

Hobs

Star SU leads the way in developing high performance hobbing using solid carbide and high speed steel hobs in wet and dry cutting applications.

Hob Types

- Involute Gear Hobs
- Non-Involute Gear Hobs
- Special Drive Hobs
- Shank Hobs



Hobbing Cutter Family

Milling Cutters

Star SU offers a complete line of unground, precision unground, and ground milling cutters. The unique after heat treat form process reduces heat treat distortion and improves surface hardness for better tool life.

Milling Cutter Types

- Single and Duplex
- Saw Blade
- Multiple Thread
- Special Form
- Rack Milling



Milling Cutter Family

Gear Shaving Cutters

As one of the largest producers of cutting tools worldwide, and with a particular expertise in shaving technology, Star SU offers a wide range of shaving technology including; transverse, diagonal, underpass, plunge, internal/external shaving, unground or finished shaving cutters from multiple worldwide locations.



Hobbing Cutter Family

Chamfer & Deburring

Star SU and Samputensili design and build a line of chamfer, deburring, and rolling tools.

Why Chamfer and Debur?

- A burr which is not removed may break off and damage bearings or gears.
- Over-carbonizing may result in excessive pressure being exerted on gear lateral surfaces causing a break.
- A hardened burr may lead to premature wear of tools in finishing operations.
- Removal of very sharp burrs removes the risk of tool handling injuries.

Why roll?

- Rolling serves to remove build up on tooth flanks by plastic deformation during chamfering.
- Levels out the surface after structural changes during the chamfer/deburr process.



Master Gears, Ring & Plug Gauges

All master gear design and production processes are all carried out using special software and modern manufacturing methods and goes through full CNC machining inspections to ensure maximum quality.

Measurement, setting, calibration, and correction tools

- Master gears to DIN 3970 standards
- Setting masters to adjust and calibrate quality control instruments
- Rolling gears to measure noise
- Burnishing gears to reduce burrs and nicks
- Plugs and ring gauges

Gear Shaper Cutters

Star has more than 115 years of shaper cutter experience combined, between Star SU, Fellows, and Samputensili, which allows us to manufacture reliable shaper cutters in a full range of HSS & carbide with balzers coatings.



Gear Shaper Cutters Family

Shaper cutter types

- Disc-type
- Deep counterbore-type
- Shank-type
- Sykes/Herringbone sets
- Internal

Scudding® Cutters

Star SU and Profilator have partnered to manufacture Scudding® tools for the global market.

Scudding® can compete with shaping, broaching, and other gear cutting processes to produce gear and spline teeth at reduced cycle times and tool costs.



Scudding Cutter Family