



Mechanical Carbon Components

SEALING & BEARING SOLUTIONS

A Heritage of Bespoke Engineering

Anglo Carbon & Contacts is a well-established company, having over 55 years' experience in the manufacture of high quality electrical and mechanical carbon and graphite based products.

Research and development of our materials is based at our West Sussex facility, where our material technologists formulate new and bespoke materials in order to satisfy the ever-changing demands in a competitive global market. This is also our materials production unit, where our materials are mixed and pressed from powder, prior to heat treatment. Depending upon the grade we are also able to press to finished size, eliminating the need for machining on higher volumes.

The head office in West Yorkshire, is also where all finish machining takes place, with CAD/CAM facilities, modern CNC machines and impregnation vessels, we are able to post treat finished components to further enhance our materials suitability to your application.

Our materials and products can be found in a wide range of industries and applications including

- Automotive
- Aerospace
- Oil & Gas
- Chemical
- Marine
- Medical
- Food
- Industrial



The Right Choice for:

Advanced Polymers

Our advanced polymers, are a range of modified PTFE materials able to operate at higher temperatures and pressures than traditional filled PTFEs in a broad range of pump, compressor and valve applications.

- This range covers both lubricated and non lubricated applications in a multitude of gases
- Their low porosity and lubricious nature lend themselves perfectly to sealing applications
- With the addition of various fillers higher loads and speeds can be achieved for bearing applications in chemical pumps resulting in greater dimensional stability and lower wear rates
- For dry gas/cryogenic applications please refer the ACM700 brochure

Carbon & Graphite Materials

Our carbon and graphite materials offer;

- Excellent chemical compatibility
- Low coefficient of expansion
- High conductivity
- Low wear rates for seals and bearings running in liquids
- These grades are able to withstand higher temperatures

Polyimide Materials

Polyimide materials unlike our carbon and graphite based materials have

- Extremely low electrical and thermal conductivity
- Ideal for higher temperature sealing and bearing applications
- Can also be used in dry, wet or mixed running conditions
- These materials also exhibit good friction and wear properties
- Excellent impact resistance

Resin Bonded Materials

Resin bonded materials offer;

- Excellent dry running characteristics
- For wet running conditions they should be used at lower operating speeds/loads
- Good thermal conductivity
- Good chemical resistance
- Low coefficient of expansion
- Suitable for press to size components for higher volume production runs

Grade Application Guide - Carbon & Graphite

GRADE	TYPE	DENSITY g/cm ³	SHORE HARDNESS	TENSILE STRENGTH Kgf/cm ²	TRANSVERSE BENDING STRENGTH Kgf/cm ²	POROSITY %	MAX. TEMP. °C
Me507	Carbographite	1.65	50	260	11		350
Me508	Carbographite	1.66	80	400	<0.25%		350
Impreg Me509	Carbographite Resin Impregnated	1.75	80	410	<0.25%		200
Me501	Resin Bonded	1.70	55	600	<1%		200
Me502	Resin Bonded	1.65	58	650	<1%		200
Me511	Resin Bonded	1.69	65	600	<1%		190
Me513	Resin Bonded	1.68	68	640	<1%		200
Me514	Resin Bonded	1.75	65	650	<1%		200
Me518	Resin Bonded	1.7	68	430	<1%		190
Me523	Resin Bonded	1.65	75	475	<1%		180
Me524	Resin Bonded	1.7	74	500	<1%		190
ACM700	Polyarylate Blend		195	65	4.5	<1%	220
ACM722	Polyimide		1.4	75	410	<0.5%	360
ACM740	Polyimide		1.4	77	530	<0.5%	380
ACM751	Polyimide		1.45	75	520	<0.5%	400
ACM789	Polyimide		1.47	72	540	<0.5%	425

Grade Application Guide - PTFE Filled

GRADE	TYPE	DENSITY g/cm ³	SHORE HARDNESS	TENSILE STRENGTH MPa	YOUNG'S MODULUS GPa	ELONGATION %	POROSITY %	MAX. TEMP. °C
ACM521	PTFE Carbographite	2.05	35	16	12.9	35%	<0.25%	200
ACM522	PTFE Carbographite	2.01	33	16	11.9	19%	<0.5%	200
ACM523	PTFE Carbographite	2.06	35		12.5			200
ACM525	PTFE Carbographite	2.08	30	10	11.7	1%	<1%	200
ACM527	PTFE Carbographite	2.14	35	14	9.3	100%	<0.25%	210
ACM528	Glass	2.26	35		2.2			180
ACM529	Glass	2.28	35	17	5.6	200%	<0.25%	180
ACM531	Glass, MOS ₂	2.30	35		7.3			180
ACM552	Bronze, MOS ₂	3.87	30	16	11.5	90%	<0.25%	190
ACM553	PTFE Carbographite	2.08	40		6.0			200
ACM560	Glass/Cu	2.36	25	15	11.3	200%	<0.25%	190
ACM579	Bronze, Mos ₂ , PPSO ₂	3.61	33	17	13.2	15%	<0.25%	190

MECHANICAL COMPONENTS

RANGE Seals & Bearing Solutions

BEARINGS

- Shaft bearings
- Linear bearing pads

SEALS

- Mechanical seal faces
- Energised seals
- Labyrinth

VALVE COMPONENTS

- Valve seats

COMPRESSOR COMPONENTS

- Packing rings
- Piston rider rings

ROTORS & VANES