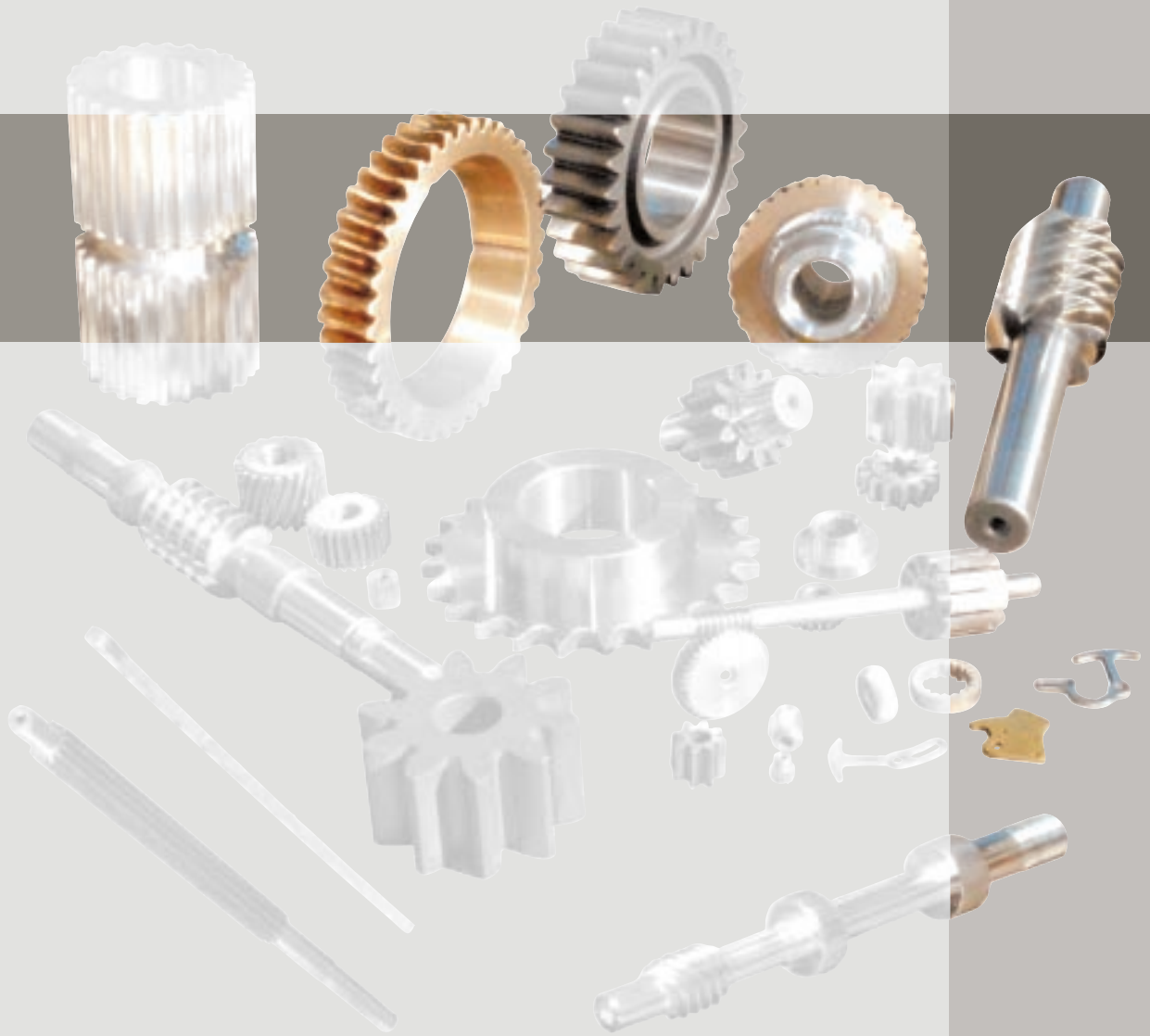


*1998 - 2008
Since 10 years active for your benefit*



***Machines and tools
for gear manufacturing
and measuring***

Our product range



Gear hobbing machines



Gear shaping machines



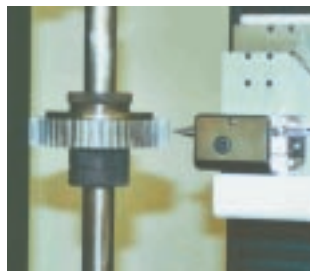
Gear grinding machines



Bevel gear generators



1- and 2-flank tester



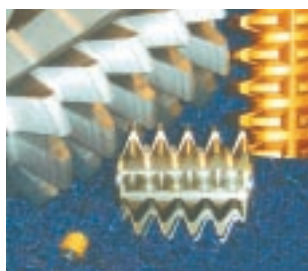
CNC-gear tester



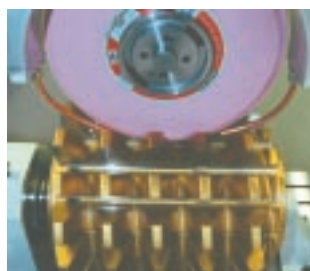
Gear box analysis systems



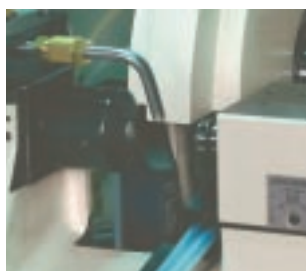
Master gears



Tools



Tool sharpening machines



Cylindrical grinders



Bore-centers + vertical lathes

Our suppliers and partner





company founder Dietmar Züfle



Specialized in machines and tools for gears

For production and measuring of internal and external gears, worms and worm gears as well as bevel gears and complete gear boxes, we want to consult you in suitable technologies.

We are representing small, but flexible and innovative machine or tool producers. We want to deliver you best production and measuring units. Our portfolio includes gear machinery and tools for hobbing, shaping and grinding as well as a multitude of gear testers.

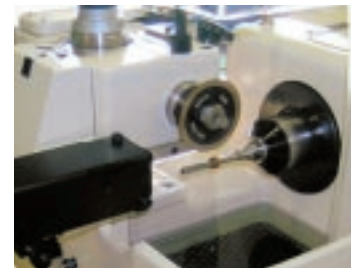
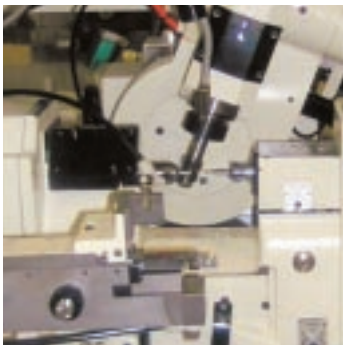
By the intensive dialogue between our suppliers, we can provide every year new and innovative solutions, which can give you best production conditions and new efforts in the worldwide competition.

We want to increase your success as a new supplier and partner for your company. You will have best impression in the technologies of our tool and machine partners when you visit their plants and inspect their machines and testing units. Also we are interested to visit you for discussing your needs.

Content

	page
Small size gear production diameter 0 - 100 mm m = 0 - 1 mm	4 + 5
Middle size gear production diameter 100 - 1.000 mm m = 1 - 10 mm	6 + 7
Large size gear production diameter 1.000 - 10.000 mm m = 10 - 100 mm	8 + 9
Bevel gear production	10 + 11
Worm gear production	12 + 13
Rack production	14
Cylindrical grinding	15
Bore-centers and vertical lathes	15
Gear suppliers	16
Used machines	16

Small size gear production



CNC-gear hobbing machines HS 35 and 38
for external gears and straight bevel gears
for highest productivity

Gear grinder RS 10
with dressing unit
for highest accuracy

Hobs and profile cutters
out of ASP or solid carbide with coating

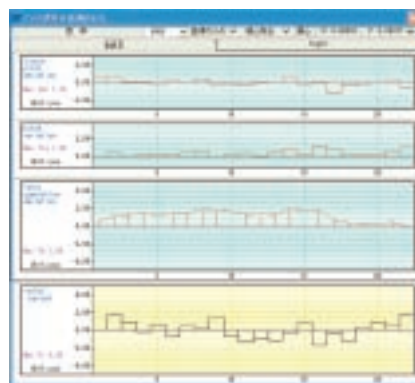
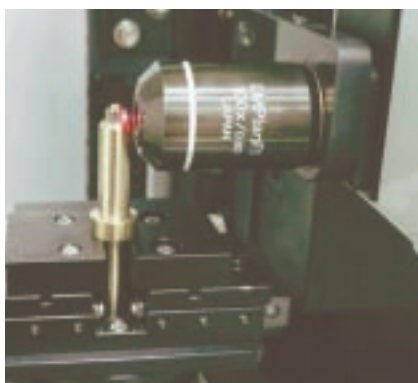
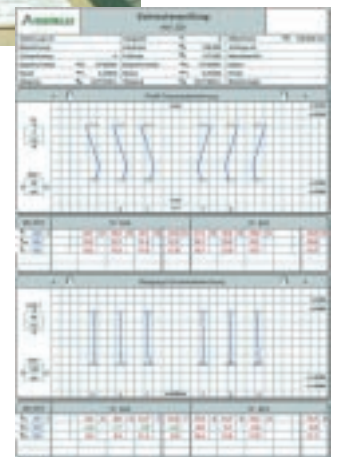
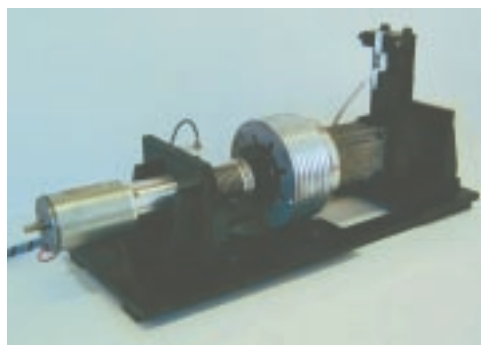
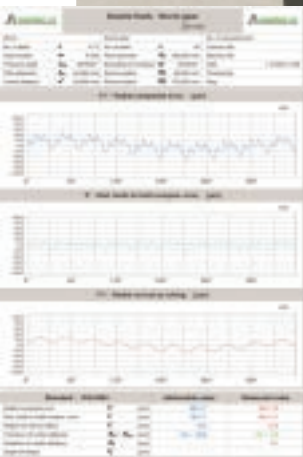
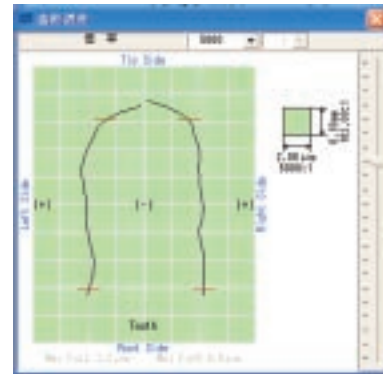
CNC-gear shaping machines LS 150 and LS 180
modernised for profitable production
with loading systems

Hob sharpener S 40
for accurate sharpening of hobs and profile cutters

Gear shaping tools
in high precision and durability

diameter 0 - 100 mm

m = 0 - 1 mm



CNC-gear tester gt-150

for internal and external gears
as table unit predestinated for small gears

2-flank tester gtz-100

with master gears
for measuring in the production floor
modernization of 2-flank testers

1-flank tester

for noise reduction and increasing of efficiency

Optical CNC-tester MLP-2

for small and micro gears
with clamping error compensation

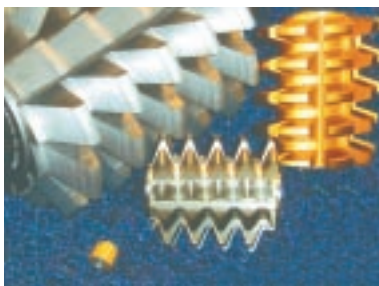
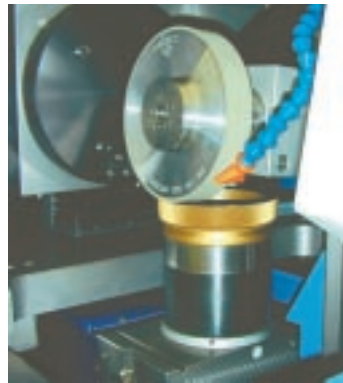
Simulation software and calculation programs

for smallest gears
for optimizing of gear boxes during construction
for easy and fast construction solutions

Gear box analysis systems

according customer needs

Middle size gear production



CNC-gear hobber (horizontal + vertical)
overhauled and CNC-modernized
cheap but with guarantee in accuracy

CNC-tool sharpening machines
for shaper cutters and hobs
for highest accuracy

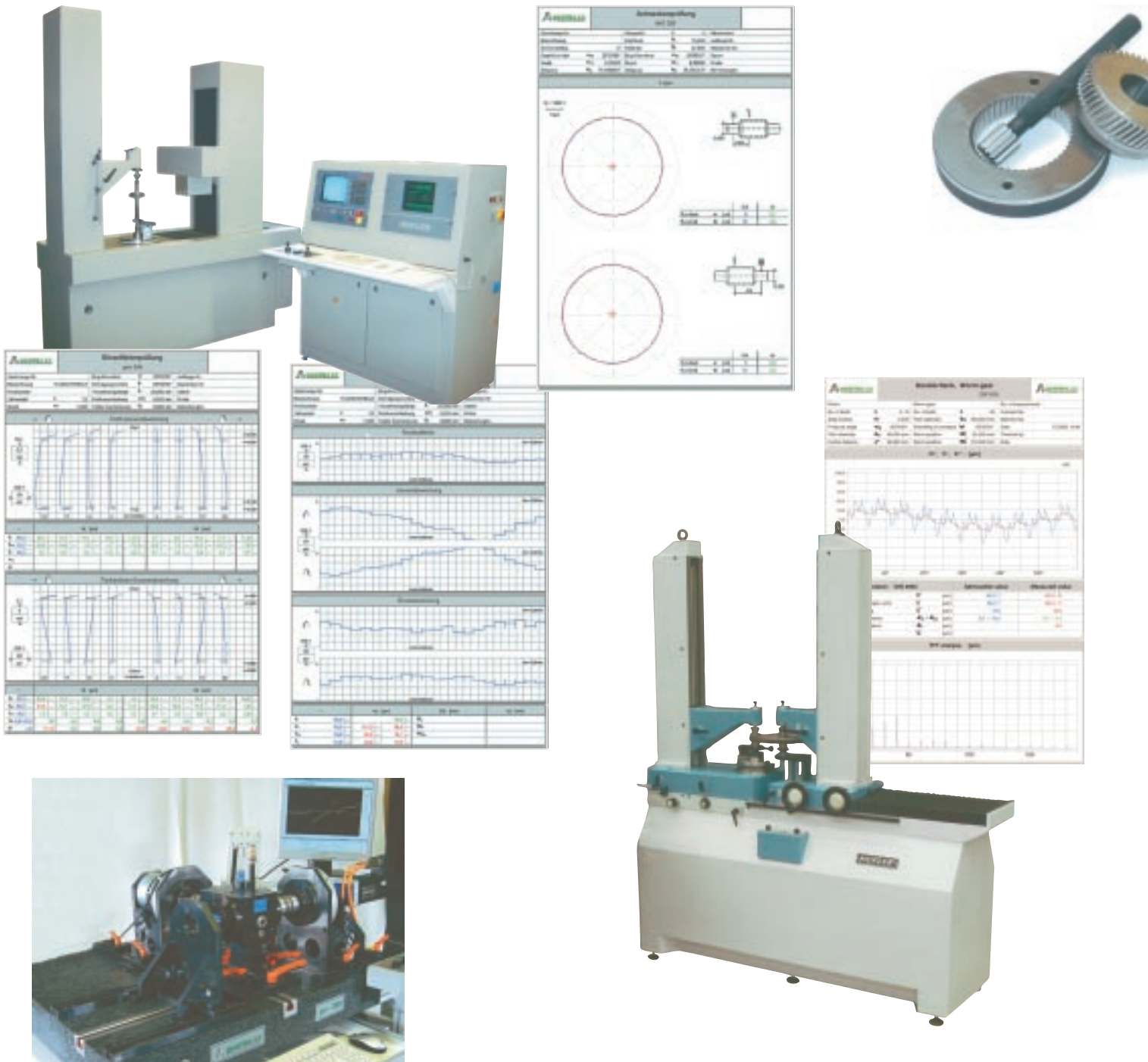
Hobs and profile cutters
standard or customer specific layout
out of ASP with coating

CNC-gear shaping machines
modernised for profitable production
modernization according customer needs
changing of machines without time delay

Spare parts, service, table drive overhauling
to keep your machines in best condition
esp. for table drives of LORENZ- and MODUL-machines

Shaper cutter
for straight or helical shaping
in highest accuracy up to tool diameter 300 mm

diameter 100 - 1.000 mm m = 1 - 10 mm



CNC-gear tester

for internal and external gears
 modernised machines based on used testers
 with clamping error compensation
 changing of tester without time delay

2-flank tester

with master gears
 for measuring in production floor
 modernization of existing 2-flank tester

Gear grinder

new, overhauled or used
 Continuous or profile grinding machines

Gear box analysis units

dimensions according to customer needs
 with FFT-analysis for noise reduction
 with measuring of efficiency
 software package for existing units

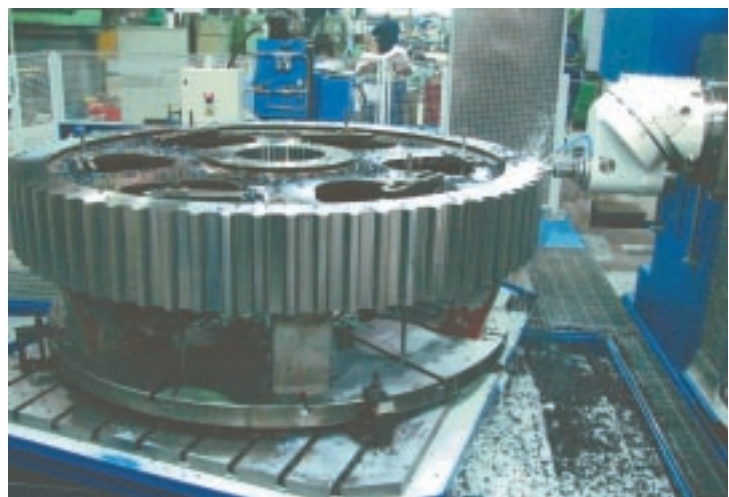
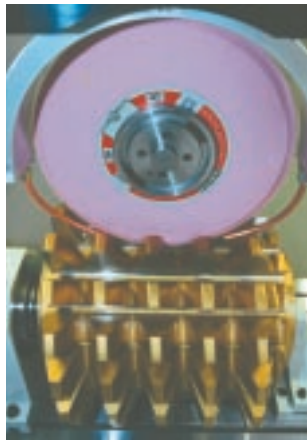
Mobile tester for gear boxes

measuring of assembled gear boxes in usage
 expert system for error detection
 simulation software for gear box optimization

MAAG gear shaper

overhauled or used

Large size gear production



CNC-gear hobber (horizontal + vertical)

with power hobbing heads
modernised for profitable production
for internal and external gears
with guarantee in accuracy

Power-hobbing or milling heads

new or modernized for internal and external gears
for all machine types

Gear grinding machines

Used or overhauled

CNC-gear shaper

complete modernised for high effectivity
modernization according customer needs
overhauling of table drives
changing of older machines to modernised units

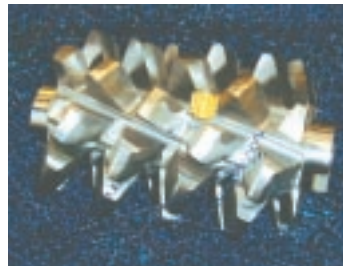
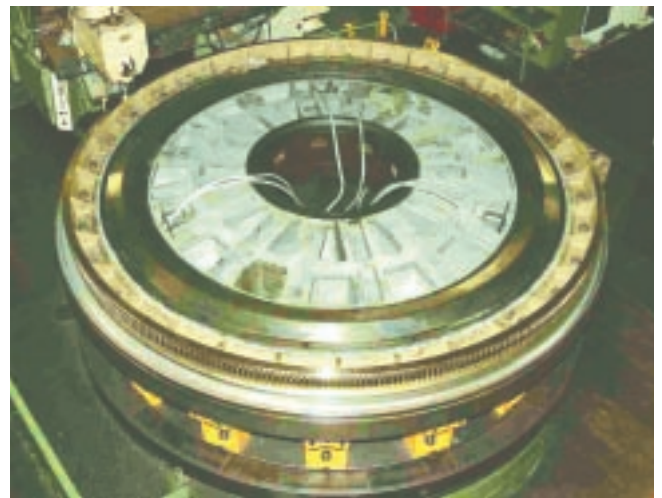
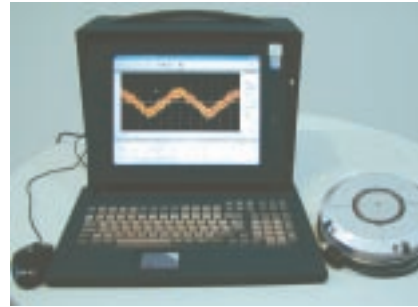
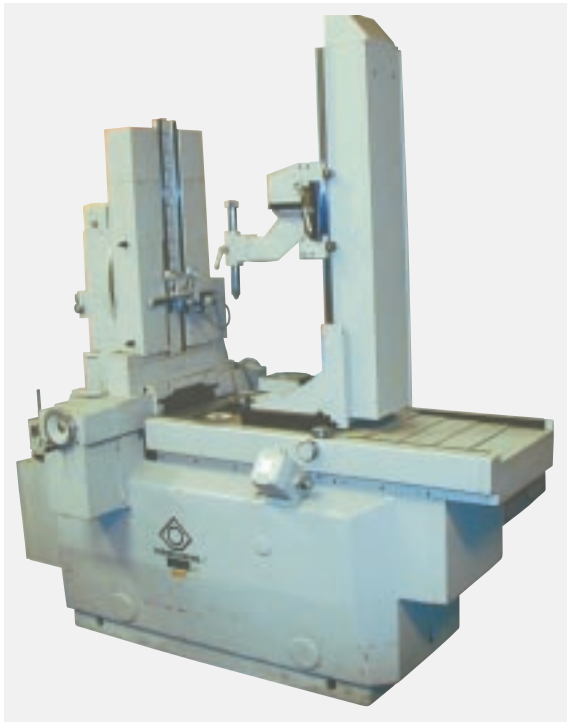
CNC-sharpening machine CB

for large hobs and profile cutters
with measuring device
for highest accuracy

Service, spare parts, table drive overhauling

from skilled workers with experiences

diameter 1.000 - 10.000 mm m = 10 - 100 mm



CNC-gear tester

diameter 1200, 1600, 2000 and 2500 mm
modernised and based on used testers
with calibration and guarantee

Mobile CNC-gear tester

PC-analysis of profile, flank direction and pitch
adaptable to large gear machinery

Worm gears for table drives

with protocol

Mobile pitch tester

new or overhauled
based on types EVTm, TP, ES 401
with PC-analysis

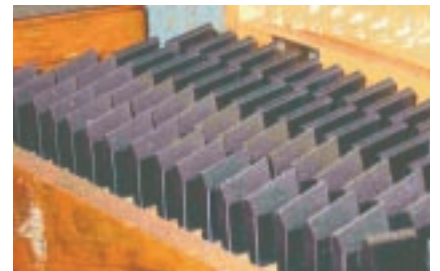
Tools

hobs and profile cutters
shaper cutters
cutters for MAAG-shaping machines

Mobile gear box analysis unit

for table drives and gear boxes in usage

Bevel gear production



CNC-spiral bevel gear generators
diameter 200, 300, 500, 1000 and 1600 mm
profitable machines from Chinese producer

Bevel gear lapping machines
CNC-controlled with high accuracy

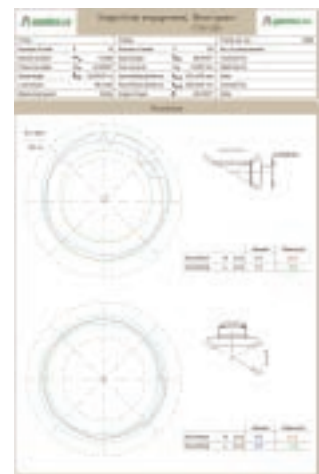
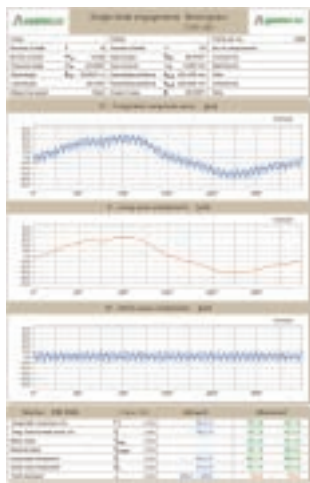
Bevel gear deburring machines

CNC-straight bevel gear generators ZFTK 250 and 500
complete CNC-controlled for high efficiency
with guarantee of accuracy

Bevel gear generator HS 38
for small straight bevel gears
with loading devices
for diameter < 60 mm and $m < 1$ mm

Tools for bevel gear generators
for KLINGELNBERG, GLEASON and MODUL

Bevel gear production



1-flank tester

suitable units for every diameter
various analysis tools
for highest accuracy needs
with changing of angle or hypoid
modernization of used tester

Simulation software and calculation program

according to customer needs
for gear box optimization in construction process
for easy and fast construction solutions

Bevel gear contact pattern tester

for diameter 150, 250, 300, 400, 500 and 800 mm
overhauling and modernization of used tester

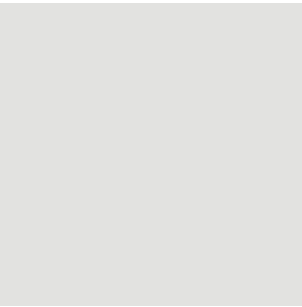
Gear box analysis units

for bevel gear boxes according customer needs

Expert systems

for noise reduction
for coupling
for determination of assembling position

Worm gear production



CNC-gear hobber

for highest accuracy
for every diameter
modernization of worm gear hobber
modernization of worm milling machines

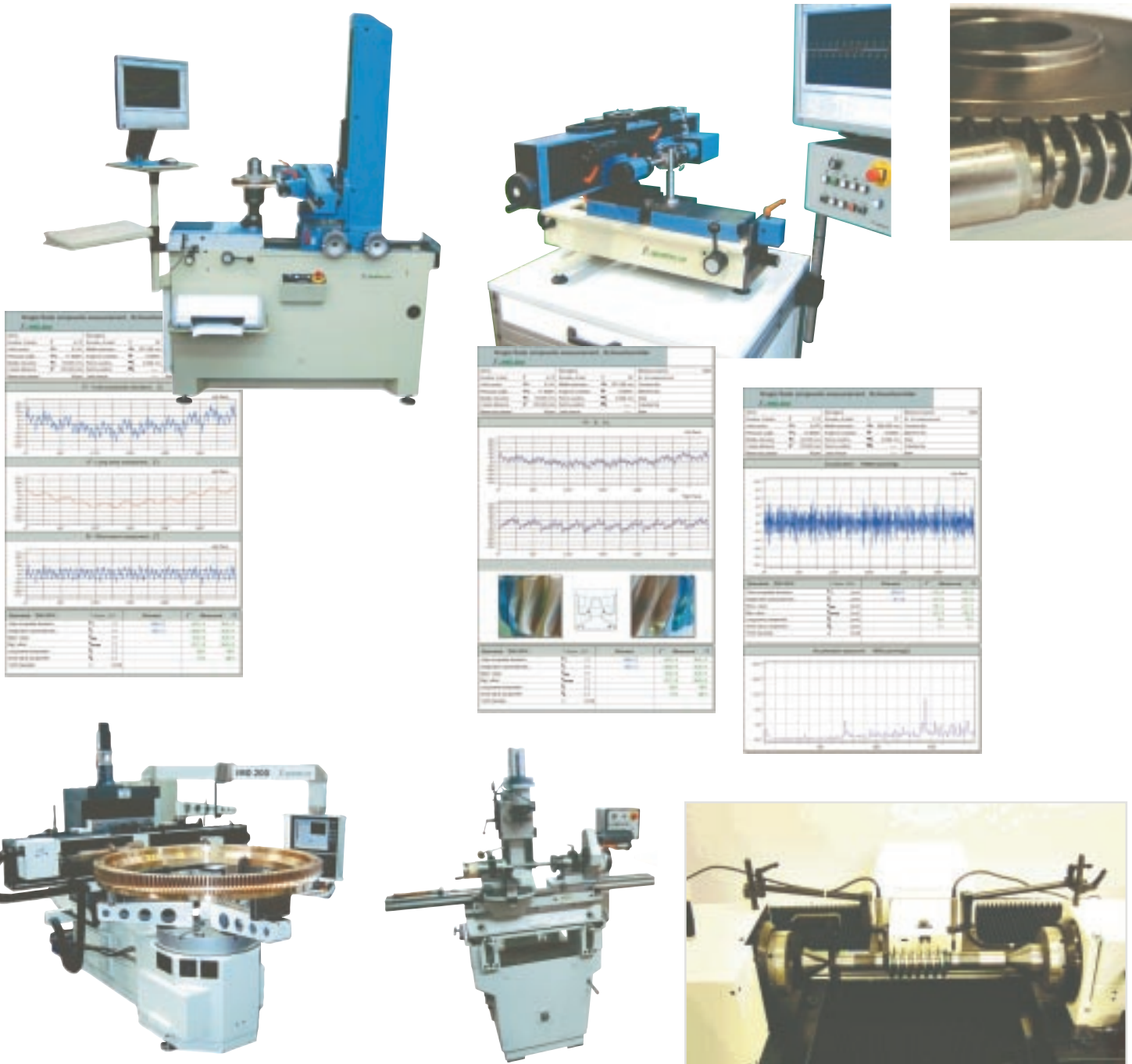
CNC-worm gear grinders

for worms up to diameter 200 mm

Tools

tangential or radial worm gear hobs
with short delivery times
out of ASP or solid carbide
master worms

Worm gear production



1-flank tester

suitable units for every diameter
various analysis tools
for highest accuracy needs
with contact pattern photos
modernization of used tester

Simulation software and calculation program

according to customer needs
for gear box optimization in construction process
for easy and fast construction solutions

Worm gear contact pattern tester

for diameter 150, 250 and 400 mm
overhauling and modernization of used tester

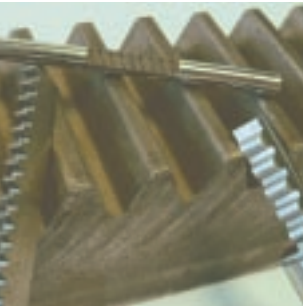
Gear box analysis units

for worm gear boxes according customer needs

Expert systems

for noise reduction
for coupling
for determination of assembling position

Rack production



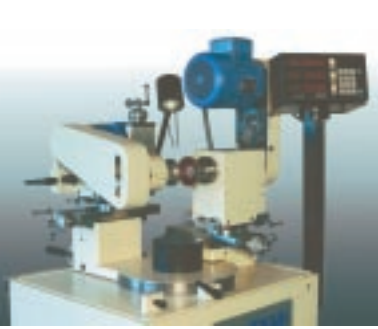
Rack milling machines
as used machines

Rack milling cutters
out of ASP with coating

CNC-rack tester
for profil, flank direction and pitch
length of tester according customer needs

2-flank tester for racks
layout according customer needs
with protocols

Cylindrical grinders



CNC-cylindrical grinder S 60
for smallest parts
with loading devices for highest productivity

Burnishing wheel dressing machine S 80

Burnishing machines ST 70 and ST 119
finest grinding and burnishing of cylindrical parts
within μ -tolerances

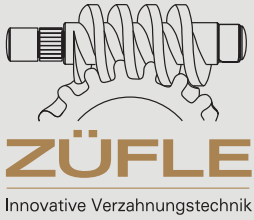
Overhauling of burnishing machines

Bore-centers and vertical lathes



Bore-centers for large cylindrical parts
with software for manufacturing of
internal and external gears
with highest flexibility

vertical lathes for large cylindrical parts
new or overhauled
diameters according to customer needs
with driven tools



Gear suppliers

Service is our most important product. If you are looking for a special type of gear, worm, worm gear or bevel gear which you cannot produce or because of no capacity, we will help you. By our international contacts, we can find for you producers with suitable machines for your parts.

Come and send us your inquiry with your drawing!



Used machines

Do you want to sell used gear machinery?

We are always interested in these machines for overhauling or reselling to interested customers. Tell us the brand and type of machines. If possible, we want to inspect the machine and will give you a quotation for your machine.

Good used machines for gear production you will find also in our homepage www.zuefle.com.



Dipl.-Ing. Dietmar Züfle Innovative Verzahnungstechnik
Theodor-Heuss-Str. 16 • D-75397 Simmozheim
Tel +49 (0)70 33/30 34 944 • Fax +49 (0)70 33/30 34 946
info@zuefle.com • www.zuefle.com