

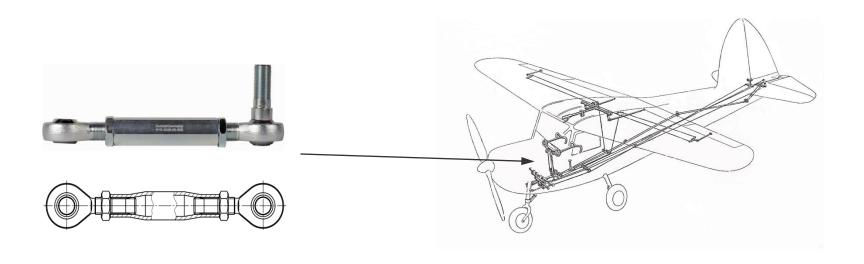
HISTORY

1938 BERLIN

Wolfgang Schlegel was a hobby pilot and one day he has got the great idea to create a perfect product.

He designed rod ends with integral ball bearing and control rods for aviation.





OUR COMPANY

o 1938 Foundation of SCHLEGEL Luftfahrtgeräte, Berlin by Wolfgang Schlegel Products: rod ends with integral ball bearing and control rod for aviation

 o 1946 Foundation of MOTRA Maschinenbau, Nagold by Wolfgang Schlegel
Products: Industrial products made of metal for automotive and mechanical engineering

o **1950** Change of name in MOTA Maschinenbau GmbH Products: bicycle frames, mopeds, motorbikes and vices

OUR COMPANY

- o 1954 Merger of MOTA Maschinenbau GmbH and EUGEN METZGER. New company name METZGER & SCHLEGEL KG Products: bicycle frames, mopeds, motorbikes and vices
- o **1959** Change of company name in SCHLEGEL KG, Öhringen Products: Vices, fork joints, angle joints, carburettor rod, spherical and roller bearings
- o 1979 Outsourcing of SCHLEGEL vices production and foundation of DURBAL GmbH & Co.
 - Products: Spherical- and roller bearings in accordance to DIN and also custom made-bearings

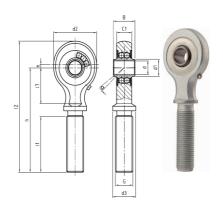
OUR COMPANY

o 1996 Certification of company group according to DIN EN ISO 9001:2000

o 2004 Foundation of DURBAL Vertriebsgesellschaft mbH and implementation of the brand FERROBAL (today DURBAL Basic Line)

o **2007** Certification according to ISO 14001:2004 (environmental management)

1938 – 1954 OUR PRODUCTS



o 1938 Schlegel Rod ends with integral ball bearing



o 1950 MOTA Bicycle frames, mopeds, motorbikes



o 1954 Schlegel Vices

OUR PRODUCT RANGE TODAY

PREMIUM CLASSIC* BASIC°

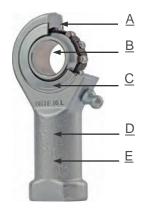
OUR PRODUCT RANGE TODAY

DURBAL PREMIUM-, CLASSIC- and BASIC-LINE





HIGHLIGHTS PREMIUM LINE





BRTM 16-00-502 / BRF 16-00-501

- A Radial clearance: 10-30 μm, low friction
- <u>B</u> Inner ring made of bearing steel, hardened, ball groves super finished
- <u>C</u> Shields on both sides against rough dirt penetration
- <u>D</u> All rod ends housings are made of forged steel, case hardened bearing race
- E Low maintenance due to long-term greasing, especially suitable for high speed large swivelling angles or rotating movements



DURBAL HEAVY-DUTY ROD ENDS

01 - roller bearing

02 - ball bearing



01-WLT



01-WLT 02-WLK



02-WLK

DURBAL HEAVY-DUTY SPHERICAL-PLAIN BEARIN

01 - roller bearing

02 - ball bearing



DURBAL HEAVY DUTY SYSTEMS

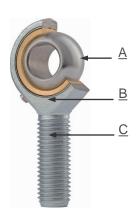


DURBAL CUSTOM MADE PRODUCTS



HIGHLIGHTS CLASSIC LINE





BEM 16-20-501

- <u>A</u> DURBAL-Glide (race) made of Polyamid-PTFE-fibreglass-Compound, maintenance free, absorbs any foreign particles
- <u>B</u> Joint ball made of bearing steel, hardened, ground, polished and hard chromium plated, ensures a reliable corrosion protection
- C No clearance radial clearance 0 10 μm
- D All rod ends housings made of forged steel, tempered, extremely high load resistant

NEW BEMN 16-20-501

DURBAL maintenance required HEAVY-DUTY-ROD ENDS with pressed spherical-plain bearing, series K and E

- <u>A</u> Joint ball made of bearing steel, hardened, ground, polished and hard chromium plated, ensures a reliable corrosion protection
- B Grease nipple DIN 3405 D1/A, on request with special grease nipple
- C All rod ends housings made of forged steel, tempered, extremely high load resistant

CLASSIC LINE



DURBAL HEAVY DUTY ROD ENDS – maintenance free

01 – with integral spherical plain bearing, series K

02 – with integral spherical plain bearing, series E/EH

CLASSIC LINE



DURBAL HEAVY DUTY ROD ENDS – maintenance required

- 01 with pressed spherical plain bearing, series K
- 02 with pressed spherical plain bearing, series E/EH

CLASSIC LINE



DURBAL CUSTOM MADE PRODUCTS





DURBAL STANDARD ROD ENDS – maintenance free & required

01 – with pressed spherical plain bearing, series K

02 – with pressed spherical plain bearing, series E



DURBAL SPHERICAL PLAIN BEARING

- 01 –spherical plain bearing, maintenance free
- 02 –spherical plain bearing, maintenance requires



DURBAL HYDRAULIC ROD ENDS

- 01 with female thread and pressed spherical-plain bearing
- 02 with welding end and pressed spherical plain bearing





DURBAL CUSTOM MADE PRODUCTS

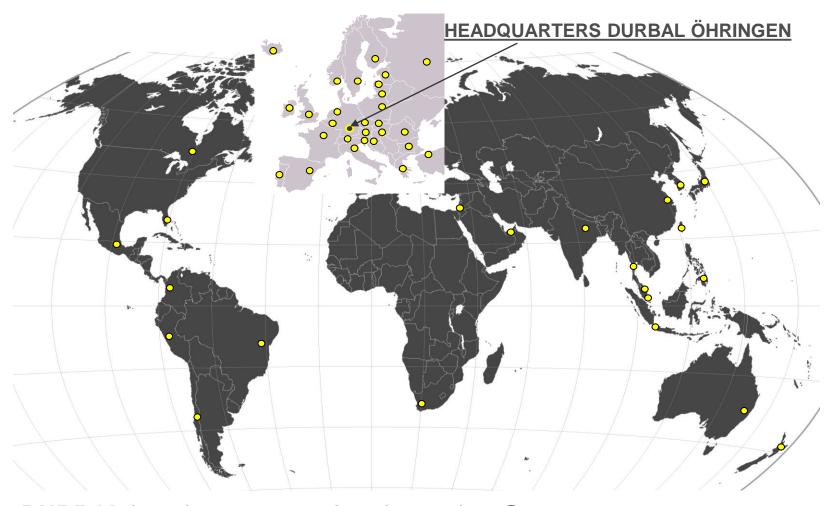




DURBAL accessories

Clevises with suitable folding spring bolt, angle joints, threaded links and -bolts, washers, rubber protector caps, nuts

OUR MARKETS



DURBAL headquarters and main market Germany

Export in almost 50 countries

THANK YOU FOR YOUR ATTENTION

www.durbal.de

DURBAL



VISION TECHNOLOGY

since