Please contact your local Comet experts for more information.

Switzerland (Head Office)

Comet AG
Flamatt

China

Comet Mechanical Equipment
(Shanghai) Co. Ltd., Shanghai

Germany

Comet Yxlon GmbH
Aachen

Japan

Comet Technologies Japan KK
Yokohama

Korea

Comet Technologies
Korea Co., Ltd., Suwon-si

Malaysia

Comet Technologies
Malaysia Sdn Bhd, Penang

Taiwan

Comet Solutions Taiwan Ltd.
Hsinchu

United States

Comet Technologies USA, Inc.
San Jose/CA

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Extend the lifetime up to factor 10

The interface letter no. 4 indicates the lead screw feature.

Example:

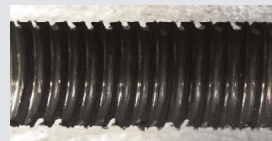
- CVHE-200AC/15-AAAB-A1 Standard product
5 - 10 million turns
- CVHE-200AC/15-AAAD-A1 Ultra Life Drive system
50 - 100 million turns

Expected lifetime in million turns

Lead screw feature	Ultra Life			
	C	D	K	L
Uni-Con				50 - 100
Uni-Select			30 - 60	50 - 100
Power-Con	25 - 50			25 - 50
Hexa-Con	25 - 50	50 - 100		
Tetra-Con	25 - 50	50 - 100		
Maxi-Con	10 - 20			
Hiper-Con		20 - 40		
Supra-Con		20 - 40		

Other series and configurations on request

Post test component comparison



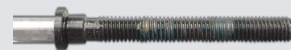
Standard version

After 1.21 M cycles /
14.52 M turns



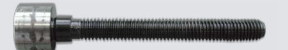
Ultra Life drive system

After 3.1 M cycles /
37.2 M turns



Standard lead screw

Worn-out flanks are clearly visible on nut



Ultra Life lead screw

The screw is still in perfect condition visually and when tested with the go / no-go gauge

Technical information can be found in Service Bulletin SB-56:

pct.comet.tech/service-bulletins