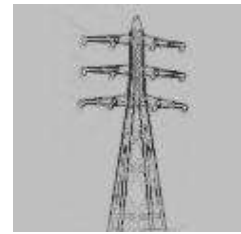


Hollow Conductors



Stop audible noise and aureole losses.

Application

The Silent conductor is a new development which reduces audible noise and aureole losses. Without fortification of the towers, an adaptation to the limit values of the magnetic field strength, which are required by law, for the existing 400 kV lines can be done.

Irritating optical effects of these large diameter conductors can be removed with a camouflage coating.

Product Description Silent Hollow Conductor

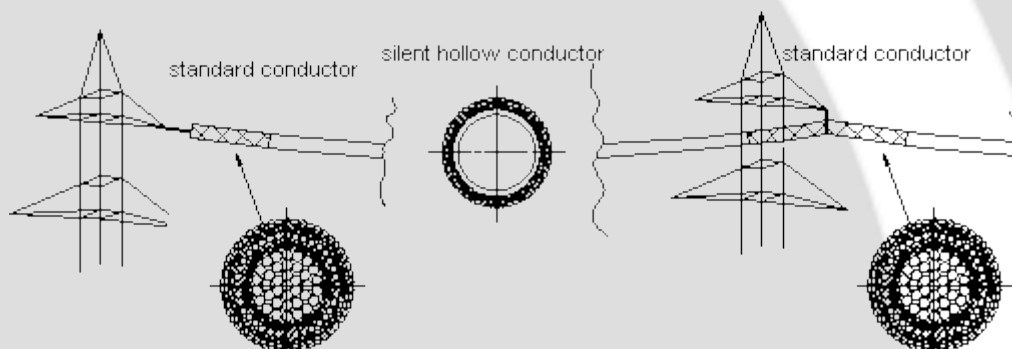


The conductor is produced with a special construction of ACS, aluminium and aluminium alloy.

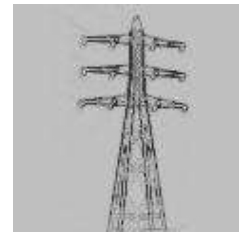
The enlarged diameter reduces the border field strength as well as the magnetic field strength. A reduction of the border field strength results in a reduction of the aureole noises.

Despite the enlarged diameters the mechanical and electrical properties are equal or improve.

The special conductor construction ensures the usage of standard clamps.



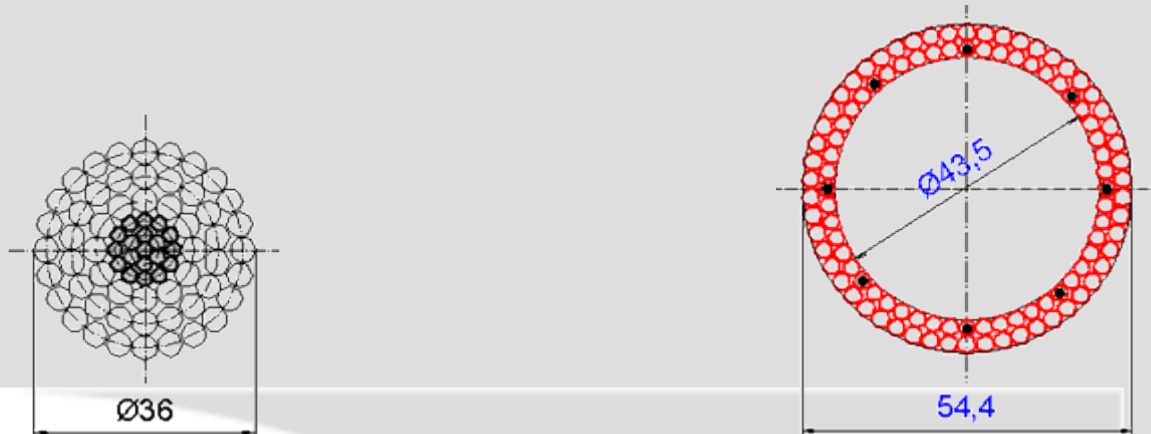
Hollow Conductors



Mechanical and Electrical Properties

At conductor diameters over 50 mm the border field strength is reduced in 400 kV power lines too and thereby the aureole noise decreases significantly.

An example:



1150	permissible continuous current [A]	1197
210	calculated tensile strength [kN]	225
764,5	total section [mm ²]	617,6
2564	total weight [kg/km]	2320
82,7	tractive force at -5 °C and AZL *) [kN]	78,8
13,96	sag at 40 °C *) [m] *) span 350 m	13,96

AZL: Emergency load is an additional load to the normal load for rarely conditions of the environment. The conductor and the towers have to be calculated for this additional loads (e.g. additional ice or wind loads).

wiretec
handels- und beratungsgesellschaft mbh
Akazienweg 24
D-40880 Ratingen
tel.: + 49 (0)2102 / 55347-10
fax.: + 49 (0)2102 / 55347-39
contact@wiretec.de
www.wiretec.de

wiretec
handels- und beratungsgesellschaft mbh