

## High speed Vacuum Capacitor drive systems Lifetime up to 100 million turns

# 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 has been recognized as the leading design for RF stability and lifetime. With the introduction of Ultra Life, the drive system components now last at least three times longer.

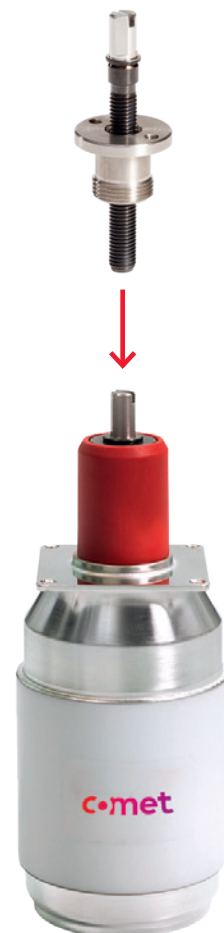
### **Avoid system breakdowns**

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

Comet Ultra Life drive systems increase capacitor and matching network lifetime by three or more times over existing products. Comet improvements ensure trouble free operation and lifetime up to 100 million turns.

### **Benefits**

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



**c•met**  
pct

**Led by experience. Driven by curiosity.**

## Comet high performance Vacuum Capacitors

Comet offers the broadest selection of capacitance, voltage and current combinations in the market. Our high performance vacuum capacitors are produced with the finest materials, fabrication processes and quality standards, to meet the needs of challenging semiconductor processes.

The optional Ultra Life drive system is available on request for most Comet vacuum capacitors traditionally used in semiconductor applications:

- Basic-Con
- Uni-Select
- Uni-Con
- Power-Con
- Hexa-Con
- Maxi-Con
- Hiper-Con
- Supra-Con



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

### Germany

YXLON International GmbH  
Aachen

### United States

Comet Technologies USA, Inc.  
San Jose/CA

### China

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

### Korea (South)

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

### Malaysia

Comet Technologies  
Malaysia Sdn Bhd, Penang

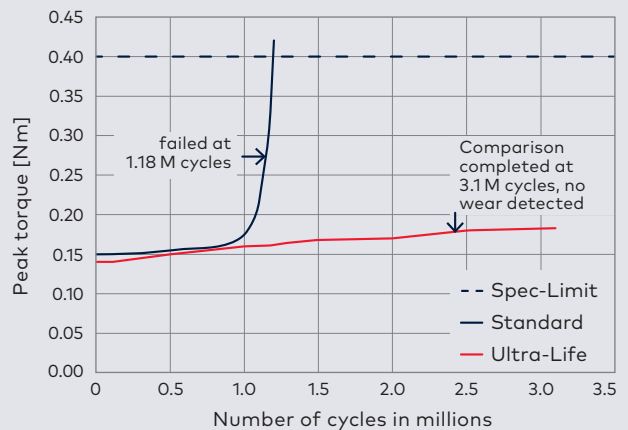
### Taiwan

Comet Solutions Taiwan Ltd.  
Hsinchu

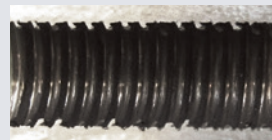
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## Drive system lifetime comparison (Hexa-Con series)



## Post test component comparison



### Standard version

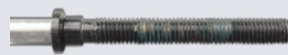
After 1.21 M cycles /  
14.52 M turns



### Ultra Life

#### drive system

After 3.1 M cycles /  
37.2 M turns



### Standard

#### lead screw

The screw still  
functions but residue  
is clearly visible



### 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](mailto:pct.comet.tech/service-bulletins)