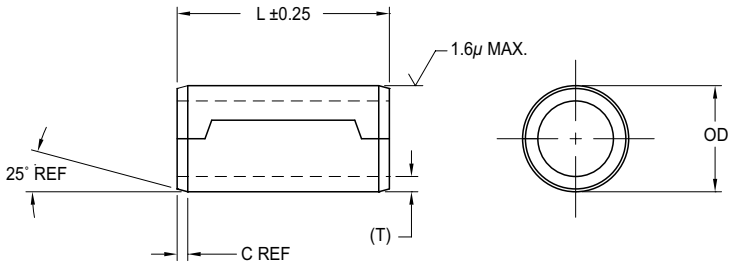
SPIROL®

GROUND HOLLOW DOWELS

Design-in **SPIROL**'s Series GD100 Ground Hollow Dowels for Precision Alignment and Substantial Cost Savings.

SPIROL Ground Hollow Dowels are designed to be direct replacements for standard Ground Solid Dowels per ISO 8734. They are used where centerline tolerancing and precision alignment are required.



- Precision ground outside diameters maintain critical alignment within 20μm.
- A 1.6μm surface finish and well-defined chamfers prevent shaving or scraping during installation.
- The roll-formed design yields substantial cost savings over Solid Dowels.
- The hollow feature offers weight savings over Solid Dowels and clearance for bolts, fluids, or gases.

TECHNICAL SPECIFICATIONS

STANDARD MATERIAL	STANDARD FINISH
F Low Carbon Steel	**K** Plain Oil

Nominal OD (mm)	OD (mm)		C Ref (mm)	Recommended Hole Size (mm)		T (mm)	Length* (mm)								
	Min.	Max.		Min.	Max.		6	8	10	12	16	20	24	30	32
6	6.004	6.012	0.55	5.987	6.000	0.9	■	■	■	■	■				
8	8.006	8.015	0.75	7.987	8.000	1.2		■	■	■	■	■	■		
10	10.006	10.015	1.05	9.987	10.000	1.6			■	■	■	■	■	■	
12	12.007	12.018	1.2	11.985	12.000	1.8				■	■	■	■	■	
16	16.007	16.018	1.5	15.985	16.000	2.2					■	■	■	■	■

* Dowels in intermediate and longer lengths, and smaller and larger diameters are available on request and feasibility review. Inch sizes available upon special request.

To Order: GHDL, Nominal Dowel Size x Length, Material, Finish, Series
Example: GHDL 8 x 16 FK GD100

SPIROL® Application Engineering

An OEM was using a 16mm OD Ground Solid Dowel to locate the transmission to the back of the engine. This particular application was more demanding than most due to the weight of the two components to be aligned and the method of joining them together. The customer approached **SPIROL** for cost-reduction suggestions.

SPIROL's **Series GD100 Ground Hollow Dowels** offered a perfect solution for this application. The standard M16 diameter fit the existing hole size and was easily incorporated into the assembly equipment and fixtures without modification. The customer was able to attain a 30% cost savings, and the function of the assembly remained consistent with the previous product.

To validate your design, **SPIROL** Application Engineers will review your application needs and work with your design team to recommend the best solution. One way to start the process is to select **Alignment Applications** in our **Optimal Application Engineering** portal at

www.**SPIROL**.com.

© 2016 SPIROL International Corporation 09/15 Rev. 1

Technical Centers

Americas

SPIROL International Corporation
30 Rock Avenue
Danielson, Connecticut 06239 U.S.A.
Tel. +1 860 774 8571
Fax. +1 860 774 2048

SPIROL Shim Division
321 Remington Road
Stow, Ohio 44224 U.S.A.
Tel. +1 330 920 3655
Fax. +1 330 920 3659

SPIROL West
1950 Compton Avenue, Suite 112
Corona, California 92881 U.S.A.
Tel. +1 951 273 5900
Fax. +1 951 273 5907

SPIROL Canada
3103 St. Etienne Boulevard
Windsor, Ontario N8W 5B1 Canada
Tel. +1 519 974 3334
Fax. +1 519 974 6550

SPIROL Mexico
Carretera a Laredo KM 16.5 Interior E
Col. Moisés Saenz
Apodaca, N.L. 66613 Mexico
Tel. +52 81 8385 4390
Fax. +52 81 8385 4391

SPIROL Brazil
Rua Mafalda Barnabé Soliane, 134
Comercial Vitória Martini, Distrito Industrial
CEP 13347-610, Indaiatuba, SP, Brazil
Tel. +55 19 3936 2701
Fax. +55 19 3936 7121

Europe

SPIROL France
Cité de l'Automobile ZAC Croix Blandin
18 Rue Léna Bernstein
51100 Reims, France
Tel. +33 3 26 36 31 42
Fax. +33 3 26 09 19 76

SPIROL United Kingdom
17 Princewood Road
Corby, Northants
NN17 4ET United Kingdom
Tel. +44 1536 444800
Fax. +44 1536 203415

SPIROL Germany
Ottostr. 4
80333 Munich, Germany
Tel. +49 89 4 111 905 71
Fax. +49 89 4 111 905 72

SPIROL Spain
08940 Cornellà de Llobregat
Barcelona, Spain
Tel. +34 93 193 05 32
Fax. +34 93 193 25 43

SPIROL Czech Republic
Sokola Tůmy 743/16
Ostrava-Mariánské Hory 70900
Czech Republic
Tel/Fax. +420 417 537 979

SPIROL Poland
ul. M. Skłodowskiej-Curie 7E / 2
56-400, Oleśnica, Poland
Tel. +48 71 399 44 55

Asia Pacific

SPIROL Asia Headquarters
1st Floor, Building 22, Plot D9, District D
No. 122 HeDan Road
Wai Gao Qiao Free Trade Zone
Shanghai, China 200131
Tel. +86 21 5046 1451
Fax. +86 21 5046 1540

SPIROL Korea
160-5 Seokchon-Dong
Songpa-gu, Seoul, 138-844, Korea
Tel. +86 (0) 21 5046-1451
Fax. +86 (0) 21 5046-1540

e-mail: **info@spirol.com**