

## The perfect addition to an unrivalled service

M Barnwell Services Limited, the UK's leading provider of Fluid Sealing Solutions is proud to announce our latest investment in customer service - **The Barnwell Seal Maker**.



We've installed a new CNC seal-making machine at our headquarters in Birmingham. This new division is yet another addition to our growing 'family' of specialist services available to our customers.

Manned by experienced, knowledgeable engineers, the unit is geared up to manufacture urgent special or standard seals, in a variety of quality materials, including Elastomers (Nitrile, FPM, Silicone, EPDM), PTFE and Polyacetal. We can produce seals up to 400mm O.D. and larger sizes on request.

- No minimum quantity
- No minimum start up charge
- No tooling limitations
- Rapid delivery
- Bespoke profiles service



## The Barnwell Portfolio

An extensive range of quality sealing products and services are available, including:

- Rotary Shaft Seals
- 'O' Rings
- Hydraulic & Pneumatic Seals
- Gaskets & Packings
- Sealing Washers
- Rubber Mouldings & Extrusions
- Circlips
- Adhesives & Sealants
- Springs & Fasteners
- Workshop Consumables
- Image Branding Service
- Bespoke Kits

Contact your nearest Barnwell Service Centre or call our Special Sales Hotline:

# 0121 420 0770

**Headquarters and Central Warehouse**  
M Barnwell Services Ltd,  
Reginald Road, Smethwick  
West Midlands B67 5AS  
Tel 0121 429 8011  
Fax 0121 434 3016  
e-mail sales@barnwell.co.uk

**Dartford**  
Unit 7 Schooner Park,  
Crossways Business Park,  
Dartford, Kent DA2 6QG  
Tel 01322 293024  
Fax 01322 272099  
e-mail dartford@barnwell.co.uk

**Bellshill**  
Unit 14 & 16, Murray Place  
Righead Industrial Estate,  
Bellshill, Lanarkshire ML4 3LJ  
Tel 01698 749666  
Fax 01698 749888  
e-mail scotland@barnwell.co.uk

**Manchester**  
Unit 36/37, Westbrook Trading Estate,  
Westbrook Road, Trafford Park,  
Manchester M17 1AY  
Tel 0161 888 2330  
Fax 0161 888 2296  
e-mail manchester@barnwell.co.uk

**Bristol**  
Unit 13, Avonbank Industrial Centre,  
West Town Road, Avonmouth,  
Bristol BS11 9DE  
Tel 0117 982 5245  
Fax 0117 923 5623  
e-mail bristol@barnwell.co.uk

**Export**  
Tel 0121 429 8011  
Fax 0121 434 3016  
e-mail export@barnwell.co.uk



BS EN ISO 9001:2000 (STOCKIST)  
CERTIFICATE NUMBER RS 00530

Visit us on the web at  
[www.barnwell.co.uk](http://www.barnwell.co.uk)



**Quality**  
Barnwell only supplies the very highest quality products, in materials with Approved Certificates, including: WRAS, HWTW, DWGW, BGV, KIWA, FDA, USP, NSF/ANSI, ACS, EU 2002/72, EN681-1, EN 549, EN 682

MBSL15/11/05

**Stockholding and Supply.**  
Items in this brochure may not necessarily be manufactured under a registered ISO 9000 management system. © All trademarks acknowledged.

M. Barnwell Services Ltd endeavours to ensure that the information contained in this publication pertaining to products and services is correct and fairly stated. However, we do not accept any liability for any errors or omissions therein. Reproduction in whole or in part of this publication without our written authorisation is prohibited.

## The SEAL MAKER from Barnwell Now you don't have to wait!



**RAPID SEALING SOLUTIONS**

## PROFILE RANGE

WIPER RINGS	
PROFILE	TYPE
	WR01
	WR01A
	WR02
	WR02A
	WR02B
	WR03
	WR04
	WR11
	WR12
	WR13
	WR14
	WR17

BACK-UP RINGS	
PROFILE	TYPE
	BUR08
	BUR09
	BUR10
	BUR11
	BUR12
	BUR13

ROD SEALS	
PROFILE	TYPE
	RS01
	RS01A
	RS01B
	RS02
	RS02A
	RS03
	RS04
	RS05
	RS08
	RS09
	RS09A
	RS09B
	RS91
	RS16
	RS17
	RS17A
	RS17B
	RS17C
	RS19
	RS20

PISTON SEALS	
PROFILE	TYPE
	PS01
	PS01A
	PS01B
	PS02
	PS02A
	PS03
	PS04
	PS05
	PS08
	PS81
	PS09
	PS16
	PS17
	PS19
	PS20
	PS23

O-RINGS	
PROFILE	TYPE
	OR

SYMMETRICAL SEALS	
PROFILE	TYPE
	PRS06
	PRS06A
	PRS06B
	PRS06C
	PRS07
	PRS10SP
	PRS18
	PRS22
	PRS99
	PRS10-12

GUIDE RINGS	
PROFILE	TYPE
	BWR01
	BWR02
	BWR03
	BWR04
	BWR05
	BWR06
	BWR07
	BWR08

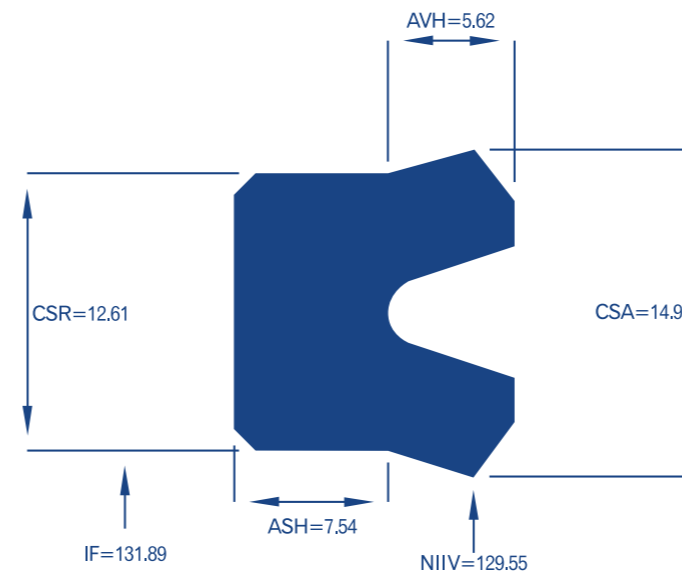
OIL/ROTARY SEALS	
PROFILE	TYPE
	OS01
	OS02
	OS08
	R03
	R04
	R05
	R06
	R07
	R08
	R09
	RS19A
	PS19A

FLANGE GASKETS	
PROFILE	TYPE
	FL01A
	FL02B

MINING SEALS	
PROFILE	TYPE
	P50
	P51
	P51G
	P52
	P53
	P54
	R50
	R51
	R52
	R53
	W50
	W51
	W53
	W54
	BWR01-P
	BWR01-R
	P58

ADDITIONAL STANDARD PROFILES			
SPECIAL SEALS AND MACHINED PARTS			

## BARNWELL BESPOKE



Our sophisticated C.A.D. system enables us to create specials. Quality samples can be provided for our customers - rapidly! Technical advice and guidance on the seal application is always available.



Our production technology enables us to supply rapid, tailor-made sealing solutions for special applications



Specials up to 1.5m outside diameter are available at short notice



All profiles can additionally be modified to your special operating conditions

## MATERIAL SPECIFICATIONS

DESCRIPTION	APPLICATION TEMP.	HARDN. AT 20°C	MAIN APPLICATION
PU red U203-R95	-30 to +105°C	Shore A 95 +/-2	U-rings, wiper rings and other seal elements. Mineral oil, Compressed air, Water resistant against hydrolysis.
PU green U203-G95	-30 to +105°C	Shore A 95 +/-2	U-rings, wiper rings and other seal elements. Mineral oil, Compressed air, Water resistant against hydrolysis.
PU blue U203-B95	-30 to +105°C	Shore A 95 +/-2	U-rings, wiper rings and other seal elements. Mineral oil, Compressed air, Water resistant against hydrolysis.
PU white (FDA) U203-95FDA	-30 to +100°C	Shore A 95 +/-2	FDA certified. U-rings, wiper rings and other seal elements in contact with food. Resistant against hydrolysis.
PU grey (MoS2) U203-GM95	-30 to +105°C	Shore A 95 +/-2	U-rings, wiper rings and other seal elements. Mineral oil, Compressed air, Water for heavy duty applications.
PU 54 Shore D blue U203-D54	-30 to +90°C	Shore D 54 +/-2	Back-up rings or composite seals with preload element. Mineral oil, Compressed air, Water resistant against hydrolysis.
NBR black N107-B85	-25 to +100°C	Shore A 85 +/- 5	U-rings, wiper rings and other seal elements. Mineral oil, Compressed air, Water.
FPM brown F109-BR85	-20 to +210°C	Shore A 83 +/-5	U-rings, wiper rings and other seal elements at high temperatures and aggressive media.
EPDM black E131-B85	-50 to +130°C	Shore A 86 +/-5	U-rings, wiper rings and other seal elements for applications in hot water and steam, as well as for diluted acids and alkaline solutions. EPDM is NOT resistant against mineral oil.
H-NBR black HN112-B85	-25 to +150°C	Shore A 85 +/-5	U-rings, wiper rings and other seal elements. Compressed air and mineral oils at higher temperatures.
NBR 95 Shore A 10N109-B95	-25 to +100°C	Shore A 95 +/-5	U-rings, wiper rings and other seal elements. Mineral oil, Compressed air, Water.
Silicone red S102-R85	-55 to +210°C	Shore A 83 +/-5	FDA certified. Flange seals, gaskets and other static seals. For dynamic applications not recommended.
POM white P101-WE	-60 to +100°C	-	Back-up and guide rings, machined parts.
PA natural A112-WC	-30 to +105°C	-	Back-up and guide rings, machined parts.
PTFE-F grey T105-G	-200 to +260°C	Shore D 55 - 64	Composite seals with elastomer preload. Spring loaded seals, Back-up and Guide elements. Glass fibre/MoS2 reinforced.
PTFE-P white T101-W	-200 to +260°C	Shore D 51 - 60	Composite seals with elastomer preload, spring loaded seals, Back-up and guide rings, low friction, for food industry, excellent chemical resistance.

Further, we supply parts from various PTFE Compounds, as well as PEEK, various Polyamide and - imides, PETP, etc...

The indicated minimum temperatures are considered as general guidelines. The proper function at low temperature is depending on the type of seal, the operating conditions and the adjacent metal parts. The indicated maximum temperatures can be exceeded, but this reduces the service life.



**BARNWELL**  
THE SEAL OF APPROVAL