## **Contents**

- General comments
- Nomenclature of the parts of a hob
- Normal and axial pitches
- Normal and axial pressure angles
- Helix angle
- Gashes
- Number of gashes
- Cutting face
- Tip and side relief
- Outside diameter
- Total length of hob
- Centering bore
- Collars and side faces
- Tooth profile
- Profile calculation
- Normal profile
- The interference problem
- Hobs with lowered pressure angle
- Calculation of the semi-topping profile
- Verifying the value of semi-topping
- Protuberance and full radius
- Multi-start hobs
- Multi-gash hobs
- Hob accuracy tolerances
- Material used to manufacture hob
- High speed steel
- Sintered carbide
- Recoating
- The CVD method
- The PVD method
- The electro-deposition process
- Working condition
- Cutting speed
- Feed and chip thickness

- The Hoffmeister formula
- Further consideration on chip thickness
- Reducing total hobbing cost
- Shifting
- Setting up a hob
- Consideration on workpiece errors
- Cutting time and disposable hobs
- Dry cutting and carbide hobs
- Hob resharpening
- Skiving hobs
- Special profile hobs
- Worm wheel hobs
- Hobs for splined shafts
- Hexagonal profile hobs
- Roller chain sprocket hobs
- Fixed-position Hobs
- · Comment on hob manufacturing
- Inserted blade hobs
- Anomalies in the use of hobs and solutions
- Problem with the hob
- Problem with the gear
- Key to the most common abbreviations (acronyms)