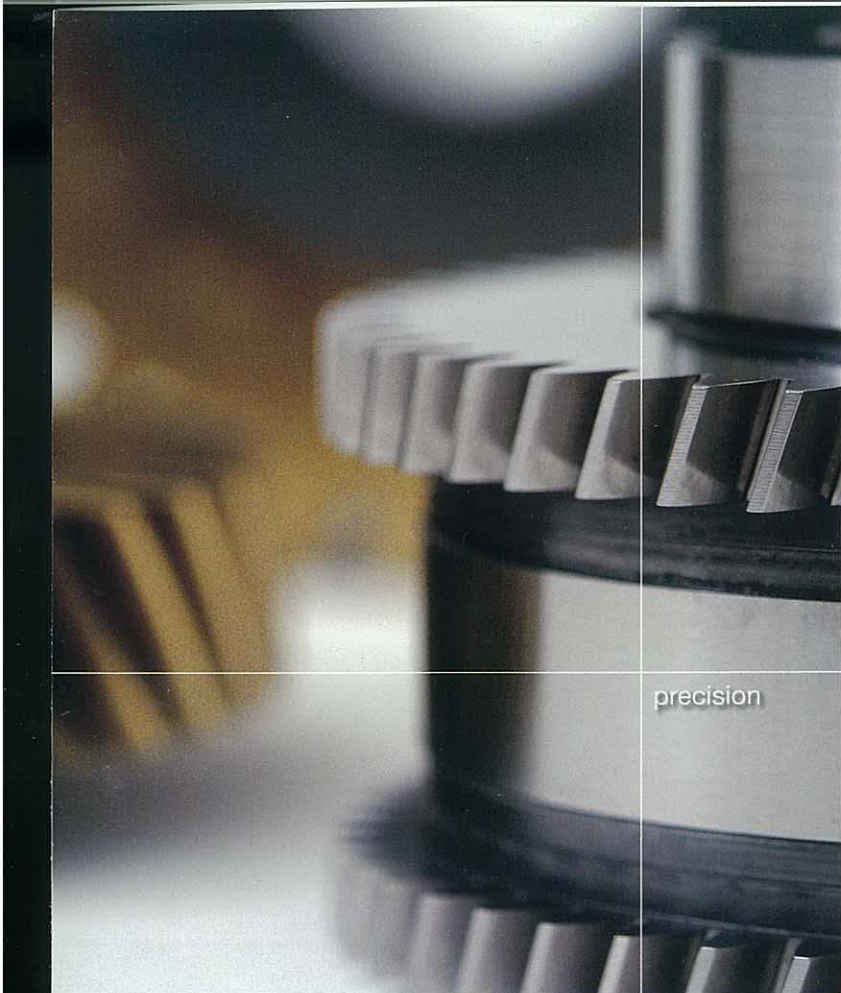




Master gears, plug and ring gauges,
setting masters, rolling gears



precision

Programme

At Star SU we offer a wide range of different precision tools for measurement, setting, calibration and correction purposes:

- + Master gears to DIN 3970 standards for single and double flank inspection and run-out measurement of gearings.
- + Setting masters to adjust and calibrate quality control instruments.
- + Rolling gears to measure noise
- + Rolling gears to reduce burrs and nicks
- + Plug and ring gauges

Module	1.0 - 6.0	mm
Diameter	40 - 300	mm
Tooth width	4 - 80	mm
Helix angle	0 - 45	degrees

Quality: 2-6, DIN 3962
 Geometry: DIN 3970
 or according to drawing

Corrections

Flank corrections
 Topological corrections

Material

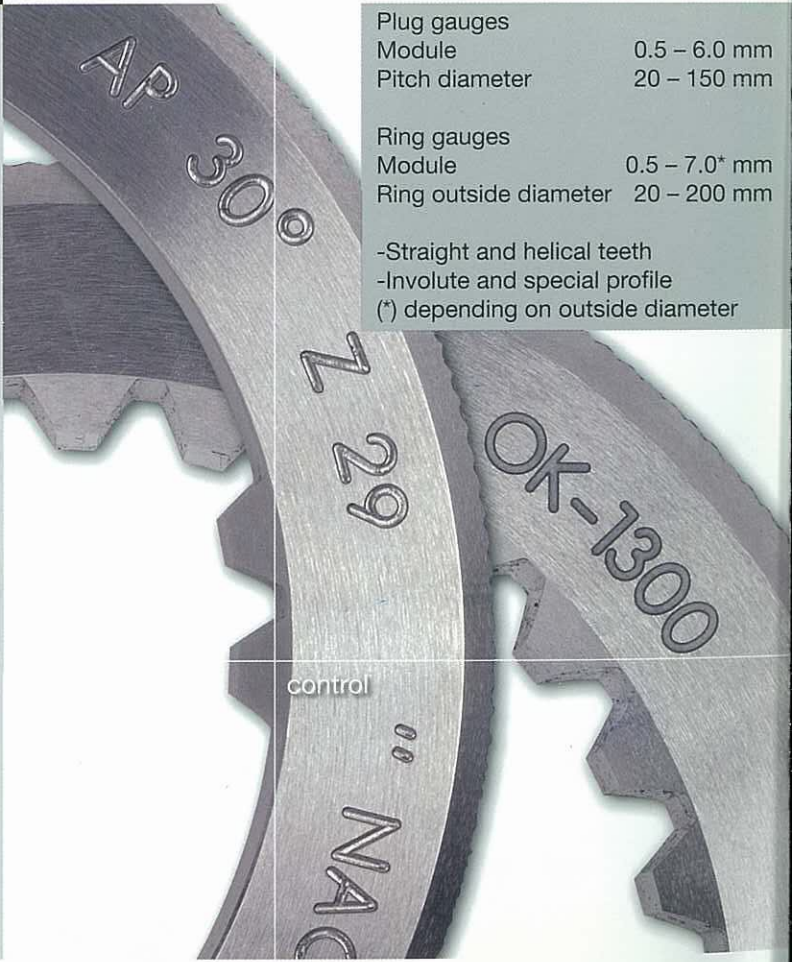
High speed steel	Bearing steel
M2	20 MnCr5
ASP 20 23	100 MnCr6
ASP 20 30	100 MnCrW4

Coating

Star SU can supply high speed steel master gears with a PVD coating.

TiN Gold
 TiAlN Futura

Master gears produced in bearing steel do not withstand temperatures exceeding 450°C and are therefore unsuitable for coating. Protective coatings may only be applied to HSS master gears produced with powder technology.



Plug gauges	
Module	0.5 - 6.0 mm
Pitch diameter	20 - 150 mm

Ring gauges	
Module	0.5 - 7.0* mm
Ring outside diameter	20 - 200 mm

-Straight and helical teeth
 -Involute and special profile
 (*) depending on outside diameter

control

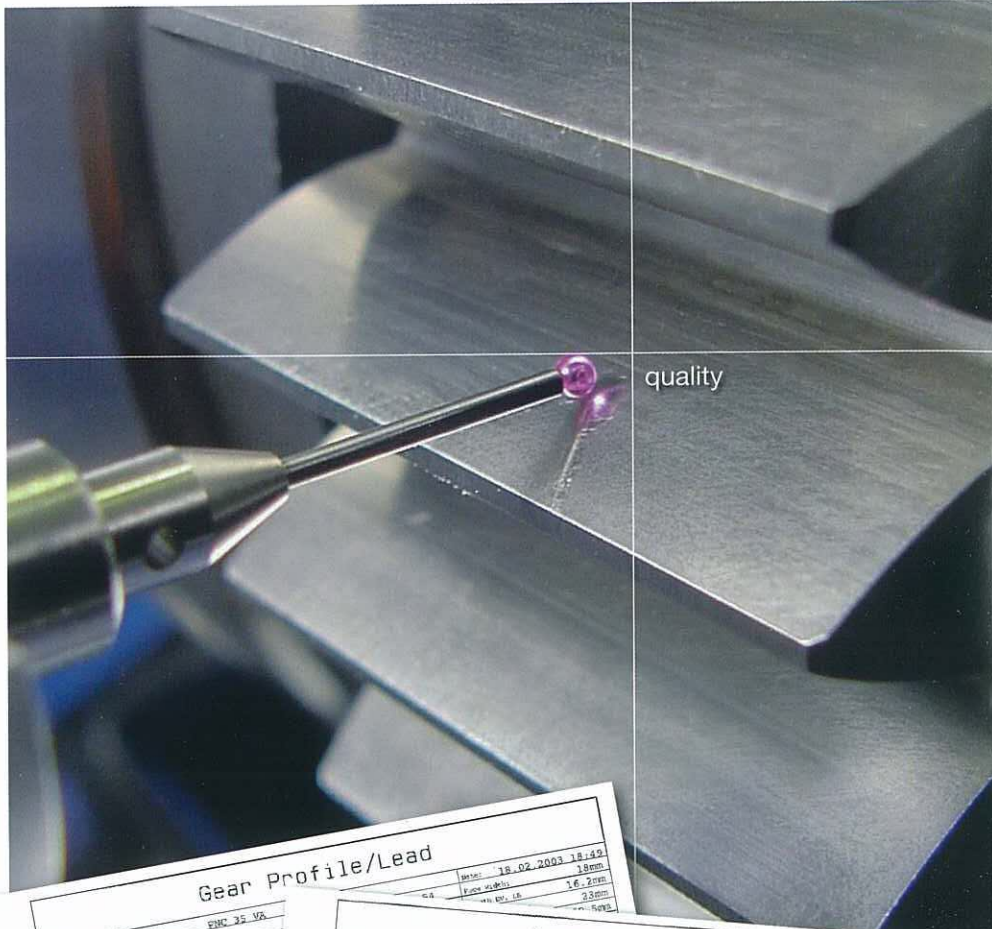
Certified quality

Master gear design and production processes are all carried out using special Star SU software and modern manufacturing methods.

All Star SU checking and setting master gears are fully tested on CNC inspection equipment and are delivered with a certificate of conformity.

We produce master gears on specially designed and optimised machinery in classes from 2 to 6 to DIN 3962, AGMA and BS standards.

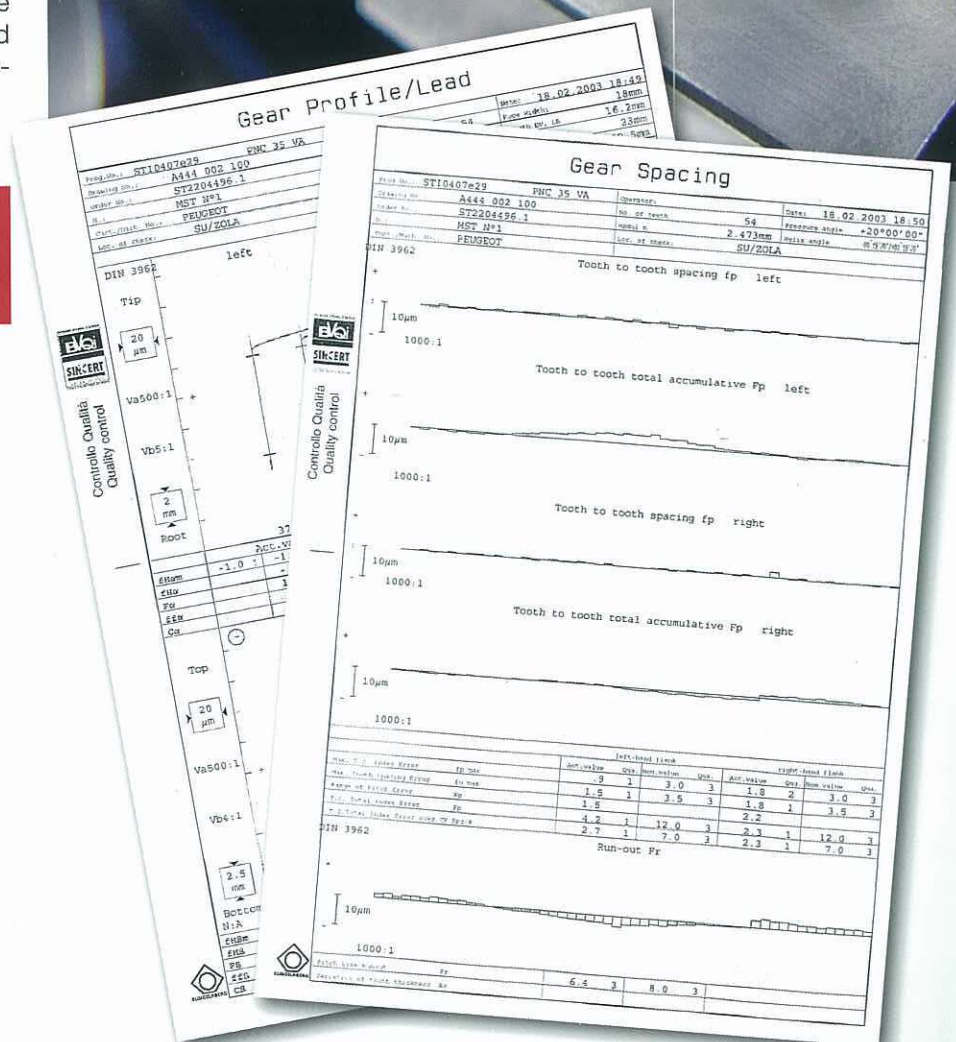
We therefore guarantee both the accuracy of our master gears and the quality of the whole manufacturing process.



quality

ISO 9001

BUREAU VERITAS
Certification





Quotation and order form

SU customer no.: _____
 First-/last name: _____
 Company: _____
 Department: _____
 Tel.: _____
 Fax.: _____
 E-mail: _____

Inquiry
 Order

SU ID number: _____
 Workpiece drawing no.: _____
 Tool drawing no.: _____

Tool type: Master gear to measure over balls
 Master gear to measure noise
 Master gear to check quality
 Gauge to assess good workpieces
 Gauge to assess bad workpieces
 Setting master
 Rolling gear

The following data applies to: tool workpiece

Type of tooth tapered parallel
 _____ ° or
 _____ μ

Module DP CP _____

Number of teeth: _____

Pressure angle: _____

Helix angle: _____

Direction of helix: right left

Outside dia.: _____

Root dia.: _____

End of active profile (EAP): _____

Start of active profile (SAP): _____

If unavailable please attach a drawing of the mating gear.

Tooth tip chamfer dia.: _____

If unspecified a chamfer of max. 0.10 - 0.15 mm will be applied.

Measured number of teeth: _____

Base tangent length (W): _____

Measuring ball/roller dia.: _____

Dimension over 2 balls/rollers.: _____

Centre distance between master gear and workpiece: _____
 or master gear outside dia.: _____

Description of the profile correction: _____
 Drawings required. Please attach. _____

Bore dia. (mm): _____

Bore tolerance: _____

Shank:
 For shank-type workpieces a drawing is required. Please attach.

Reference collar: right
 left
 both

Quality:	class	DIN	AGMA	BS
	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Material: High speed steel (coatable)
 M 2
 ASP 2023
 ASP 2030

Bearing steel (uncoatable)

20 MnCr 5
 100 MnCr 6
 100 MnCrW 4

Others _____

Coating: not coated
 TiN
 Futura

Quantity: 1 piece 2 pieces
 3 pieces 4 pieces
 5 pieces _____ pieces

Please send this completed form and any attached drawings to:
 Fax: (847) 649-0112
 sales@star-su.com

6.0 mm
 150 mm

7.0* mm
 200 mm

meter

Consultancy/analysis optimisation

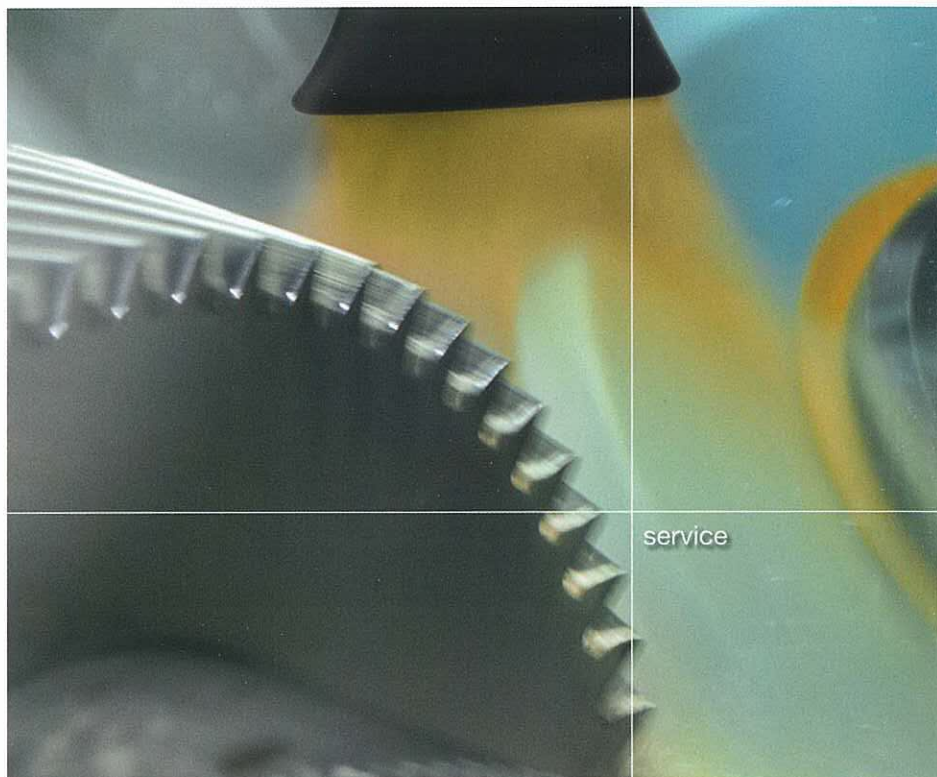
Our experienced engineering team is readily at your disposal for any questions on profile analysis and design. Existing profiles can be optimised using our internally developed master gear design software.

Regrinding & recoating

Master gears wear with use and must therefore be reground to ensure quality performance. Star SU is well-equipped for this task.

Marking

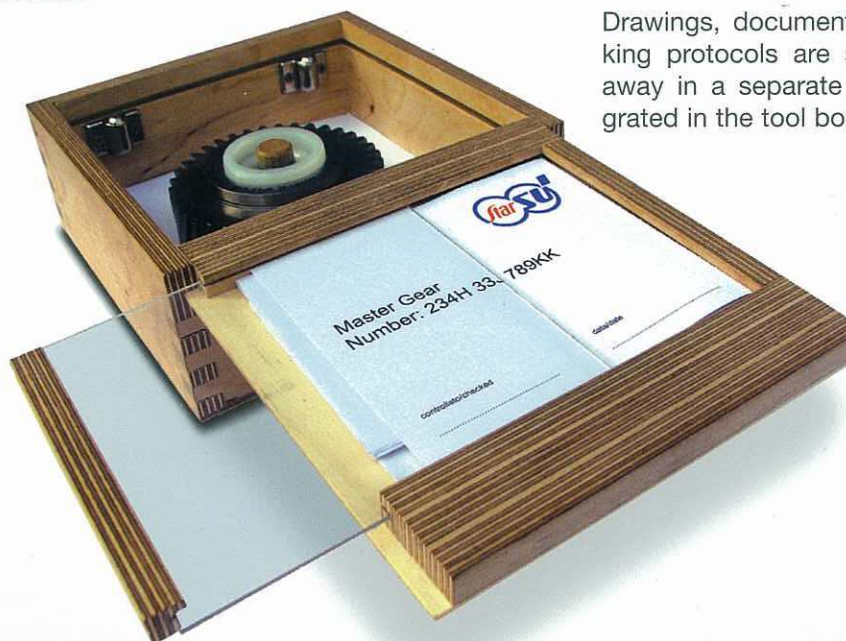
All Star SU checking and setting master gears are engraved according to DIN 3970, or with any requested customer-specific data, and bear an individual tracking number enabling them to be carefully monitored throughout the whole production process.



Packaging

Our precision tools are always shipped and transported in a specifically developed packaging system.

Drawings, documents and checking protocols are safely stored away in a separate pocket integrated in the tool box lid.





Connected to a world of service

Stay connected with your local Samputensili service centre for the best in terms of productivity, precision and rapid turnaround of your gear production tool.



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