

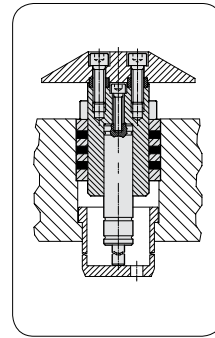
New and improved Products in the FIBRO Standard Parts Catalogue 2011



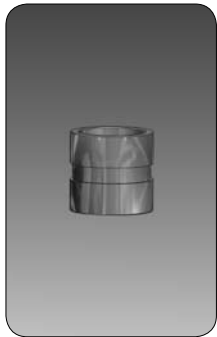
2922.
2923.
Precision flat
square tool steel
to DIN 59350
B6, B12



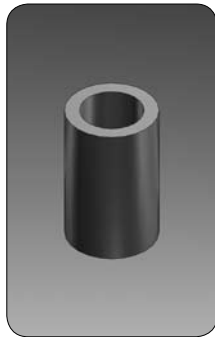
202.93.
Cage Retainer
for Ball Cage
206.71.
D212



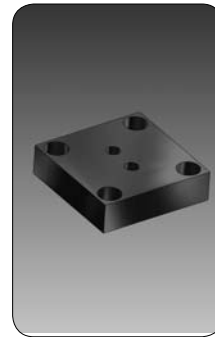
2487.20.15.30.
Universal
Lifter Unit
according to
BMW standard
F99



2132.10.03...1
Bushes for
Lifting Bolts VDI
C23



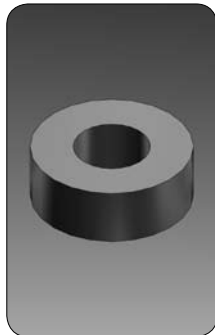
244.9.
Spacer Tubes
F65



2480.011.
Flange Plate
according to
Renault
standard
F138-F274,
L66-L68



202.29.
Guide Pillars
~DIN 9825/
~ISO 9182-2
ECO-LINE
D19



244.10.
Stop Washer
F66



2480.080.
Concertina
Shrouds for
Gas Springs
F286-F287



202.31.
Guide Pillars
Endwise
Bolt-On Type
~DIN 9825/
~ISO 9182-2
ECO-LINE
D20



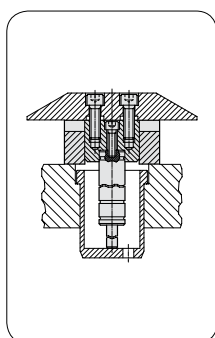
2470.10.020.080.3
Spring Plungers
with hexagon
VDI 3004
F80



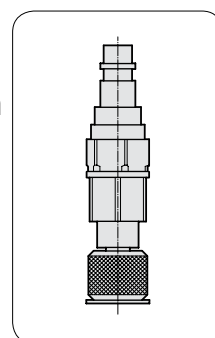
2480.00.90.
Wireless
Pressure
Monitoring
Wireless
monitoring of
gas springs
F318-F320



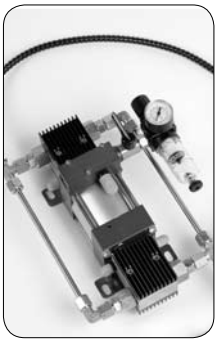
2082.70.55.
Oilless Guide
Bushes with col-
lar to VW
Bronze with
Non-Liquid
Lubricant
D113



2478.20.15.20.
Lifter unit
with installation
block
according to
BMW standard
F97



2480.00.90.10
Filling adapter
for minimess
connection
F320



2480.00.32.71.
Compact Nitro-
gen Booster
for Gas Spring
Filling
F322-F323



2480.32.71.02
Holding Plate for
Compact Nitro-
gen Boosterr
F323



2480.00.50.20..
Service station,
mobile,
for gas springs
F328

A Die Sets

Cast Iron, Steel and Aluminium
Die Set Press Units, Lamination Die Set Units, Tooling Pallet Die Sets

B Precision Ground Plates and Flat Bars

Steel and aluminium Plates
Flat and square Tool Steels

C Lifting and Clamping Devices

Shanks, Lifter Studs and Lifting Hooks, Eyebolts
Clamping Claws, Screws and Bolts

D Guide Elements

Pillars, Bushes, Mounting Flanges,
Ball Cages, Oilless Guide Elements

E Ground Precision Components

Punches and Matrixes,
Pins, Gauge Pins

F Springs

Compression Springs, Gas Springs, Elastomer Springs
Spring and Spacer Units

G Elastomer-Bars, -Sheets, -Sections

FIBROFLEX® and FIBROELAST®-Sheets and -Profiles

H FIBRO Chemical Tooling Aids

Tooling Resin, Metal Adhesives,
Degreasing Agent, Corrosion Protection Agent, Oils

J Peripheral Equipment

for Presses, Tool Manufacture
Conveyor Belts, Assembly Aids

K Cam Units

Hydraulic Cam System, Cam Slide Units, Roller Slide Units

L Standard Parts for Mould Making

FIBRO - your production partner

FIBRO – an internationally successful company.

As a market leader in Standard Parts, Rotary Indexing Tables and Automation, FIBRO provides products and solutions to ensure your production keeps moving.

So what is the secret of the FIBRO success? Products developed in-house, tailor-made for the market with uncompromising quality.

But good products are not enough on their own.

FIBRO combines excellent products, the know-how and service competence of an internationally focused company, matched to the actual needs of customers - wherever they are.



Hassmersheim plant



Standard Parts

Today the Standard Parts Division operates from the Hassmersheim and Weinsberg works, which manufacture a comprehensive range of standard parts and maintain stocks ready for immediate despatch world-wide. The machine tool, mechanical engineering and systems engineering product ranges have been developed to meet the needs of customers.

They include steel die sets, guide elements, oilless guide elements and precision components such as punches and matrixes, special steel compression springs, gas springs, forming materials, metal bonding agents, moulding resins, peripheral equipment for pressing and tool making, tool slides with cam or roller slides and hydraulic cam systems. FIBRO has become renowned world-wide for its comprehensive range of products in stock and its readiness to deliver.



FIBRO is customer-focused – world-wide. A well-developed network of sales and service points and strategic partners ensure that help is always at hand. This ensures technical advance, world-wide experience in applications and rapid availability of products.

Facts and figures on FIBRO:

- founded 1958
- approximately 770 staff
- more than 70 representatives and service stations world-wide
- branches in France, USA, India, Switzerland Singapore and China
- ISO 9001:2000 Quality Assurance and VDA 6.4 certification



Weinsberg plant



Rotary Tables

FIBRO – The worldwide pioneer in the field of rotary tables

A comprehensive range of types:

- FIBROPLAN® – NC rotary table with worm drive
- FIBRODYN® – NC rotary table with direct torque drive
- FIBROMAX® – Heavy-duty NC rotary table with Twin Drive
- FIBROTAKT® – Rotary indexing table with Hirth face gear
- FIBROTOR® – Electromechanical rotary indexing table for applications that do not involve machining

Rotary tables for all applications – from flexible workpiece positioning through rotary and multiple-axis machining to assembly automation

Used in all branches of industry – from the automobile industry through solar energy to machine tools

A wide range of sizes – from micro-machining to processing of very large parts

Customer-oriented design – from the standard modular table to customer-specific special solutions



Vertretungen
 Representatives
 Représentations
 Rappresentantes
 Representaciones
 Zastoupení
 Mümessiller
 代表处

FIBRO GmbH

info@fibro.de · www.fibro.com



Geschäftsbereich Normalien
 Business Area Standard Parts
 Département Eléments normalisés
 Settore commerciale Normalizzati
 Sector Empresarial Elementos Normalizados
 Obchodní oddělení normovaných dílů
 İş Alanı Standart Kalıp Elemanları
 业务部：标准件
 Postfach 1120 · DE-74851 Hassmersheim
 August-Läpple-Weg · DE-74855 Hassmersheim
 Tel. +49 6266-73-0 · Fax +49 6266-73-237

- | | | |
|---|--|--|
| <p>DE</p> <p>Außendienst André Bauer Amselstieg 3 · 18182 Bentwisch Tel. 0381 375 36 71 · Fax: 0381 377 26 23 Mobil 0170 7390064 · a.bauer@fibro.de PLZ 10000-19000</p> <p>Walter Ruff GmbH Heerenholz 9 · 28307 Bremen Tel. 0421 43878 0 · Fax 0421 43878 22 mail@praeziruff.de · www.praeziruff.de PLZ 20000-28000, 49000</p> <p>Außendienst Jörg Dyck Walter Ruff GmbH Postfach 450118 · 28295 Bremen Tel. 0421 43878 0 · Fax 0421 43878 22 Mobil 0173 9252243 · mail@praeziruff.de PLZ 29000-31000, 37000-39000</p> <p>Außendienst Dirk Bechinka Bündler Straße 232 · 32584 Löhne Mobil 0170 5760009 · d.bechinka@fibro.de PLZ 32000-34000, 48000, 49000</p> <p>Außendienst Ralf Feldmann Wiesenstraße 23b · 58339 Breckerfeld Mobil 0151 12590159 · r.feldmann@fibro.de PLZ 35000-36000, 56000, 57000, 61000, 65000</p> <p>Außendienst Lars Jahncke Locher Straße 44 · 42719 Solingen Tel. 0212 2543462 · Fax 0212 2543390 Mobil 0170 7637125 · l.jahncke@fibro.de PLZ 42000, 44000-46000, 58000-59000</p> <p>Außendienst Hartwig Hennemann Staubenthaler Höhe 79 · 42369 Wuppertal Tel. 0202 2831756 · Fax 0202 7595580 Mobil 0175 2965930 h.hennemann@fibro.de PLZ 40000-41000, 42000, 47000, 50000-53000</p> <p>Außendienst Volker Hottes Erzberger Straße 1 · 64846 Groß-Zimmern Tel. 06071 392119 · Fax 06071 392145 Mobil 0171 9577989 · v.hottes@fibro.de PLZ 54000-55000, 56000, 60000, 63000, 64000, 65000, 66000</p> <p>Außendienst Matthias Ehrenfried Steigerwaldstraße 25 · 74172 Neckarsulm Tel. 07132 34 56 90 · Fax 07132 98 94 82 Mobil 0171 864 95 52 m.ehrenfried@fibro.de PLZ 70000-71000, 73000-74000, 97000</p> <p>Außendienst Manfred Wagner Breslauer Straße 57 · 74372 Sersheim Tel. 07042 350 86 · Fax 07042 37 48 20 Mobil 0170 563 52 30 m.wagner@fibro.de PLZ 70000, 71000, 72000, 73000, 88000, 89000</p> <p>Außendienst Markus Rössl Johann-Strauß-Straße 16/1 74906 Bad Rappenau Tel.: 07264 20 64 17 · Fax 07264 20 64 18 Mobil 0160 97 25 23 93 m.roessler@fibro.de PLZ 64000, 66000, 67000, 68000, 69000, 74000, 75000, 76000, 77000</p> | <p>Hamacher GmbH Postfach 3308 · 78022 VS-Schwenningen Grabenäckerstraße 47 78054 VS-Schwenningen Tel. 07720 349 69 · Fax 07720 341 73 hamacher-normalien@t-online.de www.hamacher-normalien.de PLZ 72000, 77000, 78000-79000, 88000</p> <p>Jugard + Künstler GmbH Landsberger Straße 289 · 80687 München Tel. 089 546 15 60 · Fax 089 580 27 96 muc@jugard-kuenstner.de www.jugard-kuenstner.de PLZ 80000-87000, 88000, 89000</p> <p>Jugard + Künstler GmbH Thomas-Mann-Straße 63 · 90471 Nürnberg Tel. 0911 86 08 11 · Fax 0911 86 08 90 nbg@jugard-kuenstner.de www.jugard-kuenstner.de PLZ 90000-96000, 97000</p> <p>HELD Werkzeugmaschinen Präzisionswerkzeuge GmbH Sorge 34 · 07545 Gera Tel. 0365 824 91 0 · Fax 0365 824 91 11 info@held-wzm.de · www.held-wzm.de PLZ 01000-09000, 98000-99000</p> | <p>AT Rath & Co. Ges. m.b.H. Teiritzstrasse 3 · 2100 Korneuburg Tel. +43 2262 608 0 · Fax +43 2262 608 60 office@rath-co.at · www.rath-co.at</p> <p>AU Bruderer Presses Australia Pty. Ltd. 92 Trafalgar Street · Annandale, NSW 2038 Tel. +61 419 400 995 · Fax +61 296 864 809 Brudsyd@tpgi.com.au</p> <p>BA Oro-Tech trgovina d.o.o. Ulica borcev 1/b · SI-2000 Maribor Tel. +386 2 426 08 43 · Fax +386 2 426 08 44 oro-tech.trgovina@siol.net</p> <p>BE Schiltz S.A. Chaussee de Gand 1034 · 1082 Bruxelles Tel. +32 2 464 4830 · Fax +32 2 464 4839 info@schiltz.be · www.schiltz-norms.be</p> <p>BG Bavaria 2002 EOOD Patriarh Evtimii 10 5100 Gorna Orjachoviza Tel. +359 618 64158 · Fax +359 618 64960 bavaria2002@gorna.net · www.bavaria2002.hit.bg</p> <p>BR Industecnica Equipamentos Industriais Ltda. R. Olívia Guedes Penteado 759 04766-001 São Paulo Tel. +55 11 5548 4333 · Fax +55 11 5522 4400 industecnica@fixo.com.br · www.industecnica.com.br</p> <p>BY Jury Ivanovich Kotski Sennaja Ulica 143a · 222 120 Borisov Tel. +375 1777 820 60 · Fax +375 1777 820 60 yur_kot17@mail.ru</p> <p>CH Brüttsch/Rüegger Werkzeuge AG In der Luberzen 1 · 8902 Urdorf Tel. +41 44 736 63 63 · Fax +41 44 736 63 00 sales@brw.ch · www.brw.ch</p> <p>CL Bermat S.A. Coyancura 2283, Of. 601 Casilla 9781 · Santiago Tel. +56 2 231 88 77 · Fax +56 2 231 42 94 bermat@bermat.cl · www.bermat.cl</p> <p>CN Forsteppe Asia Ltd. (Shanghai) Co., Ltd. 福仕德精密工程(上海)有限公司 上海市南汇区六灶镇鹿吉路199-3号 邮编: 201322 Tel./ 电话: +86 21 6816 0169 Fax/ 传真: +86 21 6816 0162 mailto/ 电子邮件: ayft@forsteppe.com 网站: www.forsteppe.com</p> <p>FGC Precision (Guangzhou) Ltd. 福广通精密制造(广州)有限公司 广州市北围工业区A3栋东座5楼 邮编: 510730 Tel./ 电话: +86 20 8200 1027 Fax/ 传真: +86 20 8221 7576 mailto/ 电子邮件: c.service@forsteppe.com</p> <p>CY Militos Trading Ltd. K. Erotokritou & A. Demetriou Ltd. P.O.B. 27297 · 1643 Nicosia Tel. +357 2 75 12 56 · Fax +357 2 75 22 11 militos@cytanet.com.cy</p> <p>CZ Gore s.r.o. Pristavní 6 · CZ-63500 Brno-Bystrc Tel. +420 5 41 59 25 18 · Fax +420 5 41 59 25 19 vedouci@gore.cz · www.gore.cz</p> |
|---|--|--|

- DK EBI A/S**
Metalbuen 28 · Postbox 79 · 2750 Ballerup
Tel. +45 4497 8111 · Fax +45 4468 0626
ebi@ebi.dk · www.ebi.dk
- DZ Pneumacoupe Blida Boufarik**
86 Bld. Menad Mohamed
Boufarik, 09400 Blida
Tel. +213 347 5655 · Fax +213 347 5655
pneumacoupe@yahoo.fr
- EE CLE Baltic Oü**
Kuma tee 2 · Peetri küla
75312 Rae vald · Estonia
Tel. +372 780 3530 · Fax +372 668 8679
lidia.blant@clegroup.eu · www.clegroup.eu
- EG Smeco**
68, Abdel Rahman El Raffei St.
11351-Heliopolis West, Cairo
Tel. +20 2 620 06 71 · Fax +20 2 620 06 74
r.metwally@tedata.net.eg
- ES Daunert Máquinas-Herramientas, S. A.**
c/. Tirso de Molina s/n Esquina
c/. Albert Einstein
Poligono Industrial Almeda
08940 Cornellá de Llobregat · Barcelona
Tel. +34 93 475 1480 · Fax: +34 93 377 6464
info@daunert.com · www.daunert.com
- FI OY Christer Lindholm Eng. AB**
Santalantie 25 · 10900 Hanko
Tel. +358 207519600 · Fax +358 207519619
info@clegroup.eu · www.clegroup.eu
- FR FIBRO France Sarl**
19/21, rue Jean Lolive · 93170 Bagnolet
B.P. no 129 · 93172 Bagnolet Cedex
Tél. +33 1 43 62 18 80 · Fax +33 1 48 59 17 47
info@fibro.fr · www.fibro.com
- Secteur Franche Comté**
Codimec SA
Rue des Maurapans · ZAC de Valentin
BP no. 3051 · 25046 Bésançon Cedex
Tel. +33 3 81 88 83 11 · Fax +33 3 81 88 05 45
- GB Bruderer UK Ltd.**
Unit H, Cradock Road
Luton · Bedfordshire LU4 0JF
Tel. +44 1582 563 400 · Fax +44 1582 493 993
mail@bruderer.co.uk · www.bruderer-presses.com
- GR Mek-Maria Koutseris & Co.**
Pyloy 100 · 10441 Athen
Tel. +30 210 5220557 · Fax +30 210 5221208
info@mek.com.gr · www.mek.com.gr
- HK Forsteppe Asia Ltd.**
Unit 207, 2/F
Shing Chuen Industrial Building
25-27 Shing Wan Road
Tai Wai, Shatin, N.T., Hong Kong
Tel. +852 26 01 13 68 · Fax +852 26 01 16 38
annie.li@forsteppe.com · www.forsteppe.com
- HR Koncar-Alati d.d.**
Fallerovo Setaliste 22 · 10000 Zagreb
Tel. +385 1 3670 900 · Fax +385 1 3870 932
alati@koncar-alati.hr · www.koncar-alati.hr
- HU Rath & Co. Ges. m.b.H.**
Teiritzstraße 3 · AT-2100 Korneuburg
Tel. +43 2 262 608 0 · Fax +43 2 262 608 60
office@rath-co.at · www.rath-co.at
- ID Pt. Multitanaka Sejahtera**
Jl, Tanjung Duren Raya 21 A · Jakarta 11370
Tel. +62 21 56 44 743 · Fax +62 21 56 40 720
tanaka@cbn.net.id
- IE Bruderer UK Ltd.**
Unit H, Cradock Road
Luton · Bedfordshire LU4 0JF
Tel. +44 1582 563 400 · Fax +44 1582 493 993
mail@bruderer.co.uk · www.bruderer-presses.com
- IL A. J. Englander 1980 Ltd.**
13 Harechev Street · Tel Aviv 67771
Tel. +972 3 537 36 36 · Fax +972 3 537 33 25
info@englander.co.il · www.englander.co.il
- IN FIBRO India Standard Parts Pvt. Ltd.**
Regd. Office & Works
Plot No. 1, Gat No. 107
at Post: Pirangut, Tal. Mulshi,
Dist. Pune 411042
Tel. +91 20 66 75 05 20 · Fax +91 20 66 75 05 24
info@fibro-india.com · www.fibro.com
- IN FIBRO India Standard Parts Pvt. Ltd.**
Sales Office
Antaral Society
Sanganna Dhotre Marg,
Ghaneshkhind Road
Pune - 411016
Tel. +91 20 2565 62 9 · Fax +91 20 2565 6487
info@fibro-india.com · www.fibro.com
- IR Eximrad Co.**
268 Dr. Mofatah Ave. · Tehran 15848
Tel. +98 21 8882 12 3 · Fax +98 21 8830 9778
eximrad@yahoo.com
- IT Millutensil S.R.L.**
Corso Buenos Aires, 92 · 20124 Milano
Tel. +39 02 2940 4390 · Fax +39 02 204 6677
info@millutensil.com · www.millutensil.com
- KR JEDA Industries Inc.**
#640-12, Gojan-dong, Namdong-gu
(Namdong Ind , Zone 71B-13L)
Incheon, Korea, POST 405-817
Tel. +82 32 821 5656 · Fax +82 32 821 9501
zeno@jedainc.com · www.jedainc.com
- Jinsan Commercial Co. Ltd.**
Rm 103, 12 Dong, Anyang Int'l.
Circulation Complex
#555-9, Hogye-Dong, Dongan-Gu
Tel. +82 31 479 3181 · Fax +82 31 479 3180
jiscco@hotmail.com
- LV Cle Baltic Oü**
Katlakalna 11C · 1073 Riga
Tel. +371 713 9991 · Fax +371 713 9992
info@clebaltic.com · www.clebaltic.com
- MA Chiba Industrie**
Bd. Mohamed Bouziane Lot 96
Hay My Rachid · Casablanca
Tel. +212 22 72 69 83 · Fax +212 22 72 69 83
chibaindustrie@menara.ma
- MY FIBRO Asia Pte. Ltd.**
121, Genting Lane, #02-02
Singapore 349572
Tel. +65 68 46 33 03 · Fax +65 68 46 33 02
info@fibro-asia.com · www.fibro.com
- NL Jeveka B.V.**
Postbus 22966 · Keienbergweg 8
1100 DL-Amsterdam · 1101 GB Amsterdam
Tel. +31 20 342 03 42 · Fax +31 20 342 03 02
info@jeveka.com · www.jeveka.com
- NZ APS Tooling Ltd.**
145 Station Road · Penrose
1006 Auckland 6
Tel. +64 9 579 2208 · Fax +64 9 579 2207
info@apstools.co.nz
- PE Ing. E. Brammertz S.c.r.l.**
Av. José Pardo 182 · OF. 905
Apartado 0173 · Miraflores, Lima 18
Tel. +51 1 445 81 78 · Fax +51 1 445 19 31
braming@terra.com.pe
- PL Laska Technika Przemyslowa Sp.z.o.o.**
Towarowa 35 · 43-100 Tychy
Tel. +48 32 326 24 50 · Fax +48 32 326 24 51
laska@laska.com.pl · www.laska.com.pl
- PT Ferrometal Lda.**
Estrada Manuel Correia Lopes
Rua da Rosita, Lote 12
Conceição da Abóboda
2785-543 S. Domingos de Rana-Cascais
Tel. +351 21 4447160 · Fax +351 21 4447169
ferrometal@ferrometal.pt
- RO Reprezentant Vanzari Daniel Andrei Sibisan**
Str. Zizinului nr. 8, ap. 21 · Brasov, 500414
Tel. +40 744 44 05 83 · Fax +40 368 78 00 08
d.sibisan@fibro.de · www.fibro.com
- RU CLE Group Ru Ltd.**
Sofyiskaya Ulica 66 · 192289 S. Petersburg
Tel. +7 812 575 1592 · Fax +7 812 324 7388
info@cleru.ru · www.cleru.ru
- SA Al Rasha Est**
Makkah Road Kilo - 3 · Dar Al-Oloum Street
Al Saghr Dist. 2
P. O. Box 130029 · Jeddah 21372
Tel. +966 2 652 35 89 · Fax +966 2 652 35 48
fibro.sa@gmail.com
- SE Lideco AB**
Verkstadsvägen 4 · 51463 Dalstorp
Tel. +46 321 53 03 50 · Fax +46 321 603 77
info@lideco.se · www.lideco.se
- SG FIBRO Asia Pte. Ltd.**
121, Genting Lane, #02-02
Singapore 349572
Tel. +65 68 46 33 03 · Fax +65 68 46 33 02
info@fibro-asia.com · www.fibro.com
- SI Oro-Tech trgovina d.o.o.**
Ulica borcev 1/b · SI-2000 Maribor
Tel. +386 2 426 08 43 · Fax +386 2 426 08 44
oro-tech.trgovina@siol.net
- SK Dekona s.r.o. Montages et Outillages**
Buzulucká 3 · 96001 Zvolen
Tel. +421 45 5401 531 · Fax +421 45 5242 603
office@dekona.sk · www.dekona.sk
- TH LuBo (Thailand) Co., Ltd.**
777 Moo 15 Soi Thai Prakarn 2
Theparak Road km. 21
Bangsaothong, Samut Prakarn 10540
Tel. +66 2 317 6226 · Fax +66 2 317 6224
sale@luboasia.com · www.luboasia.com
- TR Ender Kesici Ve Teknik · Takimler Ltd. Sti.**
Tersane Caddesi No. 105
34420 Karaköy/Istanbul
Tel. +90 212 2532600 · Fax +90 212 2545791
info@enderltd.com · www.enderltd.com
- TW SunNan Enterprises Co. Ltd.**
2F, No. 7, Alley 6, Lane 235 · Pao-Chiao Road
Hsin-Tien City · Taipei
Tel. +886 22917 6454 · Fax +886 22911 0398
sun-ss@umail.hinet.net
- US FIBRO Inc.**
139 Harrison Ave. · Rockford, IL 61104
P. O. B. 5924 · Rockford, IL 61125
Tel. +1 815 229 1300 · Fax +1 815 229 1303
info@fibroinc.com · www.fibro.com
- YU Andrija Tesic, Dipl. Ing.**
Partisanska 12/a-ll · 11090 Beograd
Tel. +381 11 2338 362 · Fax +381 11 2338 362
atesic@verat.net
- ZA Herrmann & Herrmann Pty. Ltd.**
24, Shaft Road · P. O. B. 13030
Knights 1413
Tel. +27 11 828 01 00 · Fax +27 11 828 60 21
hermstools@mweb.co.za · www.hermstools.com

Index

| | Page |
|---|---------------|
| A | |
| Accessories for Precision Retainers, triangular, for Ball-Lock Punches | E111 |
| Accessories for Precision Retainers, triangular, for Punches, ISO 8020 | E117 |
| ACCU-LOCK Fixture Device for Ball-Lock Punches, light and heavy duty | E114 |
| Adjusting Washers | D200- D204 |
| Adjusting washers | L7 |
| Air Springs, to VW Standard | F277 |
| All Steel Die Sets ECO-LINE | A34–A35 |
| All-steel die sets | A25–A61 |
| Aluminium die sets | A38–A43 |
| Aluminium Plates similar ISO 6753-1 | B5 |
| Aluminium plates, surface ground | A37, B5 |
| Angled Guide Gibs, Bronze with Non-Liquid Lubricant | D172- D179 |
| Application of FIBROFIX®-SECHS with Injection Gun | H17 |
| Application of FIBROLIT® ZWO, FIBROFIX®-SECHS | H18-H19 |
| Assembly Guide Lines for Head Type Punches with round Points | E20 |
| Assembly Guidelines for Guide Elements, Tolerances for Fitment | D224- D228 |
| B | |
| Ball bearing Guides | L25 |
| Ball Bearing Inserts with collar | J7 |
| Ball Bearing Inserts without collar | J7 |
| Ball Bearing Rails | J7 |
| Ball Cages small dimensions | D15 |
| Ball Cages with cage spacing | D61 |
| Ball Cages with Circlip DIN 472 and Fastning Ring Groove | D62 |
| Ball Cages with securing ring groove | D60 |
| Ball guide units, complete to Daimler standard | D36 |
| Ball Guides for highest stroking speeds | D38 |
| Ball Lock Type Quill Bush and Thrust Pin VDI 3374 | E16 |
| Ball-Lock Pilot Pins, with parabolic tip, heavy duty | E59 |
| Ball-Lock Pilot Pins, with parabolic tip, light duty | E45 |
| Ball-Lock Pilot Pins, with tapered tip, heavy duty | E58 |
| Ball-Lock Pilot Pins, with tapered tip, light duty | E44 |
| Ball-Lock Punches with ejector pin, heavy duty | E49-E51 |
| Ball-Lock Punches with ejector pin, light duty | E35-E37 |
| Ball-Lock Punches, heavy duty | E46-E48 |
| Ball-Lock Punches, light duty | E32-E34 |
| Ball-Lock Punches, punch larger than shaft, heavy duty | E52-E54 |
| Ball-Lock Punches, punch larger than shaft, heavy duty with ejector pin | E55-E57 |
| Ball-Lock Punches, punch larger than shaft, light duty | E38-E40 |
| Ball-Lock Punches, punch larger than shaft, light duty with ejector pin | E41-E43 |
| Ball-Type Load-Bearing Bolt, self-locking | C20 |
| Blade Precision Ejectors, hardened, similar to DIN ISO 8693 | L44 |
| Blanking and forming with FIBROFLEX®-Elastomers | G21-G27 |
| Bolt Guides | L37 |
| Bolt On Die Set Shanks, ~DIN ISO 10242-2 | C8 |
| Bushes for Lifting Bolts VDI | C23 |
| C | |
| Cage Retainers | D211- D212 |
| Cam Slide Units KBV1 with Gas Spring | K6 |
| Cam Slide Units KBV2 with Gas Spring | K7 |
| Cam Units | Register K |

| | Page |
|--|-----------------|
| Cam Units | Registry K |
| Carbide Punches – similar to DIN 9844 + DIN 9861, Shape A, Cylindrical Head – Straight | E27 |
| Carbide Punches – similar to DIN 9844 + DIN 9861, Shape B, Cylindrical Head – Stepped | E27 |
| Carbide Punches – similar to DIN 9844 + DIN 9861, Shape C, Conical Head – Stepped | E27 |
| Carbide Punches – similar to DIN 9844 + DIN 9861, Shape D, Conical Head – Straight | E27 |
| Cast iron die sets | A9–A24 |
| Centering Pins | C28 |
| Centering pins to Daimler standard | D207 |
| Centering pins to VW standard | D206 |
| Centering sleeves | L9 |
| Centering Units and Adjusting Washers | D200- D204 |
| Circlips | |
| Clamping Claws, goose neck shape | C30 |
| Clamping Claws, infinitely variable | C31 |
| Clamping Claws, infinitely variable | C31 |
| Clamping Tool Sets | C46-C47 |
| Clamps, DIN 6314 | C32 |
| Clamps, forked shape, DIN 6315 B | C30 |
| Clamps, goose neck shape, DIN 6316 | C33 |
| Clamps, goose neck shape, with setscrew | C33 |
| Clamps, straight, with setscrew | C32 |
| Cleaner | H11 |
| Combination Spring and Spacer Units | F64-F72 |
| Compact Cam (FCC) Tool Slides | K8 |
| Compact Nitrogen Booster | F322-F323 |
| Compact-Gas Springs | F209-F227 |
| Compensation Discs | F66 |
| Compensation Discs | L7 |
| Concertina Shrouds | D208- D209 |
| Concertina Shrouds for Gas Springs | F286-F287 |
| Controllable Gas Springs | F276 |
| Counter View | J10 |
| Cyanoacrylate adhesive gel | H12 |
| Cyanoacrylate adhesive paste | H12 |
| D | |
| Damping Discs | F67 |
| Date insert, complete (short version) embossed lettering | L49 |
| Date insert, complete (standard version) embossed lettering | L48 |
| Demountable Pillars DIN 9825/ ~ISO 9182-5 with Collar and Screw Clamp Retention | D35 |
| Demountable Pillars, conical, DIN 9825/ISO 9182-4 similar AFNOR* | D22 |
| Demountable Pillars, conical, with Ball Cage Retainer | D22 |
| Demountable Pillars, with Ball Cage Retainers | D35 |
| Description FIBROLIT- Grease-LD, Oil-LD | H15 |
| Description of Materials for Punches and Matrixes | E10-E11, E26 |
| Die Lifting Bolts with safety ring for Lifting Flange 2133.12. | C26 |
| Die Lifting Bolts with safety ring to CNOMO | C25 |
| Die Lifting Bolts with safety ring to VDI 3366 | C22 |
| Die Set Accessories | A46, C7 |
| Die Set Coupling Spigots | C9 |
| Die Set Coupling Spigots | C9 |
| Die set units | A44–A46 |
| Die set units for progression/lamination dies | A51–A57 |

| | Page | | Page |
|--|---------------------|--|---------------------------|
| Die sets to customers specifications | A30–A33, A47–A50 | Flanged Guide Bushes for Ball Bearings, with ball cage retainer | D65 |
| Die sets, all-steel | A25–A61 | Flanged Guide Bushes, sintered ferrite, carbonitrided, DIN 9831/ISO 9448-4 | D86-D88 |
| Die sets, cast iron | A9–A24 | Flat Guide Bars | D129- D131 |
| Disc Springs DIN 2093 | F42 | Flat Guide Bars Cut-to-length with and without CSK-Holes | D119- D121 |
| Dished Stacking Washers | F62 | Flat Mushroom Head Screws with hexagon socket | C45 |
| Dowel Pin Extractor FIBROZIPP | | FML Gas Springs for Mould Making | L54-L69 |
| Dynamic Strippers | E104 | Four-pillar die sets, all-steel | A24–A29 |
| E | | Four-pillar die sets, aluminium | A38–A43 |
| ECO-LINE All Steel Die Sets | A34–A35 | G | |
| Ejector pin units | Registry E | Gas Spring accessories | F279- F336 |
| Ejector rods | L8 | Gas Springs »Speed Control TM«, SPC, cushioned | F237- F247 |
| Electrically controlled Conveyor Belts | J13-J23 | Gas Springs for Mould Making FML | L54-L69 |
| Electromechanical Transporters, Accessories | J29-J37 | Gas Springs Low Build Height | F229- F235 |
| Example of FIBROFLEX® Application: Combination Blanking-, Embossing and Forming Die | G17-G19 | Gas Springs to WDX Standard | F249 |
| Eyebolts DIN 580 | C11 | Gas Springs with Increased Spring Force-Power Line | F183- F207 |
| Eyebolts rotatable | C13 | Gas Springs with Reduced Pressure Rise | F165- F173 |
| F | | Gas Springs with through bore passage | F175- F181 |
| FIBROELAST® Hollow Round Sections | G13 | Gas Springs, Accessories, Installation material | F103- F336 |
| FIBROELAST® Round Sections | G13 | Gas Springs, Ejector Pin Units | F81-F83, F117- F121 |
| FIBROELAST® Sheets | G12 | Gas springs, small dimensions | F123- F129 |
| FIBROELAST®- Tubular Spring Elements | F58-F59 | General Data | F40 |
| FIBROFIX®-SECHS 280.08 – properties identical with those of 280.02 6 Injection Cartridges and hardener ampoules and stirring rod | H7 | Ground precision components | Registry E |
| FIBROFLEX® Tubular Spring Elements | F48-F57 | Guide Bars | D158- D165 |
| FIBROFLEX® Channel Sections | G9 | Guide Brackets | D166 -D167 |
| FIBROFLEX®- Compression Pads | F75 | Guide Bushes | D106- D117, L23 |
| FIBROFLEX®- Elastomer Strippers | F74 | Guide Bushes for Ball Bearings with stroke Limitation for slip fit bonding | D63 |
| FIBROFLEX® Equilateral Hollow Triangle Selections | G11 | Guide Bushes for Ball Bearings, for slip fit bonding, DIN 9831/ISO 9448-3 | D58 |
| FIBROFLEX® Equilateral Triangle Sections | G11 | Guide Bushes for Ball Bearings, for slip fit bonding, similar AFNOR | D59 |
| FIBROFLEX® Hollow Round Sections | G10 | Guide Bushes for Spring Rams | F102 |
| FIBROFLEX® Hollow Square Sections | G9 | Guide Bushes with Collar for Ball Bearings similar AFNOR, Slotted Nuts | D100 |
| FIBROFLEX® Round Sections | G10 | Guide Bushes with Collar, Bronze coated to AFNOR, Slotted Nuts | D101 |
| FIBROFLEX®- Setting-up Bumpers, round | F77 | Guide Bushes, small dimensions | D15 |
| FIBROFLEX®- Setting-up Bumpers, square | F77 | Guide pillars | L10 - L11 |
| FIBROFLEX®- Shedder Inserts | F74 | Guide Pillars – endwise bolt on type with Ball Cage Retainer | D18 |
| FIBROFLEX® Sheets and Pads | G8 | Guide Pillars – endwise bolt-on type ~DIN 9825/~ISO 9182-2 | D18 |
| FIBROFLEX® Spring Systems | F46-F47 | Guide pillars (diagonal load pillars) | L21 |
| FIBROFLEX® Square Sections | G8 | Guide Pillars ~AFNOR with Retaining Ring Groove | D26 |
| FIBROFLEX®-Tubular spring elements | F68 | Guide Pillars ~DIN 9825/ ~ISO 9182 press-in type, with internal threads | D17 |
| FIBROLIT®-ARF 280.131 and 280.23 – fast-drying marking out blue | H13 | Guide Pillars DIN 9825/ISO 9182-2 | D16 |
| FIBROLIT®-Grease-LD | H14 | Guide Pillars ECO-LINE | D19-D20 |
| FIBROLIT®-MK 281.01 – two component metal adhesive on epoxy resin basis | H9 | Guide Pillars for Large Tools | D31 |
| FIBROLIT®-OIL-LD for longtime lubrication of sintered guiding system | H14 | | |
| FIBROLIT®-Press Tool Lubricant | H16 | | |
| FIBROLIT®-RL 280.15 – penetrating lubricant spray containing graphite and molybdenum-disulfide | H13 | | |
| FIBROLIT®-TW 280.11 and 280.27 – release agent on wax basis | H14 | | |
| FIBROLIT®-ZWO 280.02 and Hardener 280.05 – a two component casting resin on epoxy resin basis, exhibiting high strength and excellent sliding properties | H7 | | |
| Fine blanking die sets | A24 | | |
| Flanged Guide Bushes DIN 9831/ISO 9448-5 Bronze with solid lubrication rings, ECO-LINE | D89-D91 | | |
| Flanged Guide Bushes DIN 9831/ISO 9448-5 for Ball Bearings | D92-D94 | | |

Index

| | |
|--|---------------|
| | Page |
| Guide pillars for Lifting units to Daimler standard | F95 |
| Guide Pillars to CNOMO, with Groove | D33 |
| Guide Pillars to Daimler with Pilot Taper, for Large Tools and Snap Ring Groove | D27 |
| Guide Pillars to Daimler, for Large Tools with Snap Ring Groove | D30 |
| Guide Pillars to VDI 3356, with Pilot Taper, for Large Tools | D28 |
| Guide Pillars to VW, with 5° Pilot Taper | D32 |
| Guide Pillars to VW, with Groove, for Large Tools | D29 |
| Guide Pillars to WDX with Collar, with Screw Clamps | D34 |
| Guide Pillars with Ball Cage Retainer | D16 |
| Guide Pillars with collar, ECO-LINE | D37 |
| Guide pillars with flange | L20 |
| Guide pillars, shouldered | L12 - L15 |
| Guide Pillars, small dimensions | D14 |
| Guide Pins | F62 |
| Guide Sleeves | L22 |
| Guide units Million-Guide | D44-D47 |
| Guides | D220- D222 |
| H | |
| Hardened Ejector Pins, similar to DIN 1530, Shape D | L42 |
| Hardened Ejector Pins, similar to DIN ISO 6751 | L38 |
| Hardened Ejector Pins, similar to DIN ISO 8694 | L40 |
| Head Type Quill Bush and Thrust Pin VDI 3374 | E16 |
| Headed Guide Bushes for Ball Bearings , DIN 9831/ ISO 9448-7 | D81-D85 |
| Headed Guide Bushes for Ball Bearings similar AFNOR | D98-D99 |
| Headed Guide Bushes for Ball Bearings, with ball cage retainer | D64 |
| Headed Guide Bushes, bronze plated, ECO-LINE | D75-D77 |
| Headed Guide Bushes, bronze with solid lubricant rings, ECO-LINE | D78-D80 |
| Headed Guide Bushes, carbonitrided, long-term lubrication, similar AFNOR | D95-D97 |
| Headed Guide Bushes, sintered ferrite, carbonitrided, long- term lubrication, DIN 9831/ISO 9448-6 | D70-D74 |
| Headed Guide Bushes, to ISO 9448, Steel, with bronze- coated internal bore | D67-D69 |
| Heat Resistant Retainer for bushings, bearings, sleeves | H10 |
| Helical Springs for Ball Cage Retention | D210 |
| Hexagon Collar Nuts, DIN 6331 | C38 |
| Hexagon Nuts, DIN 6330 B | C37 |
| Hexagon Socket Countersunk Head Cap Screws DIN 7991/ ISO 10.642 | C44 |
| Hexagon Socket Head Cap Screws DIN 6912 | C42 |
| Hexagon Socket Head Cap Screws DIN 7984 | C43 |
| Hexagon Socket Head Cap Screws DIN EN ISO 4762 | C40-C41 |
| High Precision Gauge Pins – Boxed Sets | E140 |
| High Precision Gauge Pins with Handle | E140 |
| High-Performance Compression Springs DIN/ISO Standard 10243 from chrome-vanadium spring steel, rectangular cross-section | F10-F39 |
| High-Performance Compression Springs, rectangular cross- section | F7-F39 |
| High-Precision Gauge Pins DIN 2269, Accessories: Wooden Boxes for Gauge Pins, Gauge Pin Holders | E138- E139 |
| High-Precision Liner Bushes for Dowel Pins, for bonding for push fit | E133 |
| High-Precision Special Parts | E128- E129 |
| High-Tensile Eyebolts | C12 |
| Hoisting Snap Links – omnidirectional | C14 |

| | |
|---|---------------|
| | Page |
| Hotwork Blade Precision Ejectors, nitrided, similar to DIN ISO 8693 | L45 |
| Hotwork Precision Ejector Pins, nitrided DIN ISO 8694 | L41 |
| Hotwork Precision Ejector Pins, nitrided ISO 6751 | L39 |
| Hotwork Precision Ejector Pins, nitrided, similar to DIN 1530, Shape D | L43 |
| Hotwork Precision Ejector Sleeves, nitrided, DIN ISO 8405 | L47 |
| Hydraulic Cam System | K3 |
| I | |
| Injection Gun – for the injecting of casting resin FIBROFIX®- SÉCHS 280.08 | H7 |
| Inspection specifications for die sets | A7 |
| Installation frame for counter view, mechanical | J11 |
| L | |
| Lamination/progression die set units | A51 A57 |
| LCF Gas Springs, damped | F261- F275 |
| Leak Detector Spray | H11 |
| Lifter Pins for Press Tool Strips | D215 |
| Lifter Studs | C11 |
| Lifter Studs VDI 3366 | C10 |
| Lifter Studs with cable securing device | C10 |
| Lifter Units with Installation Block according to BMW standard | F97-F98 |
| Lifters, round with pilot pin hole to BMW Standard | F96 |
| Lifting Flanges with Bolt, with Feather Key to CNOMO Standard | C29 |
| Lifting Flanges with Bolt, with safety ring | C28 |
| Lifting Flanges with Bolt, with Safety Ring, to BMW | C27 |
| Lifting units to Daimler standard | F94 |
| Liner Bushes AFNOR, for conical pillars 2021.50. | D25 |
| Liner Bushes, DIN 9825/ISO 9182-4, for conical pillars 2021.50. | D24 |
| Locating bolts for FIBROFLEX® round springs and FIBROELAST® | F76 |
| Locating bolts, threaded | F76 |
| Locating Guide Bushes | L24 |
| Locating guide pillars, shouldered | L16 - L19 |
| Locating units, round, Locating units, flat | L6 |
| M | |
| Manifoldsystem | F278 |
| Matrixes with or without shoulder for Dynamic Strippers | E105- E106 |
| Matrixes without shoulder, automotive standard | E88-E90 |
| Mounting Examples: Oilless Guide Elements | D196- D199 |
| N | |
| Notes on Guide Elements | D9 |
| Nutlock high strength | H10 |
| Nutlock medium strength | H10 |
| O | |
| OIL – high performance spindle oil for die set guides | H14 |
| Oilless Guide Bushes with collar, Bronze with Non-Liquid Lubricant | L26-L29 |
| Oilless Guide Bushes, Bronze, with and without Non-Liquid Lubricant | L30-L31 |
| Oilless Guide Elements | D103- D228 |
| O-Rings | |
| Overrun Cams, Bronze with Non-Liquid Lubricant, to VDI 3357 | D171 |
| Overrun Cams, Steel, to VDI 3357 | D170 |

| | Page | | Page |
|--|------------|--|-----------|
| P | | Rectangular Mounting Flanges for Guide Pillars and Guide Bushes Bronze with Non-Liquid Lubricant | D52 |
| Pallet tooling die sets | A59–A65 | Rectangular Precision Retainers for Ball-Lock Punches, light duty | E113 |
| Piercing punches | Registry E | Rectangular Precision Retainers for Punches to ISO 8020 | E119 |
| Pillar Wipers | D214 | Rectangular Precision Retainers for Punches to VDI 3374 | E124 |
| Pilot Pins with parabolic tip, ISO 8020 | E71 | Release agent on silicon oil basis | H14 |
| Pilot Pins with tapered tip, ISO 8020 | E70 | Retaining bolts | F68 |
| Pilot Units to Daimler Standard | E72 | Retaining disc with countersunk head screw, DIN 9825/ISO 9182-4 | D23 |
| Piloted counterbore for tapered-head punch | E18-E19 | Retaining disc with head cap screw, similar AFNOR | D23 |
| Pneumatic controlled Conveyors | J25-J28 | Retaining Disc with Screw | D35 |
| Power Clamps, sliding, Power Clamp Accessories | C346–C35 | Retaining Plates | D122–D124 |
| Precision components | Registry E | Ring Block with Position Lock for max. carrying capacity 3000 kg | C21 |
| Precision Dowel Pins (Parallel) similar to DIN EN ISO 8734/ISO 8734 | E134–E135 | Ring Block with Position Lock for max. carrying capacity of 8000 up to max. 15000 kg | C21 |
| Precision Dowel Pins (Parallel) with Internal Extracting Thread, similar to DIN EN ISO 8735/ISO 8735 | E131–E132 | Roller Cages with circlip groove | D66 |
| Precision Drill Bushes Shape A, DIN 172, with collar | E137 | Roller Cages with mounting aid | D66 |
| Precision Drill Bushes Shape A, DIN 179, without collar | E137 | Roller inserts with collar | J8 |
| Precision feeler Gauges Foil shims | B14 | Roller inserts without collar | J8 |
| Precision flat and square bar steel ~DIN 59350 | B6 | Roller rails | J8 |
| Precision flat and square bar steel to DIN 59350 | B12 | Roller Slide Units | K5 |
| Precision flat and square bar steel to DIN 59350 with machining allowance | B6-B12 | Rotary Safety Eyebolts, heavy duty, with ball bearing | C16 |
| Precision Guide Bushes for Punches DIN 9845, Shape C | E92 | Rotary Safety Eyebolts, light duty, with ball bearing | C15 |
| Precision Guide Bushes for Punches ISO 8978 | E92 | Round Precision Punches with tapered heads 30°, Shape C | D17 |
| Precision Matrixes with collar, conical | E95 | Round Precision Punches with tapered heads 30°, Shape D | E17 |
| Precision Matrixes with collar, cylindrical | E94 | Round Wire Compression Springs | F40-F41 |
| Precision Matrixes with collar, DIN 9845, Shape B | E93 | Rubber Tubular Spring Elements | F60-F61 |
| Precision Matrixes without collar DIN 9845, Shape A | E93 | S | |
| Precision Matrixes without collar, conical | E95 | Screw Clamps | D216–D217 |
| Precision Matrixes without collar, cylindrical | E94 | Screw Clamps, to CNOMO | D218 |
| Precision Matrixes without shoulder, cylindrical, ISO 8977 | E77-E87 | Screw-in Lifter Studs, VDI 3366 | C9 |
| Precision Punches DIN 9844, Shape A | E21 | Securing Flanges | D218 |
| Precision Punches DIN 9844, Shape B | E21 | Selection matrix Guide Pillars – Guide Bushes | D12 |
| Precision Punches DIN 9861, Shape DA | E12 | Service Station, mobile, for Gas Springs | F328 |
| Precision Punches DIN 9861, Shape D/ISO 6752 | E13 | Set Screws | F73 |
| Precision Punches DIN 9861, Shape CA+C | E14 | Setscrews | C37 |
| Precision Punches with Ejector Pin | E24 | Shallow Mounting Flanges, Rectangular, for Guide Pillars and Guide Bushes, – with screw holes – | D51 |
| Precision Punches with Ejector Pin, Stepped, Long Point | E25 | Shock Absorbing Washers FIBROFLEX® | G9 |
| Precision Punches with Ejector Pin, Stepped, Short Point | E25 | Shoulder Screws | F70 |
| Precision Punches, ISO 8020 | E64-E66 | Sintered Ferrite Guide Bushes carbonitrided, for slip fit bonding DIN 9831/ISO 9448-2 | D54 |
| Precision Punches, similar to DIN 9861 Shape CA+C | E15 | Sleeves for Lifting units to Daimler standard | F95 |
| Precision Punches, similar to VDI 3374 | E23 | Slide centre guides, Bronze with Non-Liquid Lubricant | D168 |
| Precision Punches, Square/Rectangular, with Hot Upset-Forged Head | E130 | Slide Stop | D194 |
| Precision Punches, Square/Rectangular, without Head | E130 | Sliders for transverse bolt guides | L36 |
| Precision Punches, with ejector pin, ISO 8020 | E67-E69 | Sliding Blocks and Prismatic Guides, Bronze and Steel | D182–D193 |
| Precision-Ejector Sleeves, hardened, DIN ISO 8405 | L46 | Sliding Guide Systems: Clearance and Pairing Recommendations | D10-D11 |
| Progression/lamination die set units | A51–A57 | Sliding Pads | D132–D157 |
| Punch with tapered head, Shape D | E18-E19 | Spacer Bushes | D208 |
| Punching and embossing units for punched holes | E141 | Spacer Plates, toothed | D219 |
| Q | | Spacer Plugs | F66 |
| Quick Metal | H12 | Spacer Sleeves | F66 |
| Quill holders for core tempering | L50 | Spacer Tubes | D209, F65 |
| R | | Special Ball Bearing Cages – Brass | D55 |
| Rectangular Guides | L32 | Spigot Holders | C9 |
| Rectangular guides with rollers | L33 | | |
| Rectangular Mounting Flanges Bronze with Non-Liquid Lubricant | D48 | | |
| Rectangular Mounting Flanges for Guide Pillars and Guide Bushes – with screw holes – | D50 | | |
| Rectangular Mounting Flanges for Guide Pillars and Guide Bushes – without screw holes – | D49 | | |

Index

| | Page | | Page |
|---|-----------------------|---|---------------|
| Spring Accessories | F65-F67 | U | |
| Spring Ejector-/ Fixing Pin Cartridges | F80-F89 | Universal Lifter Units according to BMW standard | F99 |
| Spring Ejectors with Gas Springs | F81-F83, F117-F121 | Universal Rotary Safety Eyebolts for Grade 10 chain | C18 |
| Spring mounted Rollers | J9 | Universal Rotary Safety Eyebolts with Eye Hooks | C19 |
| Spring Ram with gas spring to VW standard | F102 | Universal Rotary Safety Eyebolts with Oval Ring | C17 |
| Spring Rams for Workpiece Lifters (Gas Springs) | F101 | W | |
| Spring Units for Compression Springs | F63 | Washers | F66 |
| Spring Units for FIBROFLEX®-Springs | F63 | Washers, DIN 6340 | C38 |
| Spring-, Fit- and spacer Units | F69 | Wireless Pressure Monitoring | F318- F320 |
| Square Precision Retainers for Ball-Lock Punches, light duty | E112 | | |
| Square Precision Retainers for profile Punches to VDI 3374 | E123 | | |
| Square Precision Retainers for Punches to ISO 8020 | E118 | | |
| Square Precision Retainers for round Punches to VDI 3374 | E122 | | |
| Stacking Washers – Flat | F62 | | |
| Standard Cam Slide Units | K4 | | |
| Standard Parts for Mould Making | Registry L | | |
| Standard-Gas Springs | F135- F151 | | |
| Standard-Gas Springs – HEAVY DUTY | F152- F163 | | |
| Standardised Special Shapes Punches/Precision Matrixes | E99-E101 | | |
| Steel die sets, customized | A30-A33 | | |
| Steel plate to ISO 6753-1 | B4 | | |
| Steel plates, surface ground | A36, B4 | | |
| Stepped Blocks, DIN 6318 | C36 | | |
| Stepped Quill Punches – Conical Head VDI 3374 | E16 | | |
| Stock lifter | F91-F92 | | |
| Stop buffer | D194 | | |
| Stripper-Mounted Guide Pillars, conical pillar fit | D43 | | |
| Stripper-Mounted Pillars | D39-D41 | | |
| Stripper-Mounted Retaining Bushes, conical pillar fit | D42 | | |
| Strippers for blanking dies | F78 | | |
| Stripping unit mountings | E127 | | |
| Stripping Units | E126, F90 | | |
| Summary: Spring Units Combination, Spring-Spacer Units | F43-F45 | | |
| Supports, adjustable | C36 | | |
| Surface ground steel plates | A36, B4 | | |
| T | | | |
| Tables: Safe Loads for FIBRO Ball Bearing Guides | D56-D57 | | |
| Technical Data on FIBROFLEX® | G6-G7 | | |
| Technical Data: Thinning Agent for FIBROLIT® ZWO | H8 | | |
| Technical Data: FIBROLIT®-ZWO and FIBROFIX®-SECHS | H6 | | |
| T-Guide Bars, Bronze with Non-Liquid Lubricant | D180 | | |
| T-Head Bolts, DIN 787 | C39 | | |
| Thinning Agent 280.24 – for reducing viscosity of FIBROLIT®-ZWO | H9 | | |
| Threaded Die Set Shanks | C8 | | |
| Threaded Die Set Shanks, ~DIN ISO 10242-1 | C8 | | |
| Threaded Die Set Shanks, with collar | C8 | | |
| Threaded Discs | F67 | | |
| Threaded Discs for Helical Springs | F67 | | |
| Thrust Washers | D105, F65, F68 | | |
| Tooling pallet die sets | A59–A65 | | |
| Triangle Precision Retainers for Ball-Lock Punches, light duty/heavy duty | E108- E110 | | |
| Triangle Precision Retainers for round and profile Punches, ISO 8020 | E116 | | |
| Two-pillar die sets, all-steel | A24–A29 | | |
| Two-pillar die sets, aluminium | A38–A43 | | |
| Two-pillar die sets, cast iron | A9–A24 | | |

FIBRO

Numerical Index

| Order No | Page | Order No | Page | Order No | Page | Order No | Page |
|-------------|--------------|-------------|-----------|---------------|---------|----------------|-----------|
| 201.01. | A10 | 2022.25. | D26 | 2086.70. | D110 | 2192.50. | F295-F306 |
| 201.03. | A11 | 2022.29. | D34 | 2086.71. | D116 | 2192.61. | C45 |
| 201.05. | A12 | 2022.40.1. | D29 | 2087.70. | L27 | 2195.114. | J20 |
| 201.07. | A13 | 2024.94. | D44 | 2087.71. | L28 | 2195.115. | J20 |
| 201.11. | A14 | 2024.96. | D46-D47 | 2087.72. | L26 | 2195.116. | J20 |
| 201.13. | A15 | 2025.94. | D36 | 2087.73. | L29 | 2195.117. | J20 |
| 201.145. | A45 | 2031.01. | D49 | 2091.31. | D86 | 2195.120./121. | J22 |
| 201.149. | A45 | 2031.02. | D50 | 2091.32. | D87 | 2195.130./131. | J22 |
| 201.21. | A16 | 2031.04. | D51 | 2091.34. | D88 | 2195.140./141. | J22 |
| 201.23. | A17 | 2031.31. | D49 | 2091.44. | D92 | 2195.150./151. | J22 |
| 201.26. | A18 | 2031.34. | D50 | 2091.45. | D93 | 2195.218. | J21 |
| 201.31. | A19 | 2031.38. | D51 | 2091.46. | D94 | 2195.219. | J21 |
| 201.33. | A20 | 2031.41. | D49 | 2091.67. | D65 | 2195.220. | J21 |
| 201.36. | A21 | 2031.42. | D50 | 2091.71. | D89 | 2195.221. | J21 |
| 201.39. | A22 | 2031.44. | D51 | 2091.72. | D90 | 2195.301. | J16 |
| 201.45. | A30 | 2031.70. | D48 | 2091.74. | D91 | 2195.302. | J17 |
| 201.46. | A31 | 2032.02. | D52 | | | 2195.401. | J18 |
| 201.47. | A32 | 2032.70. | D52 | 210.31. | D95 | 2195.402. | J19 |
| 201.49. | A33 | 2051.32. | D54 | 210.34. | D96 | 2198.32./33. | J7 |
| 201.50. | A53-A57 | 2052.70. | F106-D107 | 210.35. | D97 | 2198.34./35. | J8 |
| 201.65. | A30 | 2052.71. | F102 | 210.39. | D25 | 2198.42. | J7 |
| 201.66. | A31 | 2053.70. | D105 | 210.44. | D98 | 2198.44. | J8 |
| 201.67. | A32 | | | 210.45. | D100 | 2198.50.55. | J9 |
| 201.69. | A33 | 206.41. | D38 | 210.46. | D99 | 2199.03 | J24-J26 |
| 201.95. | A60-A63 | 206.49. | D59 | 210.85. | D101 | 2199.10 | J24-J26 |
| 201.96. | A64 | 206.51. | D15 | 2102.70. | D117 | 2199.40 | J24-J26 |
| 201.97. | A64 | 206.54. | D15 | 2102.71. | D117 | 2199.70 | J24-J26 |
| 201.98. | A65 | 206.71. | D60 | 211.11. | C8 | | |
| 2010.45. | A24-A29 | 206.72. | D60 | 211.12. | C8 | 220. | E21 |
| 2010.46. | A24-A29 | 206.73. | D61 | 211.13. | C8 | 2201. | E64 |
| 2010.47. | A24, A27-A28 | 206.75. | D62 | 211.14. | C8 | 2202. | E32 |
| 2010.49. | A24-A29 | 206.91. | D208 | 212.11. | A46, C9 | 2203. | E46 |
| 2010.55. | A34-A35 | 206.92. | D209 | 212.15. | A46, C9 | 2204. | E38 |
| 2010.57. | A34-A35 | 206.93. | D208 | 212.16. | C9 | 2205. | E52 |
| 2010.59. | A34-A35 | 206.94. | D209 | 212.16.1. | A46 | 221. | E21 |
| 2010.65. | A38-A43 | 206.95. | D214 | 213.10. | C11 | 2211. | E65 |
| 2010.66. | A38-A43 | 2061.44. | D38, D58 | 213.12. | C9 | 2212. | E33 |
| 2010.67. | A38, A41-A42 | 2061.47. | D63 | 213.13. | C11 | 2213. | E47 |
| 2010.69. | A38-A43 | 2061.48. | D27, D30 | 2130.11. | C10 | 2214. | E39 |
| 2011.45. | A44 | 2061.82. | D66 | 2130.12. | C10 | 2215. | E53 |
| 2011.49. | A44 | 2061.84. | D66 | 2131.10. | C12 | 222. | E12 |
| 2016. | K4, K6, K7 | 2061.95. | D214 | 2131.11. | C13 | 2221. | E66 |
| 2017. | K5 | 2062.44. | D38 | 2131.15. | C14 | 2222. | E34 |
| 2018. | K3 | 20745. | D216 | 2131.20. | C15 | 2223. | E48 |
| 2018.00. | D215-D216 | 20748. | D100-D101 | 2131.21. | C16 | 2224. | E40 |
| | | 2071.45. | D217 | 2131.22. | C21 | 2225. | E54 |
| 202.17. | D16 | 2072.45. | D216 | 2131.23. | C19 | 223. | E13 |
| 202.19. | D14, D16 | 2072.46. | D216 | 2131.25. | C17 | 2231. | E66 |
| 202.21. | D18 | 2072.47. | D217 | 2131.26. | C18 | 2232. | E34 |
| 202.22. | D17 | 2072.48.45. | D218 | 2132.10. | C22 | 2233. | E48 |
| 202.23. | D17 | 2073.45. | D218 | 2132.10.03. 1 | C23 | 2234. | E40 |
| 202.24. | D17 | 2073.46. | D26 | 2132.11. | C25 | 2235. | E54 |
| 202.29. | D19 | 2073.48. | D42 | 2133.11. | C27 | 224. | E14 |
| 202.31. | D20 | | | 2133.12. | C28 | 2241. | E66 |
| 202.53. | D23 | 2081.31. | D70 | 2133.12. 1 | C26 | 2242. | E34 |
| 202.55. | D18 | 2081.32. | D71 | 2133.13. | C29 | 2243. | E48 |
| 202.60. | D41 | 2081.33. | D72 | | | 2244. | E40 |
| 202.61. | D38 | 2081.34. | D73 | 2140.01.01. | C46 | 2245. | E54 |
| 202.91. | D211 | 2081.35. | D74 | 2140.01.02. | C47 | | |
| 202.92.1. | D211 | 2081.44. | D81 | 2140.02. | C37 | 225. | E14 |
| 202.93. | D212 | 2081.45. | D82 | 2140.10. | C32 | 2251. | E66 |
| 2020.62. | D40 | 2081.46. | D83 | 2140.11. | C33 | 2252. | E34 |
| 2020.63. | D39 | 2081.47. | D84 | 2140.13. | C31 | 2253. | E48 |
| 2020.64. | D43 | 2081.49. | D85 | 2140.14. | C31 | 2254. | E40 |
| 2021.29. | D37 | 2081.67. | D64 | 2140.15. | C30 | 2255. | E54 |
| 2021.39. | D24 | 2081.71. | D78 | 2140.16. | C32 | 2261. | E70 |
| 2021.43. | D35 | 2081.74. | D79 | 2140.17. | C30 | 2262. | E44 |
| 2021.44. | D35 | 2081.75. | D80 | 2140.18. | C33 | 2263. | E58 |
| 2021.46. | D35 | 2081.81. | D67 | 2140.19. | C36 | 2271. | E71 |
| 2021.50. | D22 | 2081.84. | D68 | 2140.20. | C36 | 2272. | E45 |
| 2021.53. | D23 | 2081.85. | D69 | 2140.21. | C34-C35 | 2273. | E59 |
| 2021.58. | D22 | 2081.91. | D75 | 2140.30. | C39 | 2276. | E72 |
| 2021.64. | D42 | 2081.94. | D76 | 2140.32. | C37 | 2280.01. | L48 |
| 2022.12. | D27 | 2081.95. | D77 | 2140.33. | C38 | 2280.02. | L49 |
| 2022.13. | D32 | 2082.70. | D114 | 2140.34. | C38 | 2281. | E17 |
| 2022.15. | D28 | 2082.70.55. | D113 | 2192.10. | C40 | 2282.01. | E141 |
| 2022.16. | D30 | 2082.71. | D115 | 2192.12. | C41 | 2284. | E18-E19 |
| 2022.16.45. | D33 | 2085.70. | D108 | 2192.20. | C42 | 2291. | E17 |
| 2022.17. | D29 | 2085.71. | D109 | 2192.30. | C44 | 2299. | J28 |
| 2022.19. | D31 | 2085.72. | D111 | 2192.40. | C43 | 2299.001 | J29 |

Numerical Index

| Order No | Page | Order No | Page | Order No | Page | Order No | Page |
|-------------|---|----------------------|-----------------------|------------------------|-------------------------------|--------------|-----------|
| 2299.002 | J29 | 2441.11.3. | D202 | 2480.00.24. | F295-F296, | 2490. | F105 |
| 2299.011. | J30 | 2441.13. | D204 | | F298-F299 | 2490.12./13. | F210-F227 |
| 2299.012. | J30 | 2441.13.3. | D204 | 2480.00.25. | F304-F305 | 2491. | F277 |
| 2299.121. | J31 | 2441.13.3.45. | D203 | 2480.00.26. | F303, F305 | 2495. | F278 |
| 2299.122. | J31 | 2441.13.45. | D203 | 2480.00.27. | F306-F307 | 2496.12. | F176-F181 |
| 2299.221. | J32 | 2441.14. | F67 | 2480.00.28. | F308, F310 | | |
| 2299.222. | J32 | 2441.14.1. | F63 | 2480.00.30.01/02/03/04 | F312 | 250. | G9 |
| 2299.510 | J33 | 2441.15. | F67 | 2480.00.30.13 | F313 | 251. | G8 |
| 2299.511 | J33 | 2441.15.1. | F63 | 2480.00.31.01/06/07 | F312 | 2511.3. | G12 |
| 2299.520 | J34 | 2441.16. | F68 | 2480.00.31.02 | F321 | 252. | G8 |
| 2299.530 | J35 | 2441.18. | F68 | 2480.00.31.11 | F315 | 252.7. | F77 |
| 2299.540 | J34 | 2441.3. | F62 | 2480.00.32.07. | F321 | 253. | G10 |
| 2299.541 | J34 | 2441.5. | F76 | 2480.00.32.21 | F321 | 2531.4. | G13 |
| | | 2441.6. | F76 | 2480.00.32.71 | F322-F323 | 2531.7. | F77 |
| | | 2442.12. | L6 | 2480.00.32.71.02 | F323 | 2532.2. | F78 |
| 230. | E130 | 2442.12.3. | L7 | 2480.00.34.11 | F311 | 254. | G10 |
| 231. | E130 | 2442.12.4. | L7 | 2480.00.34.13 | F311 | 2541.4. | G13 |
| 232. | E16 | 2442.13. | L6 | 2480.00.35.021 | F324 | 255. | G9 |
| 233. | E16 | 2443.10. | D220 | 2480.00.35.032 | F324 | 256. | G11 |
| 234. | E16 | 2443.12. | D221 | 2480.00.35.04 | F325 | 257. | G11 |
| 235.1. | E134 | 2443.13. | D222 | 2480.00.39.01. | F316 | | |
| 2351.1. | E135 | 2444.12 | D219 | 2480.00.39.04. | F314 | 260. | E93 |
| 236.001 | E131-E132 | 2444.13 | D219 | 2480.00.39.04.00.01 | F314 | 2601. | E95 |
| 236.1. | E131 | 2445.10. | D206 | 2480.00.45.01 | F317 | 2602. | E94 |
| 2361.1. | E132 | 2445.11. | D207 | 2480.00.45.10 | F317 | 2605. | E88 |
| 237.1. | L38 | | | 2480.00.45.022 | F317 | 2606. | E77 |
| 237.8. | L39 | 2450. | F67, G15 | 2480.00.50.04. | F327 | 2607. | E83 |
| 238.1. | L40 | 2451.6. | D194 | 2480.00.50.11 | F326 | 261. | E93 |
| 238.8. | L41 | 2451.6. 2 | D194 | 2480.00.50.20. | F328 | 2611. | E95 |
| 239.1. | L42 | 246. | F48-F57 | 2480.00.70. | F280-F282 | 2612. | E94 |
| 239.8. | L43 | 246.6. | F68 | 2480.00.90. | F318 | 2615. | E89 |
| | | 2461.2. | F60-F61 | 2480.00.90.10 | F320 | 2616. | E78 |
| 240. | E138-E140 | 2461.4. | F58-F59 | 2480.00.90.10.00.1 | F320 | 2617. | E84 |
| 240.11./22. | E140 | 2476. | F74 | 2480.00.90.10.01 | F320 | 2618. | E104 |
| 240.31./32. | E140 | 2470.10. | F80 | 2480.00.90.20.01 | F319 | 2618.06. | E105 |
| 241. | F8-F9 | 2470.10. 016. | F80 | 2480.00.90.51.01.0 | F319 | 2618.07. | E106 |
| 241.00.1. | F73 | 2470.10.11 | F80 | | | 2618.16. | E105 |
| 241.02. | F40-F41 | 2470.12. | F81-F83, F119-F121 | 2480.004. | F82, F83, F120, F121, F284 | 2618.17. | E106 |
| 241.14. | F10, F12, F14, F18, F22, F26, F30, F34, F38 | 2471.01./02. | F85 | 2480.005. | F252-F254 | 262. | E92 |
| | | 2471.03./04. | F85 | 2480.006. | F254 | 2621. | E92 |
| 241.15. | F10, F12, F15, F19, F23, F27, F31, F35, F39 | 2471.05. | F87 | 2480.007. | F136-F274 | 2625. | E90 |
| | | 2471.31./32. | F85 | 2480.008. | F136-F274 | 2626. | E80 |
| 241.16. | F11, F13, F16, F20, F24, F28, F32, F36 | 2471.33./34. | F85 | 2480.009. | F284 | 2627. | E86 |
| | | 2471.35. | F87 | 2480.010. | F136-F272 | 263.1. | L44 |
| 241.17. | F11, F13, F17, F21, F25, F29, F33, F37 | 2471.6. | F75 | 2480.011. | F138-F274 | 263.8. | L45 |
| | | 2472.01./02. | F86 | 2480.015. | F283 | 2635. | E90 |
| 241.18. | D210 | 2472.03./04./33./34. | F86 | 2480.018. | F285 | 2636. | E80 |
| 242.01. | F42 | 2472.05. | F87 | 2480.019. | F285 | 2637. | E86 |
| 243.7. | F74 | 2472.06. | F87 | 2480.022. | F130-F274 | 264.1. | L46 |
| 2431.7. | E126 | 2472.07./08./37. | F89 | 2480.044. | F130-F274 | 264.8. | L47 |
| 244.00.2. | D215 | 2472.11. | F88 | 2480.045. | F140-F272 | 2645. | E90 |
| 244.1. | F46-F47 | 2472.31./21./22. | F86 | 2480.047. | F140-F272 | 2646. | E80 |
| 244.10. | F66 | 2472.35. | F87 | 2480.047. | F140-F272 | 2647. | E86 |
| 244.11. | F66 | 2472.36. | F87 | 2480.051. | F124-F210 | 265.1. | E133 |
| 244.12. | F66 | 2473.01. | F88 | 2480.052. | F128-F226 | 2650.1. | E133 |
| 244.13. | F66 | 2473.02. | F89 | 2480.053. | F130-F132, F210 | 2655. | E90 |
| 244.14.0. | F63 | 2475. | F88 | 2480.055. | F130-F274 | 2656. | E80 |
| 244.15.0. | F63 | 2477. | F90 | 2480.057. | F130-F274 | 2657. | E86 |
| 244.16. | F69 | 2478. | F101 | 2480.058. | F220-F222, F234 | 266. | E23 |
| 244.17. | F70 | 2478.10. | F91 | 2480.064. | F140-F274 | 2661.01. | E118 |
| 244.20. | F71 | 2478.20. | F102 | 2480.080. | F286-F287 | 2661.02. | E118 |
| 244.20./25. | F64 | 2478.20.15.10. | F96 | | | 2661.03. | E122 |
| 244.20.3. | F72 | 2478.20.15.20. | F97 | 2480.12./13. | F136-F151 | 2661.04. | E122 |
| 244.25. | F71 | 2478.20.15.23. | F98 | 2480.21. | F130-F131 | 2661.05. | E123 |
| 244.25.3. | F72 | 2478.20.15.24. | F98 | 2480.22. | F130-F131 | 2661.06. | E123 |
| 244.32. | F71 | 2478.20.15.30. | F99 | 2480.23. | F132-F133 | 2661.07. | E112 |
| 244.32./40. | F64 | 2478.20.20. | F94 | 2480.32. | F252-F255 | 2661.08. | E112 |
| 244.32.3. | F72 | 2478.20.20.1 | F95 | 2480.33. | F260 | 2662.01. | E119 |
| 244.4. | F46-F47, F62 | 2478.20.20.2 | F95 | 2480.82. | F256-F257 | 2662.02. | E119 |
| 244.40. | F71 | 2478.30.00170. | F92 | 2481.12./13. | F166-F173 | 2662.03. | E124 |
| 244.40.3. | F72 | 2479.030. | F82, F120 | 2482.72. | F124-F125 | 2662.04. | E124 |
| 244.5. | F46-F47, F62 | 2479.031. | F82, F120 | 2482.73. | F126-F127 | 2662.05. | E113 |
| 244.6. | F65 | 2479.032. | F83, F121 | 2482.74. | F128-F129 | 2664.02. | E116 |
| 244.7. | F65 | 2479.034. | F81, F119 | 2484.12./13. | F268-F275 | 2664.04. | E116 |
| 244.9. | F65 | | | 2485.12. | F230-F235 | 2664.05. | E108 |
| 2441.11. | D201 | 2480.00. | F301 | 2486.12. | F238-F247 | 2664.06. | E108 |
| 2441.11.0. | D200 | 2480.00.10. | F300-F302 | 2487.12. | F184-F207 | 2664.07. | E109 |
| | | 2480.00.22. | F309 | 2487.82. | F258-F259 | 2664.08. | E110 |
| | | 2480.00.23. | F294-F306 | 2488.13. | F154-F163 | 2664.09. | E110 |
| | | | | 2489. | F276 | 2664.10. | E109 |

Numerical Index

| Order No | Page | Order No | Page | Order No | Page |
|------------|--------------|-------------|-----------|----------------|---------|
| 2665. | E117 | 2923.2343. | B8 | 2965.82. | D193 |
| 2666. | E111 | 2923.2363. | B9 | 2965.82.45. | D191 |
| 2667. | E127 | 2923.2379. | B10 | 2965.83. | D189 |
| 2668.2. | E114 | 2923.2436. | B11 | 2966.72. | D168 |
| 2668.3. | E114 | 2923.2767. | B11 | 2967.10. | L37 |
| 267. | E24 | 2923.2842. | B12 | 2967.11. | L36 |
| 268. | E25 | 2925. | B14 | | |
| 269. | E25 | | | 3100.04. | L9 |
| 270. | E27 | 2960.44.45. | D152-D153 | 3100.09. | L22 |
| 2701. | E67 | 2960.54.45. | D154 | 3110.11. | L21 |
| 2702. | E35 | 2960.70. | D135 | 3111.10. | L11-L15 |
| 2703. | E49 | 2960.71. | D133 | 3111.21. | L16-L19 |
| 2704. | E41 | 2960.72. | D132 | 3111.31. | L20 |
| 2705. | E55 | 2960.73. | D166 | 3120.40. | L23 |
| 271. | E27 | 2960.74. | D148-D149 | 3120.42. | L24 |
| 2711. | E68 | 2960.75. | D150-D151 | 3120.65. | L25 |
| 2712. | E36 | 2960.76. | D138 | 3120.70. | L30-L31 |
| 2713. | E50 | 2960.79. | D145 | 3120.71. | L30-L31 |
| 2714. | E42 | 2960.80. | D146 | 3131.40. | L32 |
| 2715. | E56 | 2960.81. | D155 | 3131.80. | L33 |
| 272. | E27 | 2960.85. | D136 | 3202.12. | L10 |
| 2721. | E69 | 2960.86. | D137 | 3202.13. | L10 |
| 2722. | E37 | 2960.87. | D134 | 3300.10. | L8 |
| 2723. | E51 | 2960.88. | D156 | 3479.030. | L60 |
| 2724. | E43 | 2960.89. | D167 | 3479.032. | L61 |
| 2725. | E57 | 2960.90. | D170 | 3487. | L54-L59 |
| 273. | E27 | 2960.91. | D170 | 3487.12. | L62-L69 |
| 2731. | E69 | 2960.92. | D171 | 3710.00.12.01 | J11 |
| 2732. | E37 | 2960.93. | D157 | 3710.12.01 | J10 |
| 2733. | E51 | | | 3800.01.01.01. | L51 |
| 2734. | E43 | 2961.70. | D121 | 3820.10. | L50 |
| 2735. | E57 | 2961.71. | D119 | | |
| 274. | E15 | 2961.73. | D120 | | |
| 2741. | E69 | 2961.74. | D122 | | |
| 2742. | E37 | 2961.75. | D129 | | |
| 2743. | E51 | 2961.76. | D130 | | |
| 2744. | E43 | 2961.77. | D131 | | |
| 2745. | E57 | 2961.78. | D128 | | |
| 275. | E15 | 2961.79. | D123 | | |
| 2751. | E69 | 2961.79.45. | D126 | | |
| 2752. | E37 | 2961.81. | D124 | | |
| 2753. | E51 | 2961.81.45. | D126 | | |
| 2754. | E43 | 2961.82. | D125 | | |
| 2755. | E57 | | | | |
| 276. | E137 | 2962.70. | D172 | | |
| 277. | E137 | 2962.70.45. | D173 | | |
| | | 2962.71. | D174 | | |
| 280.02 | H7 | 2962.72. | D175 | | |
| 280.05 | H7 | 2962.73. | D176 | | |
| 280.08 | H7 | 2962.74. | D163 | | |
| 280.09 | H7 | 2962.75. | D158 | | |
| 280.11 | H14 | 2962.75.45. | D159 | | |
| 280.131 | H13 | 2962.76. | D161 | | |
| 280.15 | H13 | 2962.77. | D162 | | |
| 280.20 | H11 | 2962.78. | D140-D141 | | |
| 280.23 | H13 | 2962.78.45. | D139 | | |
| 280.24 | H9 | 2962.79. | D164 | | |
| 280.27 | H14 | 2962.80. | D165 | | |
| 280.34 | H14-H15 | 2962.81. | D177 | | |
| 280.35 | H14-H15 | 2962.82. | D178 | | |
| 280.36.006 | H16 | 2962.83. | D179 | | |
| 280.8000 | H14 | 2962.84.45. | D142 | | |
| 280.8001 | H14 | 2962.85. | D144 | | |
| 280.8021 | H14 | | | | |
| 281.01 | H9 | 2963.70. | D184 | | |
| 281.147 | H12 | 2963.71. | D184 | | |
| 281.243 | H10, H20-H21 | 2963.72. | D185 | | |
| 281.270 | H10, H22-H23 | 2963.73. | D185 | | |
| 281.401 | H12, H26-H27 | 2963.80. | D187 | | |
| 281.454 | H12, H28-H29 | 2963.81. | D186 | | |
| 281.648 | H10, H24-H25 | 2963.82. | D182 | | |
| 281.706 | H11 | 2963.83. | D182 | | |
| 2900. | A36, B4 | 2963.84. | D183 | | |
| 2910. | A37, B5 | 2963.85. | D183 | | |
| 2922.1730. | B6 | | | | |
| 2922.2842. | B12 | 2964.77. | D180 | | |
| 2923.0570. | B6 | 2964.78. | D180 | | |
| 2923.2099. | B7 | 2965.80. | D192 | | |
| 2923.2162. | B7 | 2965.80.45. | D190 | | |
| 2923.2312. | B8 | 2965.81. | D188 | | |

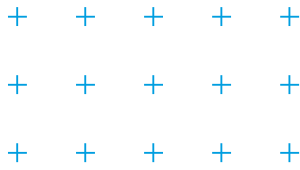
FIBRO

+ + + + Experience and expertise + + + +
+ + + + you can rely on + + + +
+ + + + FIBRO Quality Assurance + + + +

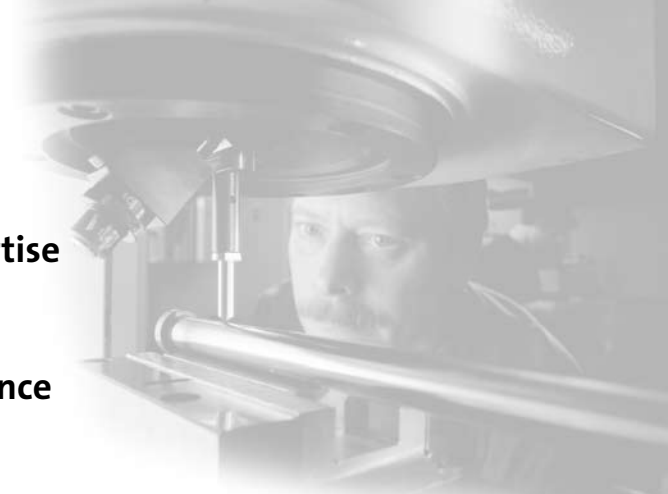


ORIGINAL
Fertigungsarbeit
Benennung
FIBRO-AUSWECKER
237.8.0700.400
Kundenvorgang
Kunde
Formzahl
Fabr.-Nr.

223.0.0150.050
297486
Prüf.-Nr.: 30796



Experience and expertise you can rely on FIBRO Quality Assurance



FIBRO is renowned for its quality world-wide. This high quality is achieved through our dedication and commitment to Quality Assurance.

FIBRO testing starts on the raw material and continues right through production to the completed product. The test facilities themselves are also subject to stringent continuous testing. Only by setting itself such stringent standards can a company support its customers long term in safety, cost-effectiveness and quality.

Tests during production

Precision shape and contour testing equipment is used directly in production. This ensures early confirmation of the quality of the product.

The shape testing equipment tests for qualities such as roundness, concentricity, straightness and rectangularity.

FIBRO state of the art technology provides 3D visualisation of concentricity, coaxiality and cylindricity.

Materials testing - raw materials to specification.

The FIBRO laboratories carry out microscopic investigation of the raw materials, including enlargement to 2,500 times natural size.

Spectral analysis determines whether the material is correct in terms of chemical composition.

Hardening – hardness testing

All the process parameters in the hardening process in our own hardening shop are recorded and documented.

Hardness testing is used to monitor the results of the hardening process on every batch.

Final tests

For precision at micro level if certain basic requirements have to be met.

It goes without saying that the temperature of the measuring room at FIBRO is kept at 20°C. Here the fine precision FIBRO products are measured after production before being released to the customer.

