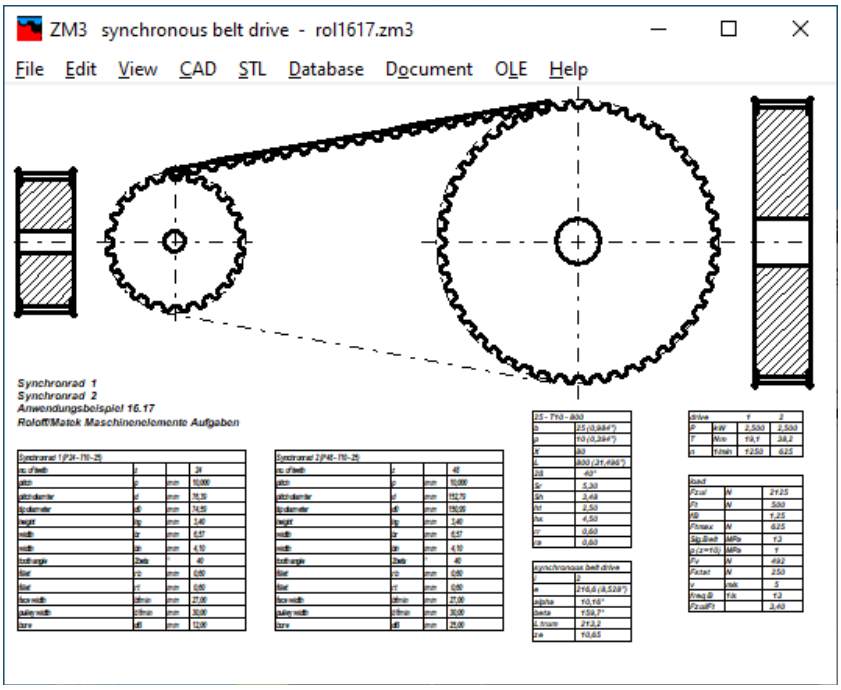
Z M 3

Synchronous Belt Drives
to ISO 5296, ISO 17396, ISO 13050

Software for Windows

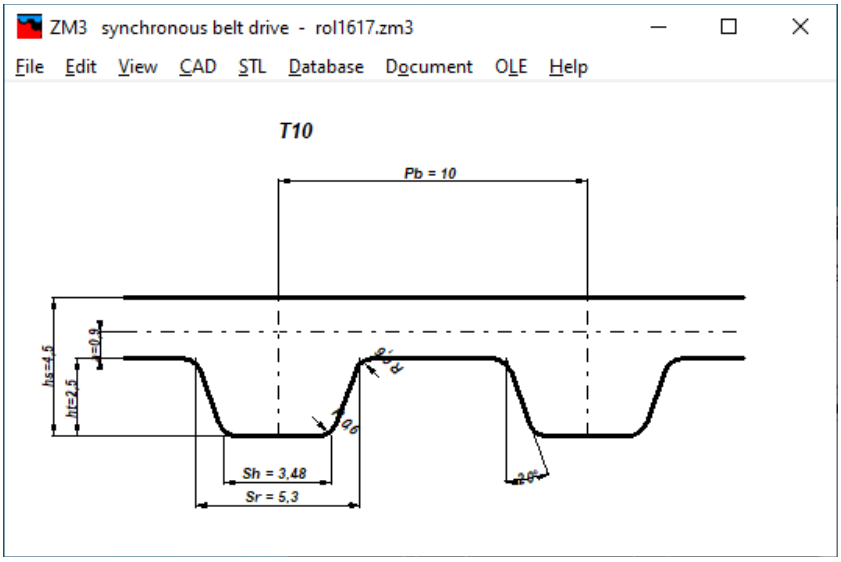
www.hexagon.de

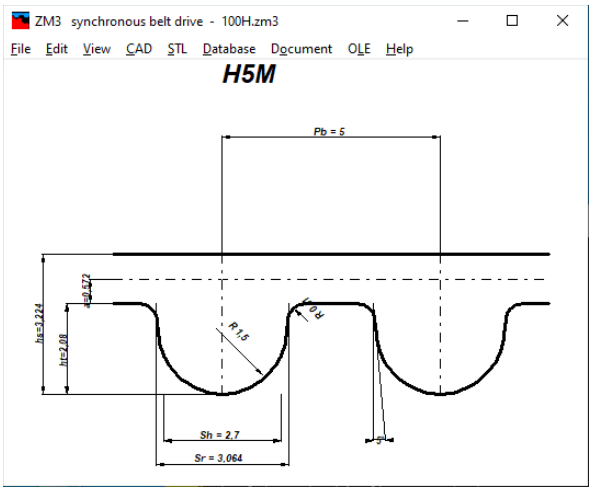


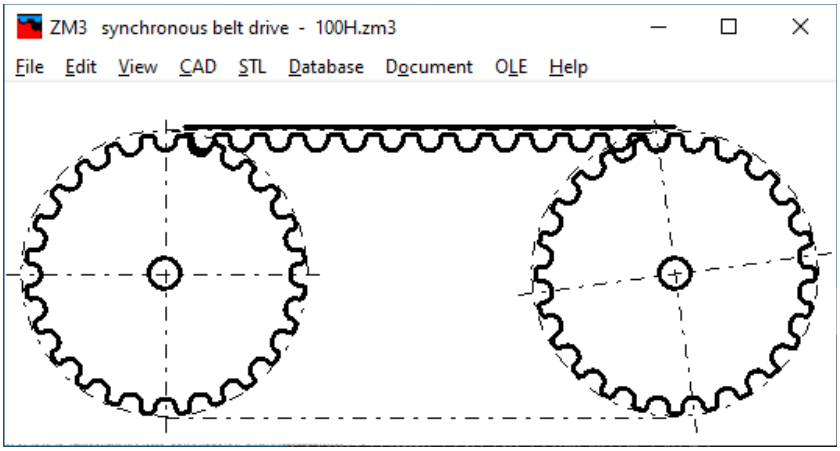
Application
ZM3 calculates the dimensions of synchronous belts according to ISO 5296 (MXL, XXL, XL, L, H, XH, XXH), ISO 17396 (T and AT), ISO 13050 (G, H, R, S). The available sizes and belt widths can be selected and calculated for these profile types in the program.

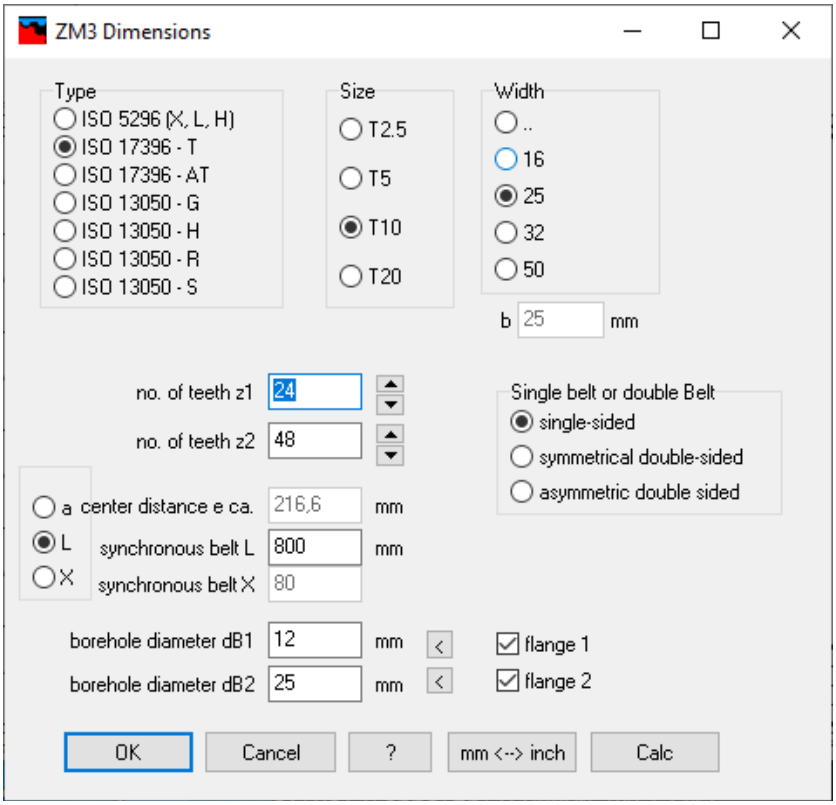
Dimensioning
ZM3 searches the database for a suitable synchronous belt based on transmission ratio, power and drive speed, and suggests it for adoption. From the approximate center distance, ZM3 determines the next suitable number of teeth and calculates the exact dimensions.

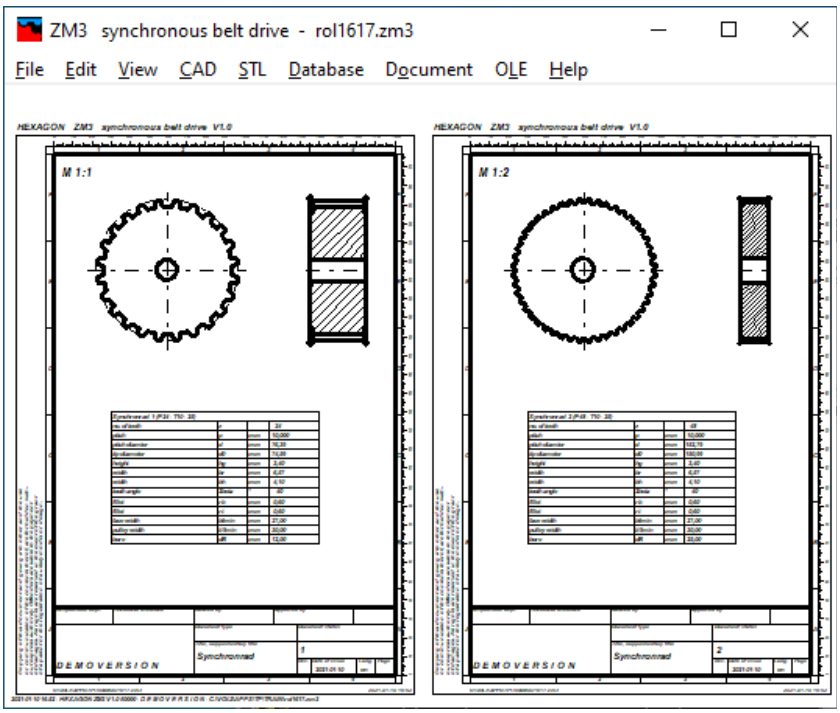
Re-Calculation
The desired synchronous belt is selected from the database. ZM3 calculates the dimensions of synchronous belt and pulleys from the number of grooves of the pulleys together with the approximate center distance or the exact belt length or number of belt teeth.











Proof of strength
ZM3 calculates tangential force, permissible belt force and belt tension.

Text Printout
The calculation results and input data can be printed on any Windows printer. Alternatively, ZM3 can generate a HTML or TXT file, or directly load the results with MS-Excel.

Quick View
Quick views show calculation results with drawings and diagrams altogether on one screen.

Drawings
Drawings of pulleys and belt profile can be displayed on screen, printed out or exported as true-scale drawings to CAD via DXF or IGES interfaces.

Production Drawings
ZM3 generates a complete manufacturing drawing of the pulleys with drawings and tables and ISO 7200 data field. Drawing info and modifications can be entered in the program. The drawings may be printed directly, or loaded into CAD via DXF or IGES interface.

CAD Interface
Drawings and diagrams can be exported to CAD via the DXF or IGES interfaces.

STL Interface
Pulleys can be generated as STL file and printed with your 3D printer.

HEXAGON Help System
As with all HEXAGON programs ZM3 can provide you with a help text and auxiliary picture for each input. Help texts and auxiliary pictures can be modified and appended by the user as required. When error messages appear you can have a description and remedy suggestion displayed.

Units
ZM3 can be switched between metric units (mm, N,MPa) and imperial units (inch, lbf, psi).

System Requirements
ZM3 is available as 32-bit app or as 64-bit app for Windows 7, 8, Windows 10.

Scope of Delivery
Software with user manual (pdf), non-expiring perpetual license with update rights.

Guarantee
HEXAGON gives a 24 month guarantee on full functionality of the software. We provide help and support by email without extra charge. HEXAGON Software is continuously improved and updated. Registered users are regularly kept informed of updates and new editions.