INTRODUCING SPLINE

Spline is the one of the world’s largest producer of spline gauges and master gears - a position of authority based on absolute specification and supreme quality.

Authority • Performance • Trust
GO AND NOGO SPLINE RING GAUGES

Conform to any of the following standards:
- ISO (International)
- DIN (Germany)
- ANSI /AGMA (American)
- JIS (Japanese)

Range:
- Max. diameter 350mm
- Min. diameter 3mm
- Max. number of teeth 500
- Max. pitch 25.4 module
- Min. pitch 0.1 module
- Max. tooth length 150

Typical Tolerances:
- Profile 0.005mm
- Total Spacing 0.005mm
- Runout 0.005mm
- Tooth Alignment 0.0025mm
- Space Width 0.005mm

Profiles:
- Involute, Serration, Parallel (straight or helical)
Taper tooth master plugs with fit and wear lines. These are used to monitor the wear of ring gauges during component manufacture. The ring gauge is ground to fit the master plug for original and replacement ring gauges.
The component is mounted on centres whilst the concentricity ring is clamped onto it. The outside diameter of the concentricity ring is concentric to the pitch circle diameter, hence with the aid of a runout checking device i.e. dial indicators or transducers, inspection of the component datum faces or diameters can be carried out.

**Range :-**
Max. diameter 300mm
Min. diameter 10mm
Max. tooth length of component 300mm

Concentricity tolerance between outside diameter and spline pitch circle diameter is 0.005mm
VARIABLE SPLINE INDICATOR RING GAUGE
WITH SETTING MASTER PLUG
For measuring component effective tooth thickness.*

Can be supplied with analogue or digital indicators. Alternatively, a transducer port can be incorporated for SPC type analysis on PC.

*Spline indicators having 2 opposite sectors of teeth can be supplied for measuring actual tooth thickness.
VARIABLE SPLINE INDICATOR RING GAUGE
WITH SETTING MASTER PLUG
For measuring component effective tooth thickness.*

Can be supplied with analogue or digital indicators. Alternatively, a transducer port can be incorporated for SPC type analysis on PC.

* Spline indicators having 2 opposite sectors of teeth can be supplied for measuring actual tooth thickness.
HELICAL VARIABLE SPLINE INDICATOR RING
GAUGE WITH SETTING MASTER PLUG
For measuring component effective tooth thickness.*

Can be supplied with analogue or digital indicators. Alternatively, a transducer port can be incorporated for SPC type analysis on PC.

* Spline indicators having 2 opposite sectors of teeth can be supplied for measuring actual tooth thickness.
GO AND NO GO SPLINE PLUG GAUGES

Conform to any of the following standards:-
ISO (International)
DIN (Germany)
ANSI /AGMA (American)
JIS (Japanese)

Range:-
Max. diameter 375mm
Min. diameter 5mm
Max. number of teeth 500
Max. pitch 25.4 module
Min. pitch 0.1 module
Max. tooth length 300

Typical Tolerances:-
Profile 0.005mm
Total Spacing 0.005mm
Runout 0.005mm
Tooth Alignment 0.0025mm
Space Width 0.005mm
TAPERED AND HELICAL SPLINED MANDRELS

**Principle:-**
Tapered splines (involute or serrated) to allow the pitch line location of component internal splines. Tooth thickness taper accommodates full spread of part space width tolerance.

**Application:-**
Rotate on centres to allow runout inspection of component datum faces or diameters.

**Range:-**
Max. diameter 300mm
Min. diameter 6mm
HELICAL VARIABLE SPLINE INDICATOR PLUG
GAUGE WITH SETTING MASTER RING
For measuring component effective tooth thickness.*

Can be supplied with analogue or digital indicators. Alternatively, a transducer port can be incorporated for SPC type analysis on PC.

* Spline indicators having 2 opposite sectors of teeth can be supplied for measuring actual tooth thickness.
ROTALOCK MANDREL

Used for the clamping of splined components. This particular type is suitable for side fitting splines. Clamping is on spline flanks.

Function:
- Grinding, Turning.

Machine face plate mounted mandrel
EXPANDING KEY TYPE MANDREL

Used for the clamping of splined components. Expanding keys make this type of mandrel suitable for major diameter fitting splines.

Function:-
Grinding, Turning.

Machine face plate mounted mandrel using machine drawbar to actuate.
HELICAL SPLINE FIXTURE GAUGE AND SETTING RING

Function:-
Measurement between balls of an internal helical splined component.
SPUR AND HELICAL MASTER GEAR

Conform to any of the following standards:-
ISO (International)
DIN (Germany)
ANSI /AGMA (American)
JIS (Japanese)

Range:-
Max. diameter 300mm
Min. diameter 6mm
Max. number of teeth 550
Max. pitch 25.4 module
Min. pitch 0.1 module
Max. tooth length 150

Typical Tolerances:-
Total Profile 0.003mm
Adjacent Pitch Error 0.0025mm
Total Pitch Error 0.009mm
Total Tooth Alignment Error 0.0025mm
Radial Runout 0.005mm
HELICAL INTERNAL MASTER COMPONENT REPLICA

Conform to any of the following standards:-
ISO (International), DIN (Germany), AGMA (American) & JIS (Japanese)

Range:-
Max. diameter 300mm
Min. diameter 6mm
Max. number of teeth 550
Max. pitch 25.4 module
Min. pitch 0.1 module
Max. tooth length 75

Typical Tolerances:-
Cylindricity of Outside diameter 0.005mm
End Face Parallelism 0.002mm
Runout of Outside diameter to Pitch diameter of teeth 0.010mm
Total Profile 0.003mm
Adjacent Pitch Error 0.0025mm
Total Pitch Error 0.009mm
Total Tooth Alignment Error 0.0025mm
GEAR ARTEFACT

Function:
Highly accurate lead and involute artefact for verification and calibration of gear testing machines.