

James Walker[®]

Seal materials for rotary applications in the metallurgical industry

**New
Products**

***Rotary seal materials
for rolling mill chock and heavy-duty gearbox applications***

Siemens VAI hot strip mill, Linz, Austria

Photo courtesy of Siemens VAI

High Performance Sealing Technology



Elastomers for rotary applications

Enhanced performance

The launch of two new elastomer compounds for rotary seal applications is the culmination of a development programme working in partnership with our customers to understand their latest requirements for rolling chock and heavy-duty gearbox applications within the metallurgical industry.

Total in-house control of material formulation, testing, compounding and manufacture ensures total traceability and guaranteed performance

To support our customers' requirements for high-performance materials to withstand higher levels of abrasion, higher temperatures and higher constant running speeds we have developed two new materials. Both materials are hydrogenated nitrile (HNBR) products, reformulated to enhance performance in the required areas and are suitable for self-retaining seals or for seals where housings are fitted with retaining plates.

Full range of options

The addition of two new options to James Walker's existing industry-leading Ultraglide material now provides best-in-class capabilities for every application under all operating conditions;

Millglide

Cost-effective HNBR choice for standard applications where assured performance is required to fulfil maintenance regimes.

Supaglide

HNBR offering improved performance and wear resistance under higher running speed operations.

Ultraglide

James Walker's original low friction, high-efficiency material with over 10 years of proven performance in providing significantly extended working life in high speed and high temperature applications.

Millglide

- ✓ Improved wear resistance over nitrile
- ✓ Abrasion resistant
- ✓ Superior resistance to higher temperatures than nitrile material

James Walker products continue to demonstrate that a good quality nitrile (NBR) material works well in most rolling mill applications. Millglide HNBR offers a significant improvement where performance needs to be assured across more demanding mill conditions.

Maximum surface speed:

Up to 15m/s (2953fpm) with D6 profile design

Media compatibility:

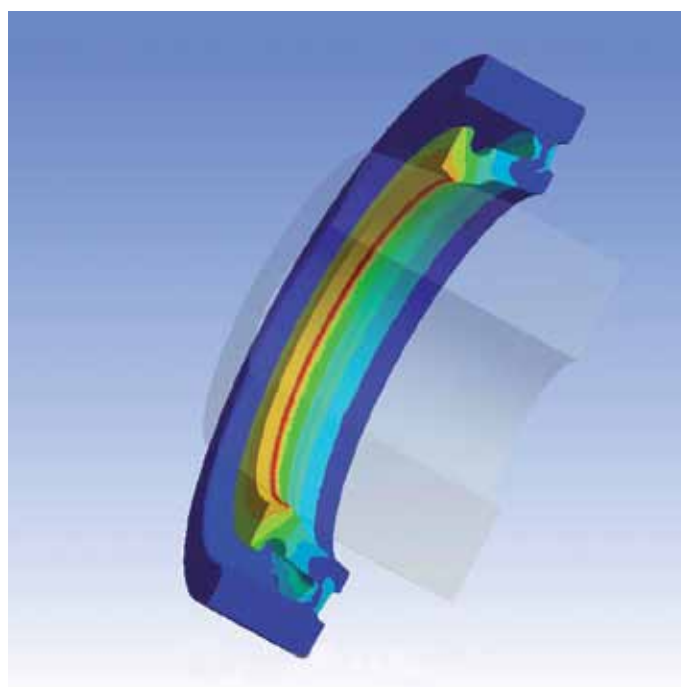
Excellent resistance to a wide range of mineral and synthetic lubricants

Seal construction:

Flexible back of Elast-O-Lion® HNBR-proofed aramid / glass fabric. Lip of enhanced hydrogenated nitrile

Maximum upper lip temperature:

150°C (302°F) constant, or 170°C (338°F) constant in oil.



Elastomers for rotary applications

Supaglide

- ✓ Formulated for higher running speeds
- ✓ Abrasion resistant
- ✓ Extended life - reduced lifetime cost

This is a highly modified, high strength hydrogenated nitrile elastomer. The compound includes specially designed additives that extend the material's performance envelope making it suited to both abrasive and higher speed applications.

Maximum surface speed:

Up to 25m/s (4922fpm) with D6 profile design

Media compatibility:

The compound retains the excellent resistance to a wide range of mineral and synthetic lubricants offered by HNBR materials

Seal construction:

Flexible back of Elast-O-Lion® HNBR-proofed aramid / glass fabric. Lip of reformulated hydrogenated nitrile

Maximum upper lip temperature:

150°C (302°F) constant; or 170°C (338°F) constant in oil.



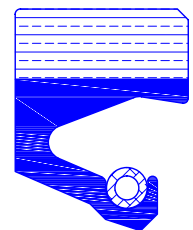
Statements of maximum operating limits are not an indication that these values can be applied simultaneously.

Seal profiles

James Walker elastomer compounds for the metallurgical industry are compatible with our existing tooling and production methods, which means seals can be manufactured without delay with existing moulds from our extensive tooling library, including the most popular Walkersele® profiles detailed below.

Walkersele® D6

The standard Walkersele® design — suitable for a vast majority of bearing protection and radial lip seal applications across all sectors of industry.

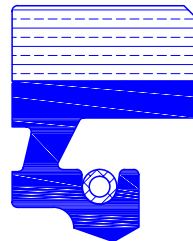


Special features

- Lip profile minimises heat generation and shaft wear.
- Geometry gives lip flexibility to accommodate shaft eccentricity.
- Works at up to 0.2bar (3psi) pressure differential, or up to 2bar (29psi) with support ring.

Walkersele® D7

This robust profile is designed to accommodate higher pressure applications.



Special features

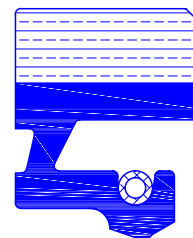
- Works at up to 4bar (58psi) pressure differential. To achieve this the heel of the seal lip must be supported but no costly profiled lip-support plates are needed.
- Flexible and robust lip maintains sealing contact on misaligned or eccentric shafts.

Walkersele® D8

The latest Walkersele design.

Special features

- Works at up to 1.5bar (21.75psi) pressure differential where the base of the seal is supported.
- Lower lip loading and seal flexibility than traditional pressure seals to accommodate shaft eccentricity.
- Design accommodates applications where vibration and shock are operational factors.



All fabric-backed Walkersele versions can be supplied as **Walkersele OSJ-2 for On-Site Joining**.

Endless-types can be supplied with **SpringSafe** positive spring retention.

James Walker worldwide sales and customer support

James Walker Asia Pacific

Tel: +65 6777 9896
Fax: +65 6777 6102
Email: sales.sg@jameswalker.biz

James Walker Australia

Tel: +61 (0)2 9721 9500
Fax: +61 (0)2 9721 9580
Email: sales.au@jameswalker.biz

James Walker Benelux (Belgium)

Tel: +32 3 820 7900
Fax: +32 3 828 5484
Email: sales.be@jameswalker.biz

(Netherlands)

Tel: +31 (0)186 633111
Fax: +31 (0)186 633110
Email: sales.nl@jameswalker.biz

James Walker Brasil

Tel: +55 21 2220 2152
Fax: +55 21 2531 1704
Email: sales.br@jameswalker.biz

James Walker China

Tel: +86 21 6876 9351
Fax: +86 21 6876 9352
Email: sales.cn@jameswalker.biz

James Walker Deutschland

Tel: +49 (0)40 386 0810
Fax: +49 (0)40 389 3230
Email: sales.de@jameswalker.biz

James Walker France

Tel: +33 (0)437 497 480
Fax: +33 (0)437 497 483
Email: sales.fr@jameswalker.biz

James Walker Iberica

Tel: +34 94 447 0099
Fax: +34 94 447 1077
Email: sales.es@jameswalker.biz

James Walker Inmarco (India)

Tel: +91 (0)22 4080 8080
Fax: +91 (0)22 2859 6220
Email: info@jwinmarco.com

James Walker Ireland

Tel: +353 (0)21 432 3626
Fax: +353 (0)21 432 3623
Email: sales.ie@jameswalker.biz

James Walker Italiana

Tel: +39 02 257 8308
Fax: +39 02 263 00487
Email: sales.it@jameswalker.biz

James Walker Mfg (USA)

Tel: +1 708 754 4020
Fax: +1 708 754 4058
Email: sales.jwmfg.us@jameswalker.biz

James Walker New Zealand

Tel: +64 (0)9 272 1599
Fax: +64 (0)9 272 3061
Email: sales.nz@jameswalker.biz

James Walker Norge

Tel: +47 22 706800
Fax: +47 22 706801
Email: sales.no@jameswalker.biz

James Walker Oil & Gas (USA)

Tel: +1 281 875 0002
Fax: +1 281 875 0188
Email: oilandgas@jameswalker.biz

James Walker South Africa

Tel: +27 (0)31 304 0770
Fax: +27 (0)31 304 0791
Email: sales.za@jameswalker.biz

James Walker UK Ltd

Tel: +44 (0)1270 536000
Fax: +44 (0)1270 536100
Email: sales.uk@jameswalker.biz

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To ensure that you are working with the very latest product specifications, please consult the relevant section of the James Walker website www.jameswalker.biz

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James Walker & Co Ltd

1 Millennium Gate
Westmere Drive, Crewe
Cheshire CW1 6AY
United Kingdom

Tel: +44 (0)1270 536000
Fax: +44 (0)1270 536100
Email: csc@jameswalker.biz

www.jameswalker.biz



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