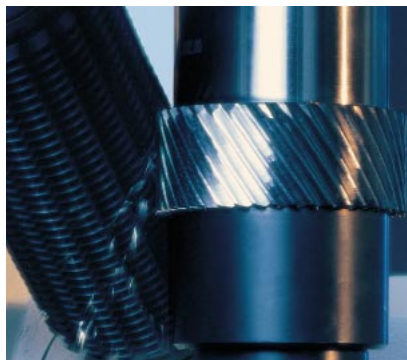


## Manufacturing Programme

# Machine Tools



S 130



S 350

## Hobbing machines for dry and wet machining

| Model         | Nominal<br>workpiece dia. (mm) | Nominal<br>module (mm) | Max.<br>axial travel (mm) |
|---------------|--------------------------------|------------------------|---------------------------|
| <b>S 100</b>  | 100                            | 3                      | 100 - 300 / 100 - 400     |
| <b>S 130</b>  | 130                            | 3                      | 100 - 300 / 100 - 400     |
| <b>S 160*</b> | 160                            | 4.5                    | 200 - 600 / 200 - 800     |
| <b>S 250*</b> | 250                            | 8                      | 200 - 600 / 200 - 800     |
| <b>S 350*</b> | 350                            | 8                      | 200 - 600 / 200 - 800     |
| <b>S 500</b>  | 500                            | 12 / 14                | 310 - 760 / 310 - 1,060   |
| <b>S 750</b>  | 750                            | 12 / 14                | 310 - 1,060               |
| <b>S 800</b>  | 800                            | 18 / 24                | 310 - 1,310 / 310 - 1,710 |
| <b>S 1200</b> | 1,250                          | 18 / 24                | 310 - 1,310 / 310 - 1,710 |
| <b>S 1600</b> | 1,600                          | 18 / 24                | 310 - 1,310 / 310 - 1,710 |
| <b>S 2000</b> | 2,200                          | 18 / 24                | 310 - 1,310 / 310 - 1,710 |
| <b>S 2500</b> | 2,500                          | 36 / 40                | 690 - 1,940 / 690 - 2,490 |
| <b>S 4000</b> | 4,000                          | 36 / 40                | 690 - 1,940 / 690 - 2,490 |

\* Optional hob heads available

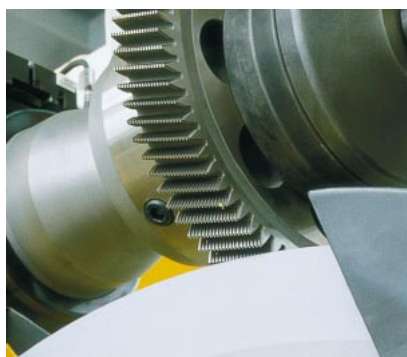


S 250 B

## Bevel gear cutting machines for dry and wet machining

| Model           | Nominal<br>workpiece dia. 1:10/1:1 (mm) | Nominal<br>module (mm) |
|-----------------|-----------------------------------------|------------------------|
| <b>S 250 B*</b> | 250 (300 / 212)                         | 10                     |
| <b>S 500 B*</b> | 500 (580 / 405)                         | 16                     |

\* Available with one or two tool spindles



S 400 GS

## Shave cutter grinding machines

| Model           | Nominal<br>workpiece dia. (mm) | Nominal<br>module (mm) | Max.<br>face width (mm) |
|-----------------|--------------------------------|------------------------|-------------------------|
| <b>S 400 GS</b> | 400                            | 0.5 - 15               | 70                      |

# Machine Tools

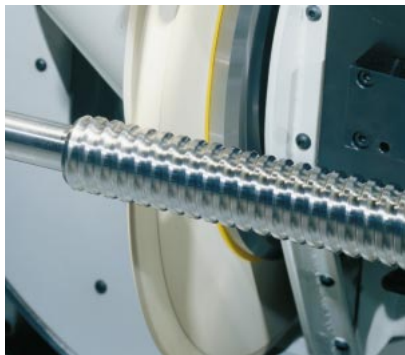


S 400 GT

## Grinding machines for external and internal gears

| Model             | Nominal workpiece dia. (mm) | Module/profile depth (mm) | Max. axial travel (mm) |
|-------------------|-----------------------------|---------------------------|------------------------|
| <b>S 375 G</b>    | 375                         | 0.5 - 10 / 0.5 - 50*      | 650 <sup>+</sup>       |
| <b>S 375 GX</b>   | 375                         | 0.5 - 10 / 0.5 - 50*      | 1000 <sup>+</sup>      |
| <b>S 500 GI</b> □ | 500 <sup>++</sup>           | 0.5 - 10 / 0.5 - 50*      | -                      |
| <b>S 400 GT</b> △ | 400                         | 20 / 40*<br>module 6**    | 1000 <sup>+</sup>      |

\* with dressable tools/with electroplated tools, \*\* with grinding worm, <sup>+</sup> depending on application, <sup>++</sup> incl. clamping system, □ for internal gears, △ with twin tool concept for profile, continuous generating and shave grinding in any combination with a total length of up to 230 mm



S 3000 GW

## Worm and rotor grinding machines

| Model             | Nominal workpiece dia. (mm) | Max. length to be ground (mm) | Max. helix angle (degrees) |
|-------------------|-----------------------------|-------------------------------|----------------------------|
| <b>S 650 GW</b>   | 375                         | 650 <sup>+</sup>              | +/- 90                     |
| <b>S 1000 GW</b>  | 375                         | 1000 <sup>+</sup>             | +/- 90                     |
| <b>S 3000 GW*</b> | 375                         | 2950 <sup>+</sup>             | +/- 90                     |

\* for plastic screws and ball screws, tools, <sup>+</sup> depending on application



SCT

## Chamfering and deburring machines

| Model              | Nominal workpiece dia. (mm) | Max. face width (mm) | Max. length of workpiece (mm) |
|--------------------|-----------------------------|----------------------|-------------------------------|
| <b>SM</b>          | 20 - 250                    | 4 - 105              | 150 <sup>+</sup>              |
| <b>SML</b>         | 20 - 250                    | 4 - 105              | 420 - 780 <sup>+</sup>        |
| <b>SCT</b>         | 20 - 250                    | 4 - 150              | 750 <sup>+</sup>              |
| <b>S 250 CD</b>    | 20 - 250 <sup>+</sup>       | 4 - 105              | tbd                           |
| <b>S 250 CDX*</b>  | 20 - 250 <sup>+</sup>       | 4 - 105              | 400 / 600** <sup>+</sup>      |
| <b>S 450 CDR</b> □ | 450                         | -                    | -                             |
| <b>S 750 CDR</b> □ | 750                         | -                    | -                             |

\* with multiple revolving tool heads, \*\* on request, <sup>+</sup> depending on application □ actuated by FANUC robot



S 450 CDR

# Samputensili Service Centre

---



## Regrinding services

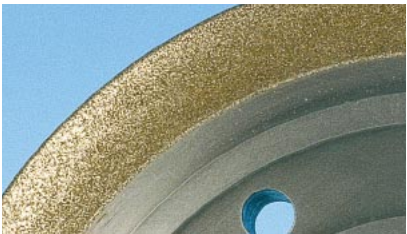
- hobs
- shaper cutters
- shaving cutters

in our service centres located around the globe.



## Coating/recoating service Stripping of carbide tools

- hobs and shaper cutters
- moulds and dies
- special tools
- machined parts and other applications



## Stripping and replating services

- electroplated CBN grinding wheels
- worm-type CBN grinding tools



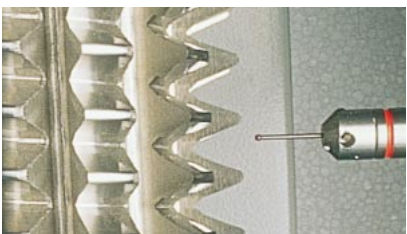
## Job Contracting

Samputensili manufactures rotors and pump spindles on the latest Samputensili production equipment to the highest quality standards and to suit customer requirements.



## CMS (Customer Management Services)

Samputensili is an experienced partner of medium and large companies and supplies a complete product cycle management service for gear cutting tools and other gear-related services.



# Cutting Tools



## Hobs

- standard HSS and carbide
- Multi-gash and Multi-start
- bore- and shank-type
- special profile, sprocket, spline, timing belt, bandsaw and large module hobs.

Module range 0.75 - 40 mm  
Diameter range 40 - 305 mm



## Shaper cutters

- standard HSS and carbide
- spur and helical
- hub- and deep counterbore-type
- disc and shank-type
- special cutters for chain sprockets, splines, timing gears and large module cutters.

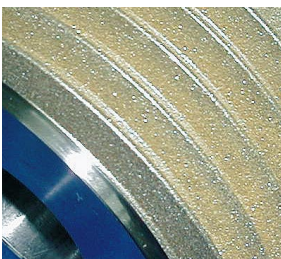
Module range up to 12 mm  
Diameter range up to 300 mm



## Grinding wheels and grinding worms

- electroplated CBN grinding wheels and worms
- diamond-plated profile grinding wheels and worms for various applications including special wheels for rotor grinding
- shave grinding/honing wheels

Wheel diameter 50 - 180 mm  
Wheel thickness 14 - 30 mm  
Wheel bore size 18 - 80 mm  
Locating face dia. 23,5 - 110 mm



## Master gears

Samputensili master gears come in DIN 3962 class 3 to check standards and calibrate checking equipment. Our masters can be supplied with a regrind diagram on request.



## Bevel gear cutting tool systems

Samputensili and its partners bring you advantageous alternatives in the field of bevel gear manufacturing with improved and new cutting tool systems.



## Shaving cutters

- plunge
- underpass
- diagonal
- conventional

Module range 1 - 15 mm  
Diameter range 70 - 300 mm  
Max. thickness 60 mm



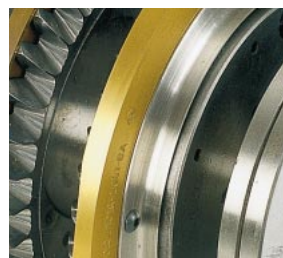
## Chamfer-roller tools

Patented, highly economical solution combining chamfering and rolling in one tool.



## Chamfering tools

To chamfer the flank edges of spur and helical cylindrical gears. The chamfering operation prevents edge distortion during heat treatment and protects the tooth profile against any nicks that may occur during handling.



## Deburring tools

- standard tools for gears with parallel faces.
- serrated tools for gears with inclined faces.
- R-type tools for gears with root diameter close to test flange.

**NEW** - Deburring tools for sprocket wheels.

# System technology from one source



Cylindrical gear hobbing  
Bevel gear cutting  
Profile grinding  
Continuous generating grinding  
Shave grinding  
Shaving cutter grinding  
Chamfering and deburring

HSS and carbide hobs  
HSS and carbide shaper cutters  
Shaving cutters  
Grinding wheels and grinding worms  
Diamond dressing tools  
Master gears  
Chamfering and deburring tools  
Bevel gear cutting tools

Regrinding of hobs, shaper cutters  
and shaving cutters

Coating of cutting tools, dies, stamps,  
mechanical parts, punching dies/tools

Replating of grinding wheels and  
grinding worms

Grinding of compressor rotors, rotors  
for hydraulic pumps, gears of special  
design, worms and cams



The driving force  
in gear technology

Samputensili S.p.A.  
Via Trionvirato, 13  
40132 Bologna  
Italy  
Tel.: +39 (051) 4132 311  
Fax: +39 (051) 434 149  
info@samputensili.com

Hurth Modul GmbH  
Marienberger Str. 17  
09125 Chemnitz  
Germany  
Tel.: +49 (0371) 576 0  
Fax: +49 (0371) 576 401  
info@hurth-modul.de

Stabilimento Zola  
Via del Greto, 16  
40069 Zola Predosa (BO)  
Italy  
Tel.: +39 (051) 4132 311  
Fax: +39 (051) 75 06 82  
info@samputensili.com

Stabilimento Ortona  
S.S. Marrucina, Loc. Alboreto Z.I.  
66026 Ortona (CH)  
Italy  
Tel.: +39 (085) 90 51 810  
Fax: +39 (085) 90 51 822  
info@samputensili.com

Stabilimento Vimercate  
Via Po, 7  
20059 Vimercate (MI)  
Italy  
Tel.: +39 (039) 60 82 093  
Fax: +39 (039) 60 82 422  
info@samputensili.com

Stabilimento Torino  
Str. Fantasia, 47  
10040 Leini (TO)  
Italy  
Tel.: +39 (011) 99 80 316  
Fax: +39 (011) 99 73 060  
sutorino@iol.it

Samputensili France S.a.r.l.  
79-81 Rue de la Tour BP 62  
42000 Saint Etienne Cedex  
France  
Tel.: +33 (0477) 92 80 50  
Fax: +33 (0477) 93 72 03  
info@samputensili.fr

Samputensili Deutschland GmbH  
Limburgerstr. 28  
65520 Bad Camberg  
Germany  
Tel.: +49 (06434) 9413 0  
Fax: +49 (06434) 9413 11  
samputensili@samputensili.de

Samputensili UK Ltd.  
Rother Way  
Hellaby Industrial Estate, Hellaby  
Rotherham, S66 8QN, England  
Tel.: +44 (01709) 703707  
Fax: +44 (01709) 703232  
postbox@geartec.demon.co.uk

SU America Inc.  
5200 Prairie Stone Parkway, Suite 100  
Hoffman Estates, IL 60192  
USA  
Tel.: +1 (847) 649 1450  
Fax: +1 (847) 649 0112  
sales@suamerica.com

SU America Inc.  
Service Center  
Detroit, MI  
USA  
Tel.: +1 (847) 649 1450  
Fax: +1 (847) 649 0112  
sales@suamerica.com

Samputensili do Brasil Ltda.  
Rod. Dom Gabriel Paulino  
Bueno Couto Km 66,3 - C.P. 849  
CEP 13201 - 970 Jundiá, SP, Brazil  
Tel.: +55 (011) 4582 5199  
Fax: +55 (011) 4582 7921  
brasil@samputensili.com.br

Samputensili S.A.  
Caldas 220  
1427 Buenos Aires  
Argentina  
Tel.: +54 (0114) 855 61 45  
Fax: +54 (0114) 856 49 67  
coutil@infovia.com.ar

SU Korea Co. Ltd.  
4 MA - 319 Sihwa Industrial Complex  
703-12, Sung-Gok Dong An-San City  
Kyungki-Do, Rep. of Korea  
Tel.: +82 (031) 497 18 11  
Fax: +82 (031) 497 18 15  
su-korea@hanmail.net

Samputensili Japan Co. Ltd.  
Daiichi Ota Coop 102  
74 Terugaoka, Meito-Ku  
465-0042 Nagoya, Japan  
Tel.: +81 (052) 771 5077  
Fax: +81 (052) 771 5078  
su-nagoya02@ml.aimnet.ne.jp

Samputensili Japan Co. Ltd.  
280 Fusjisawa, Nakai-Machi  
Ashigarakami-Gun  
Kanagawa 259-01 Odawara, Japan  
Tel.: +81 (465) 815066  
Fax: +81 (465) 812617  
su-nagoya02@ml.aimnet.ne.jp

Samputensili Beijing  
Room 1605, Jing Tai Tower,  
No. C24 Jian Guo Men Wai Avenue  
100022 Beijing, P.R. China  
Tel.: +86 (010) 6515 6349 - 6515 6350  
Fax: +86 (010) 6515 7150  
subj@163bj.com

