

ISO/TR 22849:2011-04 (E)

Design recommendations for bevel gears

Contents		Page
Foreword		iv
1	Scope	1
2	Symbols, descriptions and units	1
3	Application	3
3.1	Geometry	3
3.2	Rating	3
3.3	Materials	4
3.4	Gear tolerances	4
3.5	Gear noise	4
4	Manufacturing consideration	8
4.1	Outline of production methods and their features -- Face milling and face hobbing	8
4.2	Blank design and tolerances	9
4.3	Assembly	18
4.4	Tooth contact pattern	23
5	Strength considerations	25
5.1	Effect of hypoid offset	25
5.2	Effect of cutter radius	25
5.3	Bevel gear mountings	27
5.4	Direction of forces	29
6	Efficiency considerations	29
6.1	Hypoid and bevel gear mesh efficiency	29
6.2	Lubrication	33
Bibliography		37