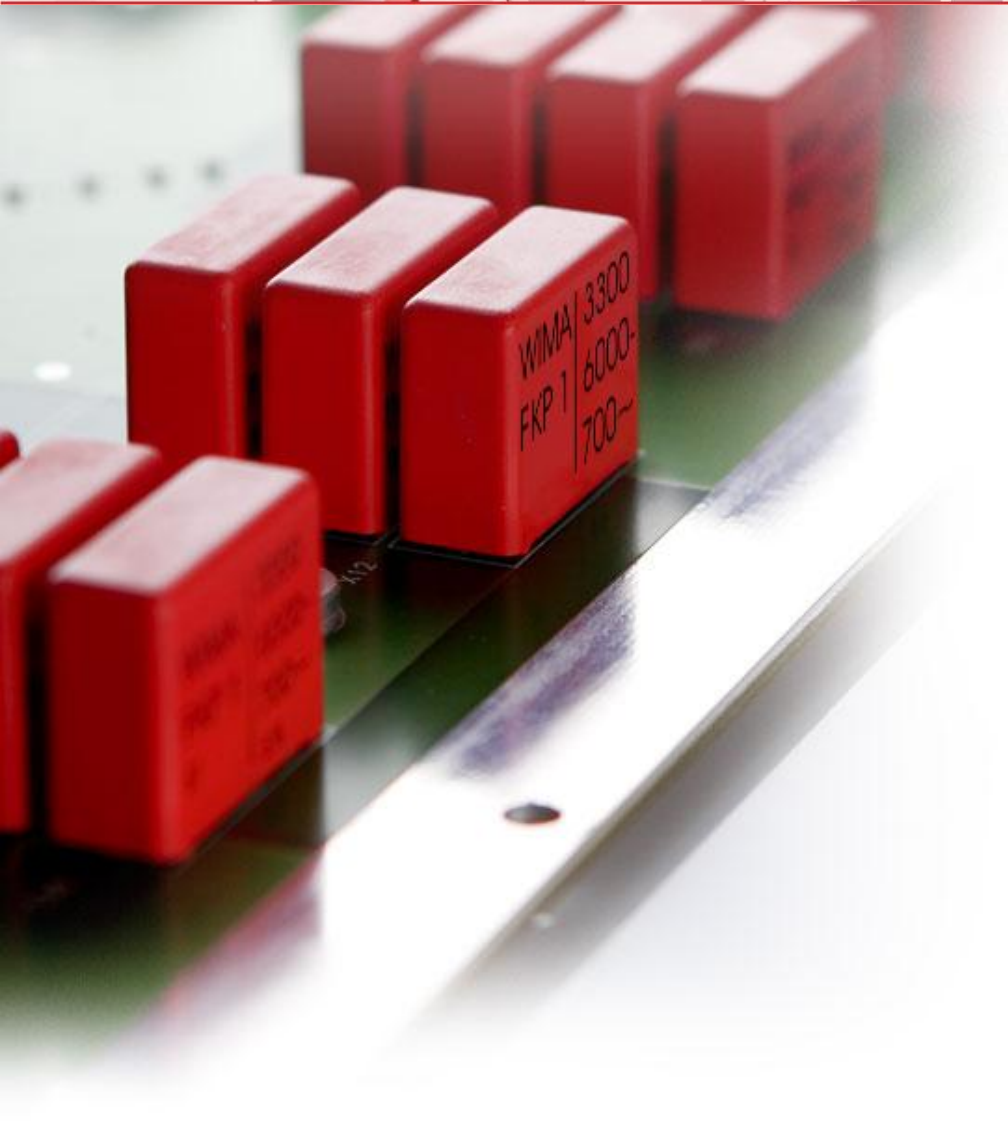
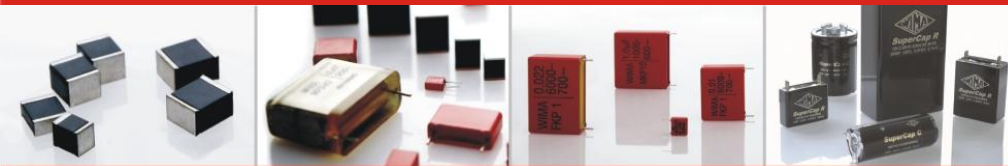


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## **WIMA Group Presentation**



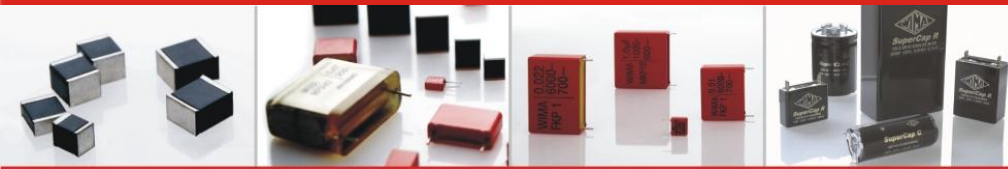
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## Outline

- WIMA Facts
- Sales Network
- Activities & Applications
- Product Range
- Quality
- Philosophy





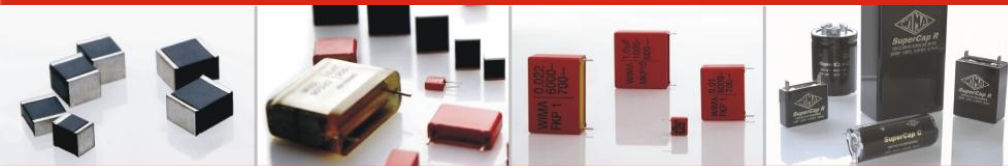
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## WIMA Facts

- **Foundation:** 1948 by Wilhelm Westermann
- **Fields of Activities:** Manufacture and sale of:
  - plastic film capacitors in SMD/through hole version and special caps
  - metallized paper capacitors
  - SuperCap double-layer capacitors
- **Ownership:** 100 % privately owned  
Wilhelm Westermann: 1948 - 1980  
Wolfgang Westermann: 1981 - today
- **Production Capacity:** max. 3 million pieces/day
- **Sites:** Administration and production in Germany only
- **Distribution:** Worldwide





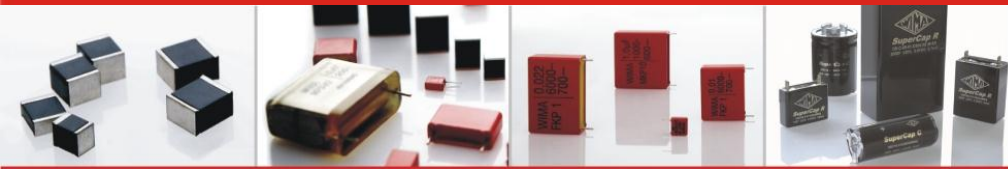
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## Germany's 1000 Global Market Leaders

Ranking	Company	Industry sector
1	Volkswagen	Automotive
2	Allianz	Financial service provider
3	EON	Transportation, logistics and other services
4	Daimler	Automotive
5	Siemens	Diversified companies and holdings
6	Metro	Trading company
7	BASF	Chemical industry
8	BMW	Automotive
9	Aldi	Trading company
10	Deutsche Post	Transportation, logistics and other services
...		
901	<b>WIMA</b>	Electronic and electro-technics

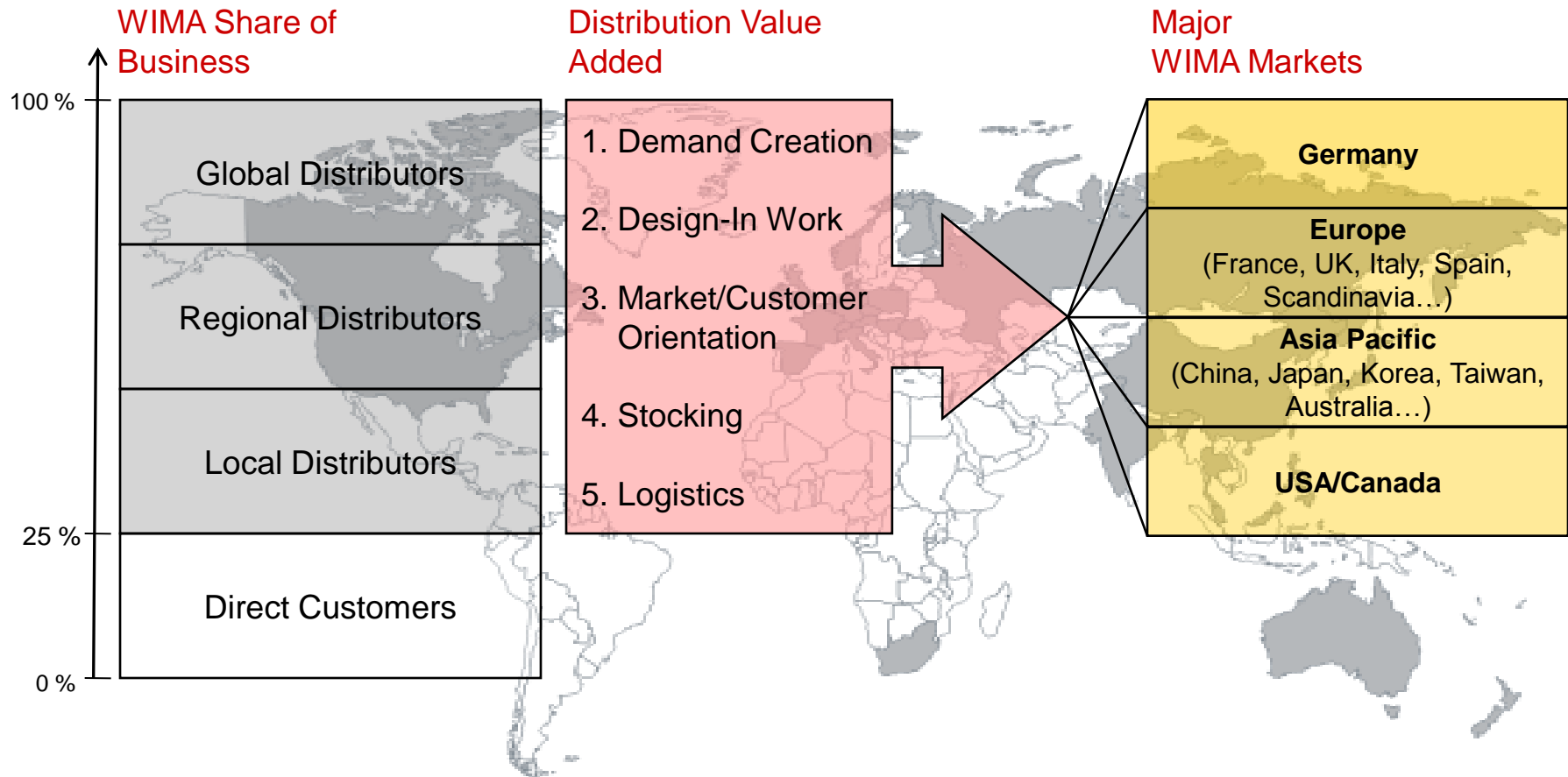
Source: Manager-Magazin 23.Oct..2011

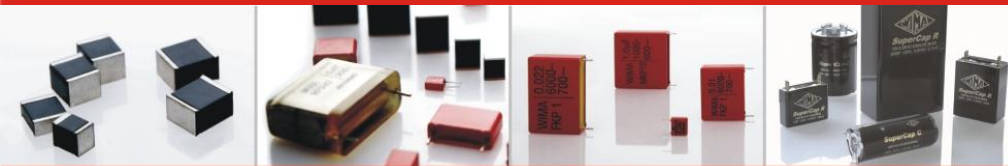


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## Worldwide Net of WIMA Distributors and Representations

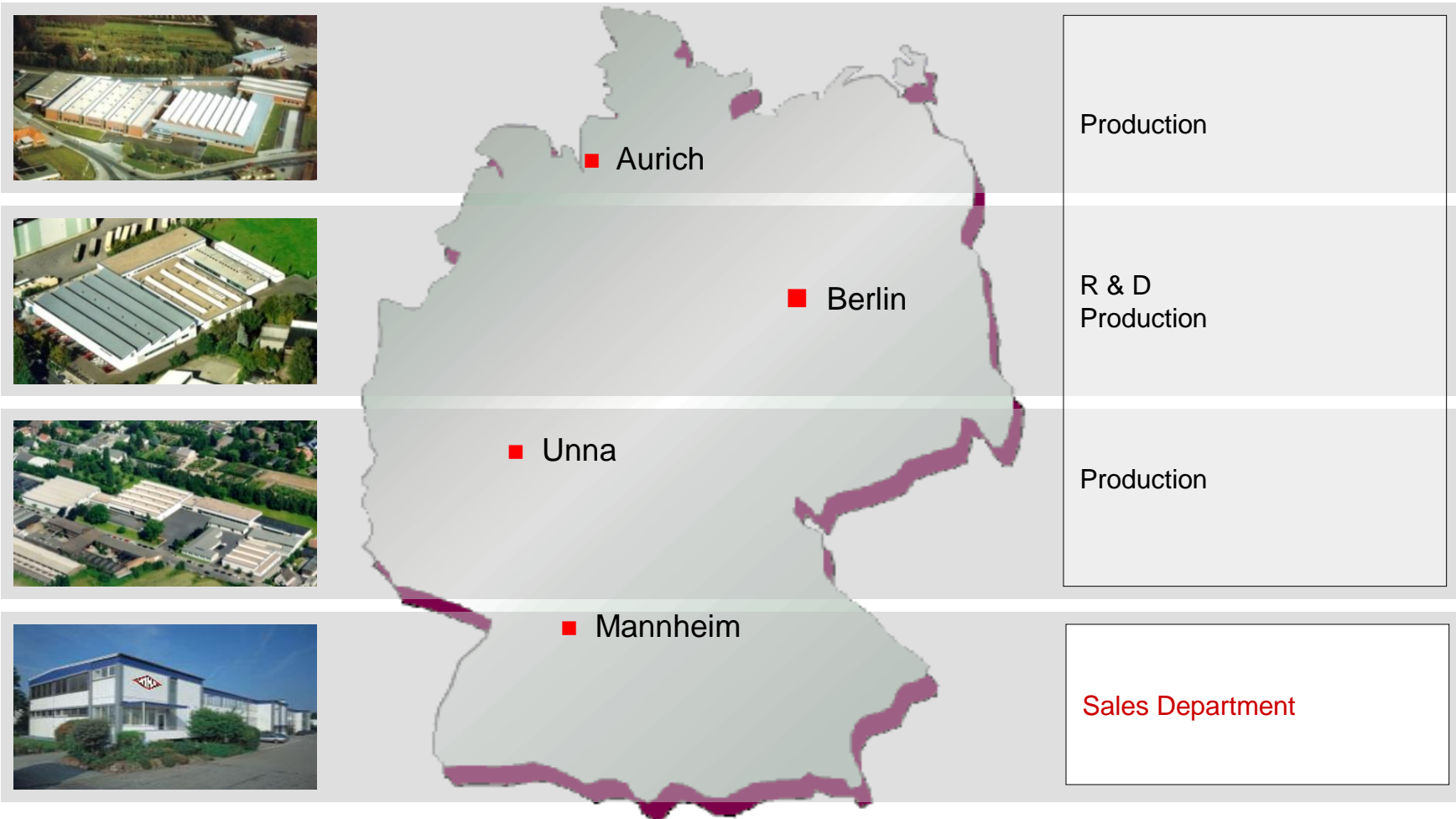


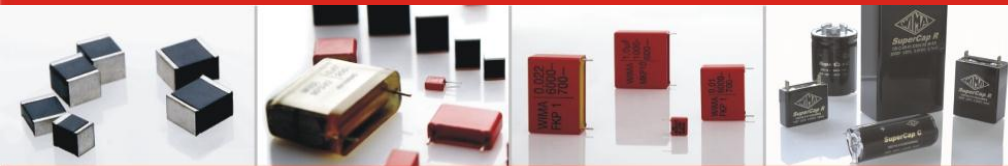


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## WIMA Locations and Products





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## Range of Activities with Application Examples

### ■ Lighting:

- Ballasts
- Energy saving lamps

### ■ Power Supply:

- RFI (Radio Interference Suppression)
- Transformers
- AC/DC converters

### ■ Industry:

- Control electronics
- Security systems
- EMC (Electromagnetic Compatibility)
- Potential transformer
- Sensor technology
- Liquid control / flow measuring

### ■ Medical Technology:

- RFI (Radio Interference Suppression)
- EMC (Electromagnetic Compatibility)
- X-Ray / dialysis

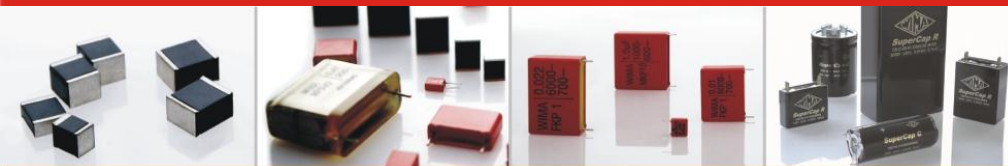
### ■ Automotive:

- Ignition capacitors for airbag
- Control units for communication, motor and gear
- EMC (Electromagnetic Compatibility)
- Belt pretensioner
- Lighting: Xenon-ballasts
- Bus interface systems

### ■ Others:

- Alternative energies
- Wind power / solar panels
- Data transmission
- Communications engineering
- Air / Space technology
- Train / Railway vehicles
- Modems
- DSL/ADSL splitters





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## With a strong Focus on Innovation WIMA sets Milestones in Capacitors

**WIMA: Pioneer of Capacitors since 1948 (foundation)**

**1959**

**WIMA TFM** ----- the first metallized Polyester capacitors with axial leads for mass production

**1963**

**WIMA MKS** ----- the first metallized Polyester capacitors with radial pins

**1970**

**WIMA PCM 5 mm** ----- MKS 2 with capacitances up to 10  $\mu\text{F}$

**1972**

**WIMA MKP 10 / FKP 1**----- the first pulse-duty plastic film capacitors

**1979**

**WIMA PCM 2.5 mm** ----- WIMA MKS 02 with capacitances up to 1  $\mu\text{F}$

**1983**

**WIMA SMD** ----- 1. generation in PET

**1988**

**WIMA PPS** ----- through-hole construction

**1994**

**WIMA SMD** ----- 2. generation in PET

**1997**

**WIMA Snubber** ----- MKP and FKP

**1998**

**WIMA SMD** ----- 3. generation in PET, PEN und PPS

**2003**

**WIMA GTO** ----- MKP

**2004**

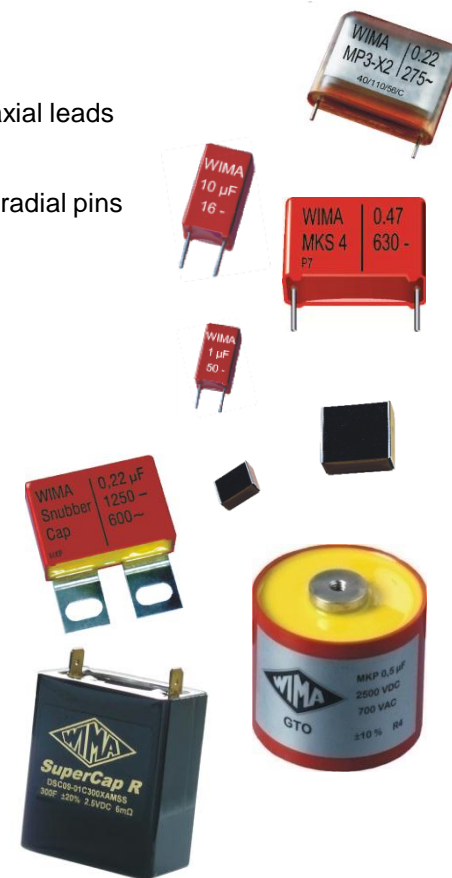
**WIMA SuperCap R + Module** -- 1. generation in rectangular case

**2007**

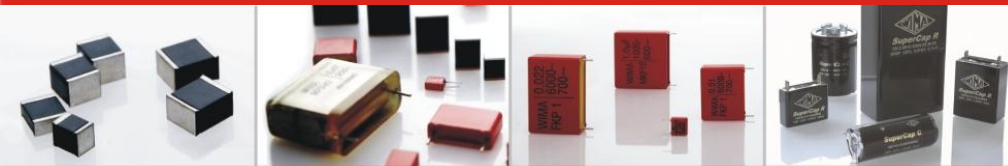
**WIMA DC Link** ----- MKP 4 / MKP 5 / MKP 6 / HC

**2008**

**WIMA SuperCap C + Module** -- 2. generation in cylindrical case







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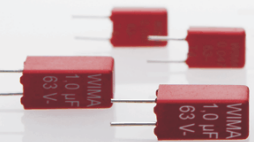


## WIMA Product Range



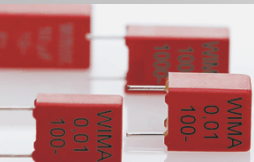
### ■ SMD Plastic Film Capacitors

0.01  $\mu$ F - 6.8  $\mu$ F  
63 VDC - 1000 VDC



### ■ PCM 2.5 mm Capacitors

100 pF - 1  $\mu$ F  
50 VDC - 400 VDC



### ■ PCM 5 mm Capacitors

27 pF - 10  $\mu$ F  
50 VDC - 1000 VDC



### ■ Capacitors for stringent requirements

100 pF - 220  $\mu$ F  
50 VDC - 2000 VDC



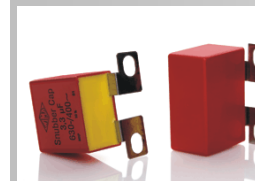
### ■ Capacitors for high current ratings

100 pF - 15  $\mu$ F  
100 VDC - 6000 VDC



### ■ RFI Capacitors Class X1, X2, Y2

1000 pF - 10  $\mu$ F  
250 VAC - 500 VAC



### ■ Snubber Capacitors

0.01  $\mu$ F - 25  $\mu$ F  
250 VDC - 4000 VDC



### ■ GTO Capacitors

1  $\mu$ F - 100  $\mu$ F  
400 VDC - 1100 VDC



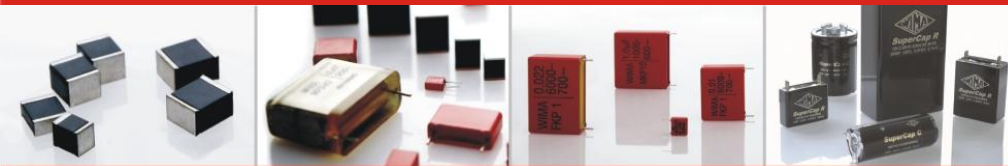
### ■ DC-LINK Capacitors

2  $\mu$ F - 4500  $\mu$ F  
400 VDC - 1600 VDC



### ■ SuperCapacitors and Modules

12 F - 6500 F  
2.5 VDC - 112 VDC

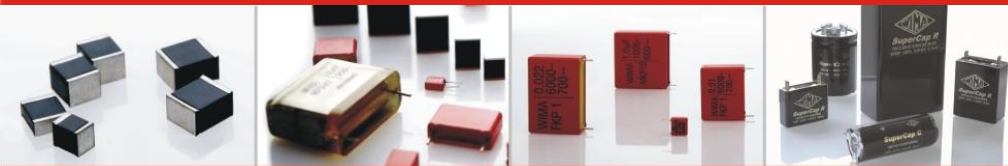


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## WIMA References (Examples)

Lighting	Industrial	Contract Manufacturer	Audio / Video / Monitors	Automotive	Communication / Data Processing
▪ ARTESYN	▪ ABB	▪ ASKEY	▪ AUDIO RES.	▪ AUTOLIV	▪ ACER
▪ DELTA	▪ AIRBUS IND.	▪ BENCHMARK	▪ BARCO	▪ BMW	▪ AGILENT
▪ GE	▪ ALSTOM	▪ CELESTICA	▪ BLAUPUNKT	▪ BOSCH	▪ ALCATEL
▪ HOWARD IND.	▪ BOEING	▪ COMPUTIME	▪ DOLBY	▪ CONTI TEMIC	▪ APPLE
▪ LAMBDA	▪ BOM	▪ DELTA	▪ BOSCH COM	▪ DAIMLER	▪ CISCO
▪ ...	▪ ...	▪ FLEXTRONICS	▪ ...	▪ DELPHI	▪ DELL
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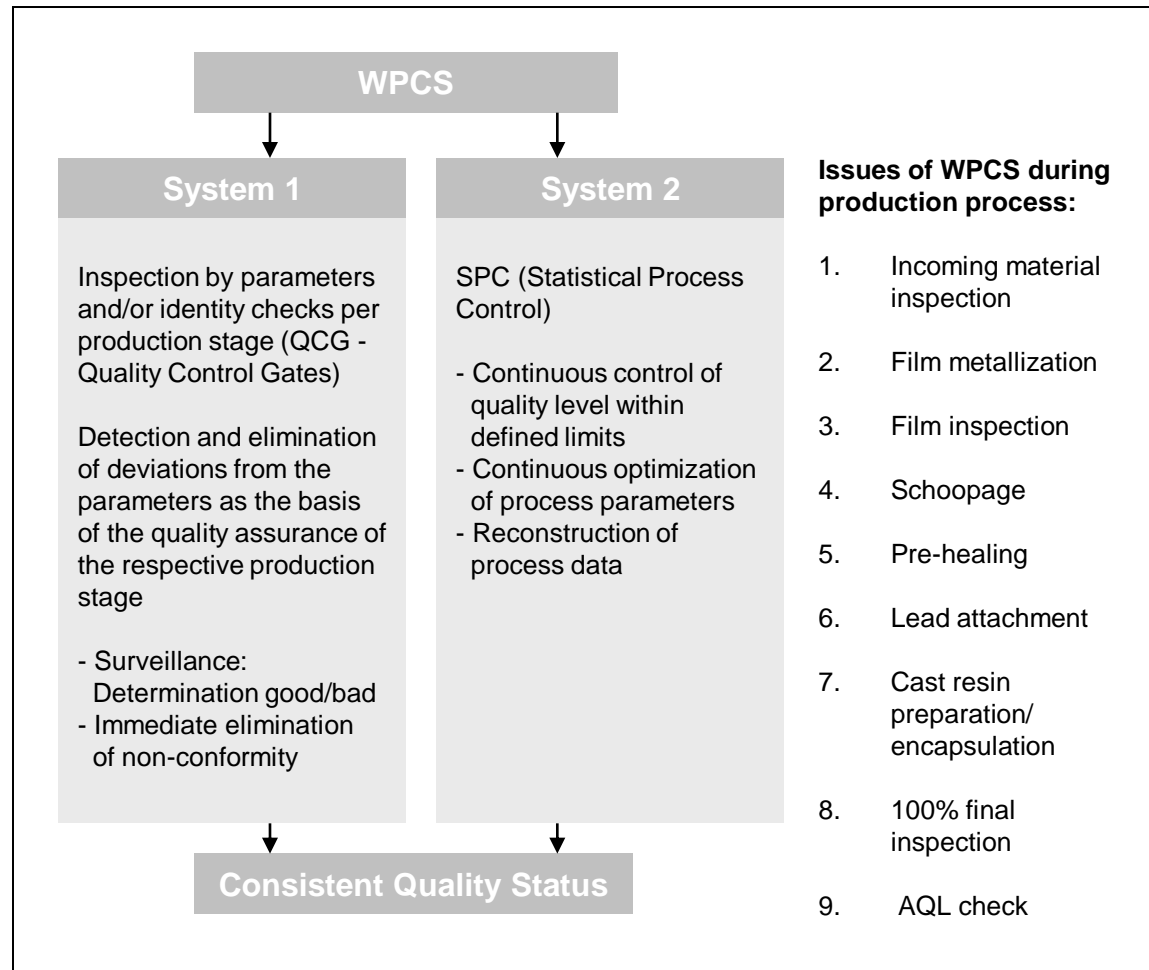
## WIMA Quality

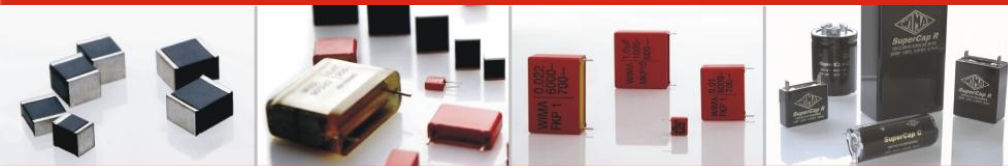
All WIMA factories are approved to **ISO 9001:2008** as well as to **ISO 14001:2009** (TS 16949 under preparation),

All WIMA products are manufactured in accordance with **IEC** specifications.

All WIMA products are in accordance with RoHS 2002/95/EC

All WIMA plants are subject to **WPCS** (WIMA Process Control System) to optimize quality. WPCS is a quality surveillance and optimization system developed by WIMA being a major part of our quality-orientated production.





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## WIMA Philosophy

Overall goal of the WIMA Group is **highest quality and total customer satisfaction** by a performance covering:

- **Quality**
- **Innovation**
- **Delivery Reliability**
- **Cost Effectiveness**

As a **capacitor specialist** with headquarter and production in Germany the competitiveness against multinational conglomerates can only be sustained through a combination of:

- a lean and flexible organisation and
- excellence in technical innovation, productivity and customer orientation.

The increasing tendency away from the pure “low-price-philosophy” is primarily due to the customer’s desire for further improvement of his own product quality.





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**Thank You !**

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