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Cylindrical helical springs made of round wire - Quality specifications for cold coiled compression springs

I.S. EN 15800:2009

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English Version

Cylindrical helical springs made of round wire - Quality specifications for cold coiled compression springs

Ressorts cylindriques hélicoïdaux en fils ronds -
Prescriptions de qualité des ressorts de compression
façonnés à froid

Zylindrische Schraubenfedern aus runden Drähten -
Gütevorschriften für kaltgeformte Druckfedern

This European Standard was approved by CEN on 18 October 2008.

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Foreword

This document (EN 15800:2008) has been prepared by Technical Committee CEN/TC 378 "Project Committee – Springs", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2009, and conflicting national standards shall be withdrawn at the latest by June 2009.

This European Standard has been prepared by the initiative of the Association of the European Spring Federation ESF and is based on the German Standard DIN 2095 "Helical springs made of round wire — Specification for cold coiled compression springs", which is known and used in many European countries.

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1 Scope

This European Standard applies to cylindrical helical compression springs made of round spring wire. Cold coiled compression springs can be made with wire up to about 16 mm diameter. (See also EN 13906-1).

Cylindrical helical springs made of round wire from European Standard materials are subject to the limiting values in Table 1:

Table 1

Characteristic	Cold coiled compression springs
Wire diameter	$0,07 \text{ mm} \leq d \leq 16 \text{ mm}$
Mean coil diameter	$0,63 \text{ mm} \leq D \leq 200 \text{ mm}$
Length of unloaded spring	$L_o \leq 630 \text{ mm}$
Number of active coils	$n \geq 2$
Spring index	$4 \leq w \leq 20$

A specification for the parameters of cold formed helical compression springs is given in Annex B.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 10270-1, *Steel wire for mechanical springs — Part 1: Patented cold drawn unalloyed spring steel wire*

EN 10270-2, *Steel wire for mechanical springs — Part 2: Oil hardened and tempered spring steel wire*

EN 10270-3, *Steel wire for mechanical springs — Part 3: Stainless spring steel wire*

EN 12166, *Copper and copper alloys — Wire for general purposes*

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