Application

The ACSR/AW conductor is used for bare overhead transmission and both primary and secondary distribution cables. It combines high strength with enhanced ampacity and improved resistance to corrosion by combining aluminum-cladding of the steel core wires, which makes it ideal for a variety of electrical transmission and distribution applications in environments where durability and reliability are critical.

Advantages

Strength and Durability: ACSR/AW offers strength characteristics similar to conventional ACSR, making it suitable for long-span applications.
Higher Ampacity: The conductor provides slightly greater ampacity compared to standard ACSR, improving efficiency in power transmission.
Corrosion Resistance: The aluminum-cladding on the steel core wires enhances the conductor's resistance to corrosion, extending its operational life, particularly in harsh environmental conditions.
Lightweight: Despite its strength, the use of aluminum makes the conductor relatively lightweight, facilitating easier handling and installation.

Construction

The ACSR/AW conductor is constructed using several wires of aluminum and aluminum-clad steel, stranded in concentric layers. The aluminum wires are made from Aluminum 1350-H19 alloy, known for its excellent conductivity and mechanical properties. These wires are concentrically stranded around a core of aluminum-clad steel (AW), which combines the strength of steel with the corrosion-resistant properties of aluminum. This construction method ensures a balanced combination of conductivity, strength, and durability.

Specifications

-BS EN 50182 Conductors for overhead lines. Round wire concentric lay stranded conductors.
-EN 60889 Hard-drawn aluminium wire for overhead line conductors.
-EN 61232 Aluminium-clad steel wires for electrical purposes.

Eastful Cable Lab

We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.
CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rhineland and CCS.

National Green Factory

Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China.
We are committed to the development of high-end, intelligent and green manufacturing industry.

*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

Technical Parameters

Code Name	No. / Nominal Dia. of Wire		Approx. Overall Dia.	Nominal Cross Section Area			Approx. Weight	Nominal Breaking Load	Max. DC Resistance at 20°C
	Aluminum	Steel		Aluminum	Steel	Total			
-	No./mm	No./mm	mm	mm^2	mm^2	mm^2	kg/km	kN	Ω/km
Mole	6/1.50	1/1.50	4.5	10.6	1.77	12.4	42.8	4.14	2.7027
Squirrel	6/2.11	1/2.11	6.33	21	3.5	24.5	84.7	7.87	1.3659
Fox	6/2.79	1/2.79	8.37	36.7	6.11	42.8	148.1	13.21	0.7812
Mink	6/3.66	1/3.66	10.98	63.1	10.5	73.6	254.9	21.67	0.454
Skunk	12/2.59	7/2.59	12.95	63.2	36.9	100.1	463	52.79	0.4568
Beaver	6/3.99	1/3.99	11.97	75	12.5	87.5	302.9	25.76	0.382
Racoon	6/4.09	1/4.09	12.27	78.8	13.1	91.9	318.3	27.06	0.3635
Otter	6/4.22	1/4.22	12.66	83.9	14	97.9	338.8	28.81	0.3415
Cat	6/4.50	1/4.50	13.5	95.4	15.9	111.3	385.3	32.76	0.3003
Hare	6/4.72	1/4.72	14.16	105	17.5	122.5	423.8	36.04	0.273
Coyote	26/2.54	7/1.91	15.89	131.7	20.1	151.8	520.7	45.86	0.2192
Cougar	18/3.05	1/3.05	15.25	131.5	7.31	138.8	418.8	29.74	0.2188
Tiger	30/2.36	7/2.36	16.52	131.2	30.6	161.8	602.2	57.87	0.2202
Lion	30/3.18	7/3.18	22.26	238.3	55.6	293.9	1093.4	100.47	0.1213
Bear	30/3.35	7/3.35	23.45	264.4	61.7	326.1	1213.4	111.5	0.1093
Goat	30/3.71	7/3.71	25.97	324.3	75.7	400	1488.2	135.13	0.0891
Sheep	30/3.99	7/3.99	27.93	375.1	87.5	462.6	1721.3	156.3	0.0771
Antelope	54/2.97	7/2.97	26.73	374.1	48.5	422.6	1413.8	118.88	0.0773
Bison	54/3.00	7/3.00	27	381.7	49.5	431.2	1442.5	121.3	0.0758
Deer	30/4.27	7/4.27	29.89	429.6	100.2	529.8	1971.4	179	0.0673
Elk	30/4.50	7/4.50	31.5	477.1	111.3	588.4	2189.5	198.8	0.0606
Camel	54/3.35	7/3.35	30.15	476	61.7	537.7	1798.8	146.4	0.0608
Moose	54/3.53	7/3.53	31.77	528.5	68.5	597	1997.3	159.92	0.0547

Headquarters: No.466 Kecheng Rd., Chongqing, China | Factory: Shuangfu Industrial Park, Jiangjin District, Chongqing, China
www.eastfulgroup.com international@eastfulgroup.com +86-23-6816 2017 +86-133 6823 7116