

SPEEDI-SLEEVE

STAINLESS STEEL

GOLD METALLIC COATING

Time saving and cost reducing **SHAFT REPAIR KITS**



BARNWELL
THE SEAL OF APPROVAL



QUALITY AND SERVICE GUARANTEED

Total Sealing Solutions

Founded in 1972, M Barnwell Services is a family business and prides itself on providing expert industry knowledge, technical expertise, products and services to over 5000 customers globally – quickly and reliably. Our range fluid sealing products include O Rings, Oil Seals / Rotary Shaft Seals, Hydraulic and Pneumatic Seals, Gaskets, Fasteners, Sealing Kits, Special Rubber Mouldings and many more.

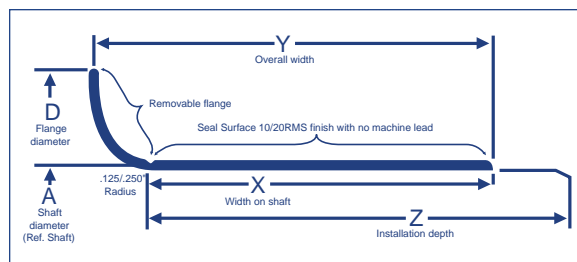
We aim to work in partnership with you to reduce your supplier base, inventory and long-term costs. Applying our unique product knowledge to your specific needs, we will always offer the right sealing solution for your industry and application.

M Barnwell Services range of services include:

- ❖ Stocking/Supplying a vast and diverse product range – over 35,000 stock lines
- ❖ An efficient logistical capability offering International coverage
- ❖ Industry leading bespoke Branding and Packaging technology
- ❖ Full documentation service and manufacturer guarantees
- ❖ Strategic partnerships with large Blue Chip customers and leading worldwide brands
- ❖ Seal Maker and Clean Room services that are tailor-made to the customer's needs
- ❖ A dedicated Export Department – providing sealing solutions to over 60 countries

Shaft Repair Kit Listing

Inches / Metric



REF SHAFT	REF SHAFT	A SHAFT DIAMETER RANGE				STOCK NUMBER	X WIDTH ON SHAFT		Y OVERALL WIDTH		D FLANGE DIAMETER		Z INSTALLATION DEPTH	
		Minimum	Maximum	ins	mm		ins	mm	ins	mm	ins	mm	ins	mm
.472	12.00	.469	11.93	.475	12.07	99049	.236	6.0	.331	8.4	.787	20.0	.472	12
.500	12.70	.498	12.65	.502	12.75	99050	.250	6.4	.344	8.7	.610	15.5	2.000	51
.551	14.00	.547	13.89	.551	14.00	99055	.250	6.3	.391	9.9	.750	19.1	1.831	47
.563	14.30	.560	14.22	.566	14.38	99056	.250	6.4	.391	9.9	.750	19.1	1.831	47
.591	15.00	.589	14.96	.593	15.06	99059	.197	5.0	.354	9.0	.750	19.1	.425	11
.625	15.88	.623	15.82	.627	15.92	99062	.313	8.0	.406	10.3	.750	19.1	2.000	51
.630	16.00	.626	15.89	.630	16.00	99058	.313	8.0	.438	11.1	.718	18.2	2.000	51
.669	17.00	.667	16.95	.671	17.05	99068	.313	8.0	.433	11.0	.875	22.2	2.000	51
.684	17.37	.682	17.32	.686	17.42	99060	.313	8.0	.438	11.1	.900	27.0	2.000	51
.706	18.00	.704	17.89	.709	18.00	99082	.313	8.0	.438	11.0	1.063	27.0	1.811	46
.750	19.00	.748	19.00	.752	19.10	99076	.313	8.0	.438	11.1	.945	24.0	2.000	51
.760	19.30	.759	19.28	.761	19.33	99081	.313	8.0	.438	11.1	.938	23.8	2.000	51
.781	19.86	.780	19.81	.784	19.91	99080	.313	8.0	.438	11.1	.935	23.8	2.000	51
.787	20.00	.785	19.95	.789	20.05	99078	.313	8.0	.433	11.0	.930	23.6	2.000	51
.859	21.82	.857	21.77	.861	21.87	99086	.250	6.5	.373	9.5	1.155	29.3	2.000	51
.866	22.00	.861	21.87	.866	22.00	99084	.259	6.6	.359	9.1	1.188	30.2	1.856	47
.866	22.00	.861	21.87	.866	22.00	99085	.315	8.0	.472	12.0	1.188	30.2	1.813	46
.875	22.23	.873	22.17	.877	22.27	99087	.313	8.0	.438	11.1	1.094	27.8	2.000	51
.910	23.11	.908	23.06	.912	23.16	99091	.313	8.0	.438	11.1	1.218	30.9	1.847	47
.945	24.00	.940	23.87	.945	24.00	99092	.313	8.0	.438	11.1	1.130	28.7	2.000	51
.969	24.59	.966	24.54	.970	24.64	99094	.313	8.0	.438	11.1	1.130	28.7	2.000	51
.969	24.59	.966	24.54	.970	24.64	99096	.625	15.9	.719	18.3	1.130	28.7	2.000	51
.984	25.00	.982	24.95	.986	25.05	99098	.313	8.0	.433	11.0	1.300	33.0	2.000	51
1.000	25.40	.998	25.35	1.002	25.45	99100	.313	8.0	.438	11.1	1.219	31.0	2.000	51
1.024	26.00	1.019	25.87	1.024	26.00	99103	.313	8.0	.472	12.0	1.312	33.3	1.813	46
1.063	27.00	1.060	26.92	1.064	27.03	99106	.313	8.0	.438	11.0	1.320	33.5	2.813	72
1.089	27.66	1.087	27.61	1.091	27.71	99108	.313	8.0	.438	11.1	1.406	35.7	.625	16
1.102	28.00	1.100	27.94	1.104	28.04	99111	.375	9.5	.500	12.7	1.375	34.9	2.813	71
1.125	28.58	1.123	28.52	1.127	28.62	99112	.313	8.0	.438	11.1	1.500	38.1	.688	17
1.125	28.58	1.123	28.53	1.127	28.63	99116	.375	9.5	.500	12.7	1.500	38.1	.688	18
1.156	29.36	1.154	29.31	1.158	29.41	99120	.375	9.5	.500	12.7	1.350	34.3	.688	17
1.175	29.85	1.173	29.79	1.178	29.92	99122	.313	8.0	.438	11.1	1.575	40.0	.688	17
1.181	30.00	1.179	29.95	1.184	30.07	99114	.315	8.0	.433	11.0	1.400	35.6	.688	17
1.188	30.15	1.185	30.10	1.190	30.22	99118	.313	8.0	.438	11.0	1.400	35.6	.688	17
1.219	31.00	1.216	30.89	1.222	31.04	99123	.313	8.0	.433	11.0	1.563	39.7	.625	16
1.240	31.50	1.237	31.42	1.243	31.57	99141	.315	8.0	.438	11.1	1.540	39.1	.688	17
1.250	31.75	1.247	31.67	1.253	31.83	99125	.313	8.0	.438	11.1	1.500	38.1	.688	18
1.260	32.00	1.257	31.92	1.263	32.08	99128	.315	8.0	.438	11.1	1.500	38.0	.688	18
1.313	33.30	1.308	33.23	1.314	33.37	99129	.250	6.4	.375	9.5	1.600	40.6	.813	21
1.313	33.35	1.310	33.28	1.316	33.42	99131	.500	12.7	.625	15.9	1.594	40.5	1.813	21
1.375	34.90	1.371	34.82	1.377	34.98	99133	.313	8.0	.438	11.1	1.638	41.6	.813	21
1.375	34.90	1.371	34.82	1.377	34.98	99138	.500	12.7	.625	15.9	1.638	41.6	.813	21
1.375	35.00	1.375	34.92	1.381	35.08	99139	.512	13.0	.630	16.0	1.638	41.6	.813	20
1.417	36.00	1.412	35.84	1.417	36.00	99146	.512	13.0	.669	17.0	1.690	42.9	.984	25
1.438	36.45	1.432	36.37	1.438	36.52	99143	.563	14.3	.688	17.5	1.690	42.9	1.016	26
1.438	36.53	1.435	36.45	1.441	36.60	99144	.375	9.5	.500	12.7	1.781	45.2	1.016	26
1.496	38.00	1.490	37.84	1.496	38.00	99147	.512	13.0	.669	17.0	1.781	45.2	.984	25
1.500	38.10	1.497	38.02	1.503	38.18	99149	.563	14.3	.688	17.5	1.781	45.2	1.016	26
1.500	38.10	1.497	38.02	1.503	38.18	99150	.375	9.5	.500	12.7	1.781	45.2	1.016	26
1.523	38.68	1.520	38.61	1.526	38.76	99152	.438	11.1	.563	14.3	1.859	47.2	1.016	26
1.552	39.42	1.549	39.35	1.555	39.49	99155	.438	11.1	.563	14.3	1.859	47.2	1.016	26
1.563	39.67	1.559	39.60	1.565	39.74	99156	.563	14.3	.688	17.5	1.859	47.2	1.016	26
1.569	39.85	1.566	39.77	1.572	39.93	99159	.625	15.9	.750	19.1	1.859	47.2	1.016	26
1.575	40.00	1.569	39.84	1.575	40.00	99151	.827	21.0	.945	24.0	1.850	47.0	1.000	25
1.578	40.00	1.572	39.92	1.578	40.08	99157	.512	13.0	.630	16.0	1.850	47.0	1.023	26
1.605	40.77	1.602	40.69	1.608	40.84	99160	.500	12.7	.641	16.3	1.938	49.2	1.000	25
1.614	41.00	1.608	40.84	1.614	41.00	99163	.500	12.7	.625	15.9	1.938	49.2	1.016	26
1.625	41.28	1.622	41.20	1.628	41.35	99161	.313	8.0	.438	11.1	1.875	47.6	1.016	26
1.625	41.28	1.623	41.21	1.628	41.35	99162	.563	14.3	.688	17.5	1.875	47.6	.813	21
1.650	42.00	1.647	41.84	1.654	42.00	99166	.445	11.3	.571	14.5	2.087	53.0	.846	22

REF SHAFT	REF SHAFT	A SHAFT DIAMETER RANGE				STOCK NUMBER	X WIDTH ON SHAFT		Y OVERALL WIDTH		D FLANGE DIAMETER		Z INSTALLATION DEPTH	
		Minimum	Maximum	ins	mm		ins	mm	ins	mm	ins	mm	ins	mm
ins	mm	ins	mm	ins	mm		ins ±0.031	mm ±0.8	ins ±0.031	mm ±0.8	ins ±0.063	mm ±1.6	ins	mm
4.250	108.00	4.248	107.90	4.256	108.10	99424	.813	20.6	1.000	25.4	4.610	117.1	1.438	37
4.328	110.00	4.327	109.90	4.335	110.10	99435	.509	12.9	.650	16.5	4.921	125.0	1.250	31
4.331	110.00	4.322	109.78	4.331	110.00	99434	.448	11.4	.589	15.0	4.921	125.0	1.297	33
4.375	111.00	4.370	111.00	4.378	111.20	99437	.813	20.6	1.000	25.4	4.750	120.7	1.650	42
4.406	112.00	4.401	111.80	4.409	112.00	99438	.748	19.0	.886	22.5	4.750	120.7	1.063	27
4.438	112.72	4.434	112.62	4.442	112.83	99439	1.000	25.4	1.142	29.0	4.813	122.2	1.313	33
4.500	114.30	4.496	114.20	4.504	114.40	99450	.813	20.6	1.000	25.4	4.900	124.5	1.250	32
4.527	115.00	4.523	114.90	4.531	115.10	99452	.813	20.6	.938	23.8	5.000	127.0	1.250	32
4.625	117.48	4.621	117.37	4.629	117.57	99463	1.000	25.4	1.250	31.8	5.063	128.6	1.375	35
4.625	117.48	4.621	117.37	4.629	117.58	99465	.438	11.1	.625	15.8	4.875	123.8	1.375	35
4.688	119.00	4.685	119.00	4.693	119.20	99468	.813	20.6	1.000	25.4	5.063	128.6	1.375	35
4.724	120.00	4.720	119.89	4.728	120.09	99471	.315	8.0	.433	11.0	5.110	129.8	1.323	34
4.724	120.00	4.720	119.90	4.728	120.10	99473	.787	20.0	.984	25.0	5.110	129.8	1.260	32
4.750	120.65	4.746	120.55	4.754	120.75	99475	.500	12.7	.750	19.0	5.000	127.0	1.500	38
4.803	122.00	4.799	121.89	4.807	122.10	99472	.787	20.0	.945	24.0	5.177	131.5	1.260	32
4.843	123.00	4.839	122.91	4.847	123.11	99484	.787	20.0	.984	25.0	5.229	132.8	1.244	32
4.875	123.83	4.871	123.72	4.879	123.93	99487	.625	15.9	.750	19.1	5.250	133.4	1.438	37
4.921	125.00	4.917	124.90	4.925	125.10	99490	.394	10.0	.551	14.0	5.400	137.2	1.438	37
4.921	125.00	4.917	124.90	4.925	125.10	99492	1.024	26.0	1.260	32.0	5.400	137.2	1.438	37
5.000	127.00	4.998	126.95	5.006	127.15	99498	.688	17.5	.875	22.2	5.400	137.2	1.438	37
5.000	127.00	4.998	126.95	5.006	127.15	99499	.813	20.6	1.000	25.4	5.390	136.9	1.438	37
5.000	127.00	4.998	126.95	5.006	127.15	99501	.540	13.7	.681	17.3	5.400	137.2	1.438	37
5.114	130.00	5.110	129.79	5.118	130.00	99494	.750	19.0	.938	24.0	5.493	139.5	1.181	30
5.125	130.00	5.117	129.98	5.125	130.18	99491	.866	22.0	.996	25.3	5.493	139.5	1.280	33
5.125	130.15	5.120	130.05	5.128	130.25	99513	.813	20.6	1.000	25.4	5.500	139.7	1.250	32
5.250	133.35	5.246	133.25	5.254	133.45	99525	.813	20.6	1.000	25.4	5.560	141.2	1.250	32
5.313	135.00	5.307	134.79	5.315	135.00	99533	.807	20.5	1.000	25.4	5.875	149.2	1.250	32
5.375	136.53	5.371	136.42	5.379	136.62	99537	.813	20.6	1.000	25.4	5.875	149.2	1.250	32
5.438	138.13	5.434	138.02	5.442	138.23	99548	1.500	38.1	1.688	42.9	5.750	146.1	1.875	48
5.472	139.00	5.472	139.00	5.480	139.20	99547	.563	14.3	.750	19.1	6.100	154.9	.938	25
5.500	139.75	5.498	139.65	5.506	139.85	99549	.813	20.6	1.000	25.4	5.938	150.8	1.250	32
5.500	139.75	5.498	139.65	5.506	139.85	99550	.518	13.2	.705	17.9	5.938	150.8	1.250	32
5.512	140.00	5.508	139.90	5.516	140.10	99552	.807	20.5	1.000	25.5	5.945	151.0	1.250	32
5.709	145.00	5.699	144.75	5.709	145.00	99571	.750	19.1	.875	22.2	6.100	154.9	1.812	46
5.734	145.54	5.726	145.44	5.734	145.64	99562	.563	14.3	.750	19.1	5.900	149.9	.938	24
5.750	146.05	5.746	145.95	5.754	146.15	99575	.813	20.6	1.000	25.4	6.180	157.0	1.750	44
5.875	149.23	5.871	149.12	5.879	149.33	99587	1.000	25.4	1.250	31.8	6.188	157.2	1.313	33
5.905	150.00	5.895	149.75	5.905	150.00	99595	1.024	26.0	1.181	30.0	6.260	159.0	1.338	34
5.938	150.83	5.934	150.73	5.942	150.93	99596	1.000	25.4	1.125	28.6	6.375	161.9	1.875	48
6.000	152.37	5.995	152.27	6.003	152.47	99601	.500	12.7	.750	19.0	6.360	161.5	1.750	44
6.000	152.37	5.995	152.27	6.003	152.47	99599	1.000	25.4	1.250	31.8	6.375	161.9	1.750	44
6.063	154.00	6.058	153.87	6.068	154.13	99605	1.024	26.0	1.181	30.0	6.375	161.9	1.299	33
6.097	155.00	6.092	154.75	6.102	155.00	99606	1.024	26.0	1.181	30.0	6.575	167.0	1.299	33
6.203	157.56	6.198	157.43	6.208	157.68	99620	.813	20.6	1.063	27.0	6.625	168.3	1.750	44
6.250	158.75	6.245	158.62	6.255	158.88	99625	1.031	26.2	1.250	31.8	6.625	168.3	1.750	44
6.299	160.00	6.289	159.74	6.299	160.00	99630	1.000	25.4	1.250	31.8	7.000	177.8	1.800	46
6.500	165.10	6.495	164.97	6.505	165.23	99650	1.000	25.4	1.250	31.8	7.000	177.8	1.750	44
6.688	170.00	6.683	169.75	6.693	170.00	99640	1.250	31.8	1.496	38.0	7.188	182.6	2.175	55
6.750	171.45	6.745	171.32	6.755	171.58	99675	.813	20.6	1.063	27.0	7.125	181.0	1.750	44
6.890	175.00	6.880	174.75	6.890	175.00	99687	1.102	28.0	1.260	32.0	7.362	187.0	1.378	35
7.000	177.80	6.995	177.67	7.005	177.93	99700	1.000	25.4	1.250	31.8	7.475	189.9	1.688	43
7.087	180.00	7.077	179.79	7.087	180.00	99721	1.300	33.0	1.496	38.0	7.500	190.5	1.752	45
7.250	184.00	7.244	184.00	7.254	184.25	99725	1.250	31.7	1.500	38.1	7.760	197.1	2.175	55
7.283	185.00	7.273	184.73	7.283	185.00	99726	1.260	32.0	1.496	38.0	7.834	199.0	2.165	55
7.453	189.20	7.444	189.08	7.454	189.33	99745	.813	20.6	1.000	25.4	7.860	199.6	1.250	32
7.500	190.50	7.495	190.37	7.505	190.63	99750	.813	20.6	1.000	25.4	7.875	200.0	1.250	32
7.609	193.17	7.600	193.04	7.610	193.29	99760	1.500	38.1	1.750	44.5	8.250	209.5	1.875	48
7.750	196.85	7.745	196.72	7.755	196.98	99775	1.000	25.4	1.313	33.3	8.270	210.1	1.875	48
7.875	200.00	7.869	199.87	7.879	200.13	99787	1.359	34.5	1.500	38.1	8.375	212.7	1.750	44
7.938	201.63	7.933	201.50	7.943	201.75	99799	1.000	25.4	1.250	31.8	8.375	212.7	1.750	45
8.000	203.20	7.995	203.07	8.005	203.33	99800	1.000	25.4	1.250	31.8	8.375	212.7	1.750	44

New Generation SKF Speedi Sleeve From M Barnwell Services

Enhanced sealing system solution – SKF Speedi Sleeve

To seal effectively, radial shaft seals must run against a smooth, round counterface. If the counterface becomes worn, the seal will no longer be able to fulfil its function, which is to retain lubricant and to exclude contaminants. Typically, the counterface becomes scored when a contaminant particle is caught under the sealing lip and abrades a track as the shaft rotates. As this continues, the seal will enable more particles to pass or get stuck eventually leading to malfunction of the component that the sealing system is meant to protect. A simple seal replacement will not be sufficient and to repair the shaft, it is usually necessary to disassemble the machine to be able to grind down the counterface until it is within specification again. Otherwise, the sealing system will not function properly. The SKF SPEEDI SLEEVE is a well-proven solution to overcome problems with worn shafts, without having to disassemble the shaft or specifying a new size of the replacement seal, while offering an excellent sealing surface.



Features

The new generation of SKF SPEEDI SLEEVE combines a proprietary stainless steel material and manufacturing process, resulting in an optimised seal counterface surface that minimises wear on both the sleeve and sealing lip. The proprietary material provides increased strength and excellent ductility properties of the SKF SPEEDI SLEEVE. Imperceptible lubricant pockets enable the lubricant to reside on the sleeve and thereby prevent dry running of the sealing lip that otherwise can create excessive wear. The SKF SPEEDI SLEEVE are thin-walled [0,28 mm (0.011 in.)] and the contact surface is wear resistant and manufactured to minimise directionality ($0^\circ \pm 0,05$), with a finish of Ra 0,25 to 0,5 μ m (10 to 20). This is, in fact, a better counterface than can often be achieved on a shaft.

SKF SPEEDI SLEEVE Gold

The preferred choice for heavy duty applications

The new generation of SKF SPEEDI SLEEVE is also available in the SKF SPEEDI SLEEVE Gold version, designed for highly abrasive applications. A thin, metallic coating applied to the base stainless steel imparts a gold colour and significantly increases durability.

SKF SPEEDI-SLEEVE Gold is particularly effective in environments where there are abrasive contaminants, especially when combined with a seal manufactured from the SKF fluoro rubber material SKF Duralife. This sealing system solution lasted 2 500 hours in a contamination test. The installation procedure is common to both SKF SPEEDI-SLEEVE designs and the original seal size can still be used. Selected SKF SPEEDI-SLEEVES can be manufactured as SKF SPEEDI-SLEEVE Gold.



The SKF SPEEDI-SLEEVE Gold coloured metallic coating significantly:

Increases durability and surface hardness (80-85 HRC)

Extends seal life

Improves resistance to abrasive wear

Test results

SKF SPEEDI-SLEEVE Gold has been thoroughly tested to establish its level of abrasion resistance in severely contaminated environments using both coarse and fine sand.

Under these conditions, seals on shafts without an SKF SPEEDI SLEEVE Gold protection started to leak after 450 hours on average. Seals on SKF SPEEDI SLEEVE Gold ran for an average of 2,500 hours.





FLUID SEALING SPECIALISTS FOR OVER 40 YEARS

£3 MILLION INVENTORY

HQ & CENTRAL WAREHOUSE

Reginald Road
Smethwick
West Midlands
B67 5AS
Tel +44 (0)121 429 8011
Fax +44 (0)121 434 3016
sales@barnwell.co.uk

BRISTOL

Unit 13 Avonbank Industrial Centre
West Town Road
Avonmouth
Bristol
BS11 9DE
Tel +44 (0)117 982 5245
Fax +44 (0)117 923 5623
bristol@barnwell.co.uk

DARTFORD

Unit 7 Schooner Park
Crossways Business Park
Dartford
Kent
DA2 6NW
Tel +44 (0)1322 293 024
Fax +44 (0)1322 272 099
dartford@barnwell.co.uk

GLASGOW

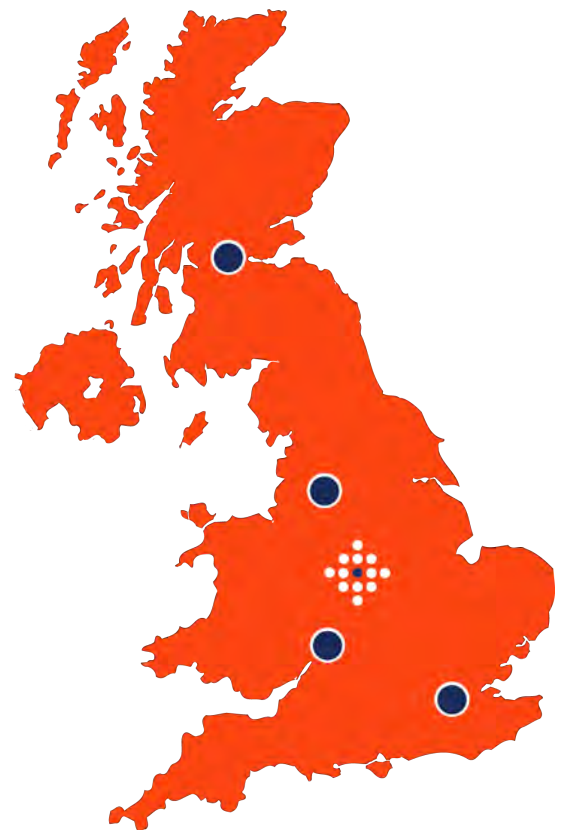
14-16 Murray Place
Righead Industrial Estate
Bellshill
Lanarkshire
ML4 3LP
Tel +44 (0)1698 749 666
Fax +44 (0)1698 749 888
scotland@barnwell.co.uk

MANCHESTER

Unit 36/37 Westbrook Trading Estate
Westbrook Road
Trafford Park
Manchester
M17 1AY
Tel +44 (0)161 888 2330
Fax +44 (0)161 888 2296
manchester@barnwell.co.uk

EXPORTS

Reginald Road
Smethwick
West Midlands
B67 5AS
Tel +44 (0)121 429 8011
Fax +44 (0)121 434 3016
exports@barnwell.co.uk



Copyright © 2017 M.Barnwell Services Limited. All rights reserved. E & OE. Pictures representation only. Items in this publication may not necessarily be manufactured under a registered ISO 9001 management system. © All Trademarks acknowledged.

TEL: +44(0)121 429 8011

WWW.BARNWELL.CO.UK

SALES@BARNWELL.CO.UK