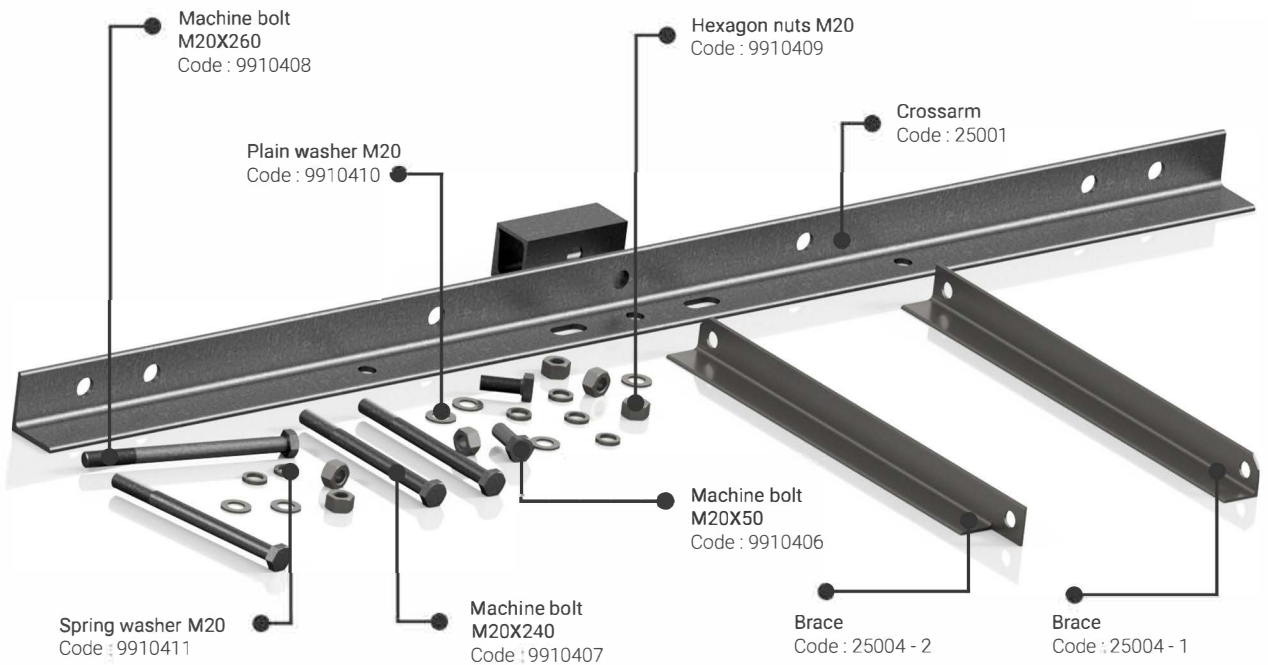




L-A Type Crossarm



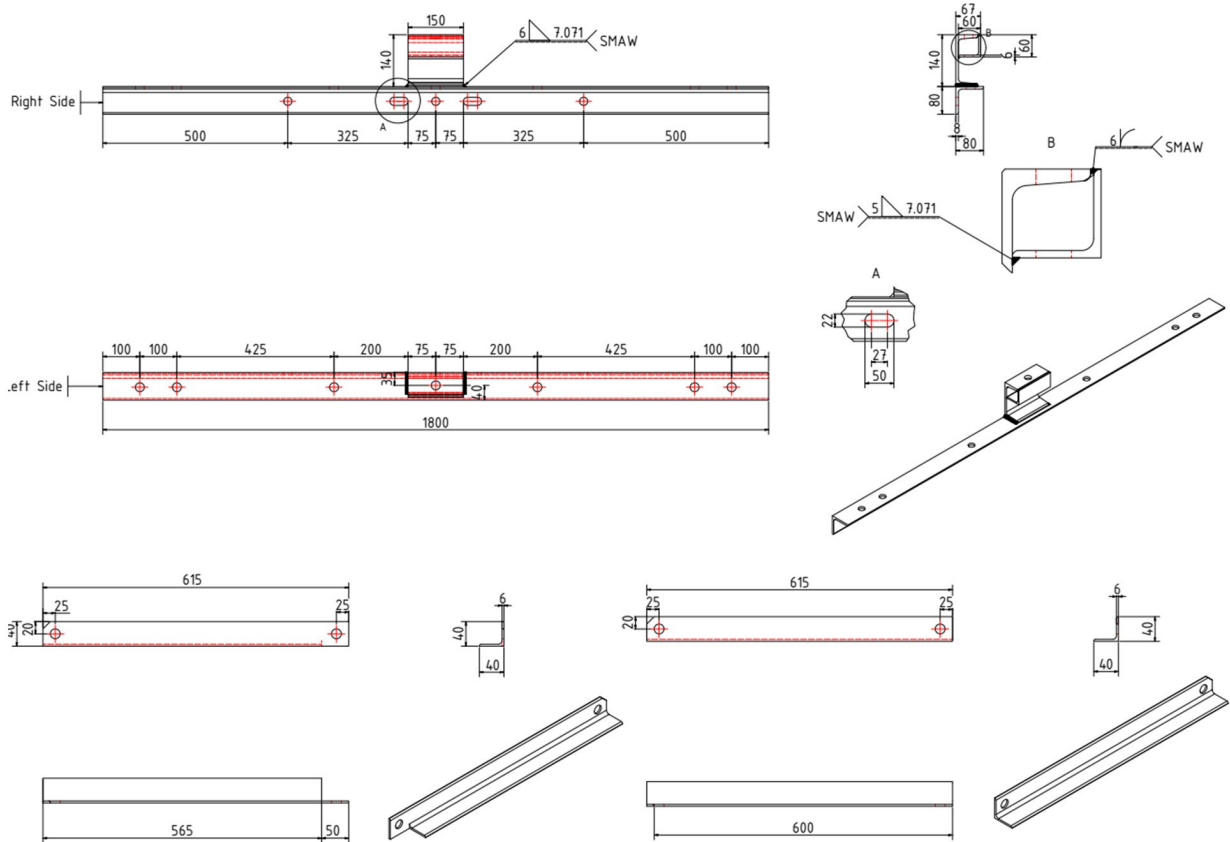
This attachment file covers the important information about the L type crossarm for used in overhead line of 11KV. Also, it's clarified the mechanical specifications properties for each part in the crossarm such as brace, bolt, nuts, and washer, etc.

Name	Code	Size (mm)	Type of material
Crossarm	25001	80x80x8x1800	Steel galvanizing
Brace	25004	40X40X6X615	
Machine Bolt	9910407	M20X240	
	9910406	M20X50	
Hexagon nuts	9910409	M20	
Plain washer	9910410	M20	
Spring washer	9910411	M20	

Specifications

All the details are according to the Technical Specification of GECOL No. GES12200 Revision history -Issued on: Jan.01,2007 update in 2013.

Crossarm and Brace



Notes :

1. Diameter for each Hole in the right side is $\varnothing 22$ mm.
2. Diameter for each Hole in the left side is $\varnothing 22$ mm.
3. All dimensions in mm.
4. Dimensional tolerance is ± 0.7 mm for up to and including 35mm in dimension and over 35mm, $\pm 2\%$.

Material :

All crossarm and braces are made from steel of good quality in accordance with ISO 630 or over equivalent. The shape of crossarm and brace is equal-leg angles in accordance with ISO 657-1.

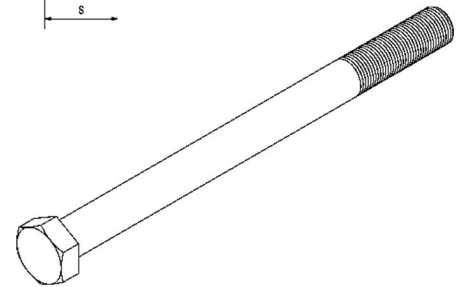
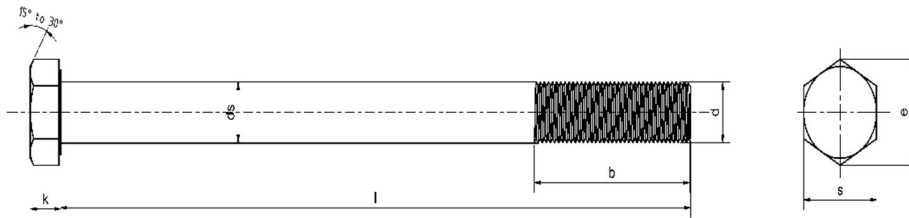
Dimensional Tolerance :

Tolerance of crossarm and brace are according to ISO 657-5.

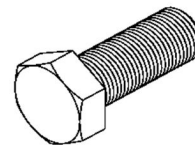
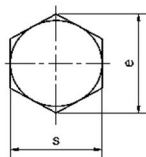
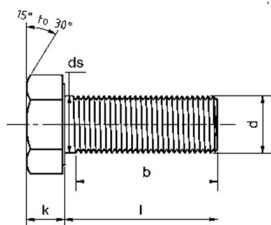
Mechanical Properties :

The minimum tensile strength of crossarm and brace is 410.

Hex Bolt DIN 931 – M20X240 – 5.8							Grade:5.8			
Chemical Composition			EN ISO 898-1:2013				MATER. SAE 1018			
%C	%Si	%S	%P	%Mn	%Ni	%Cr	%Cu	%Mo	%V	%N
0.17	0.147	0.019	0.0165	0.601	0.029	0.05	0.047	0.0051		

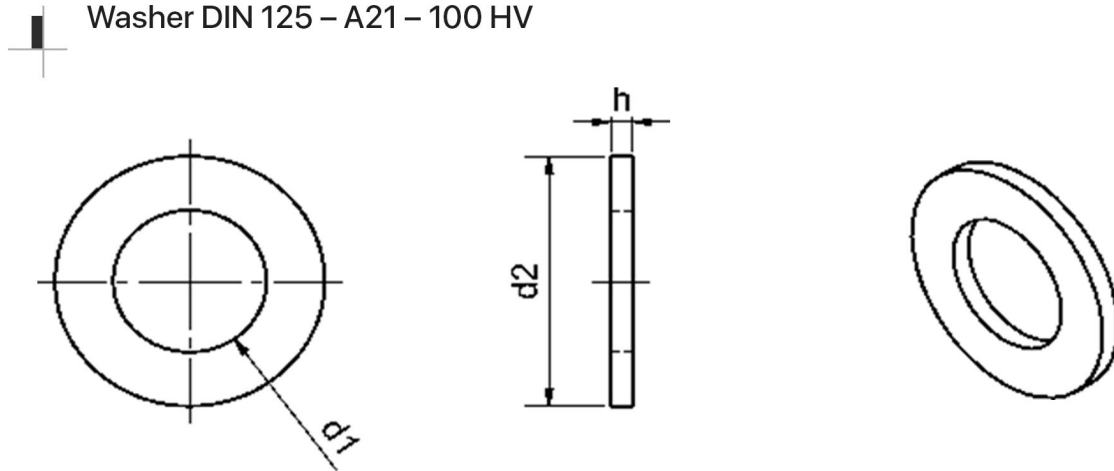


Hex Bolt DIN 931 – M20X50 – 5.8							Grade:5.8			
Chemical Composition			EN ISO 898-1:2013				MATER. SAE 1018			
%C	%Si	%S	%P	%Mn	%Ni	%Cr	%Cu	%Mo	%V	%N
0.074	0.142	0.022	0.0079	0.435	0.029	0.024	0.067	0.0042		



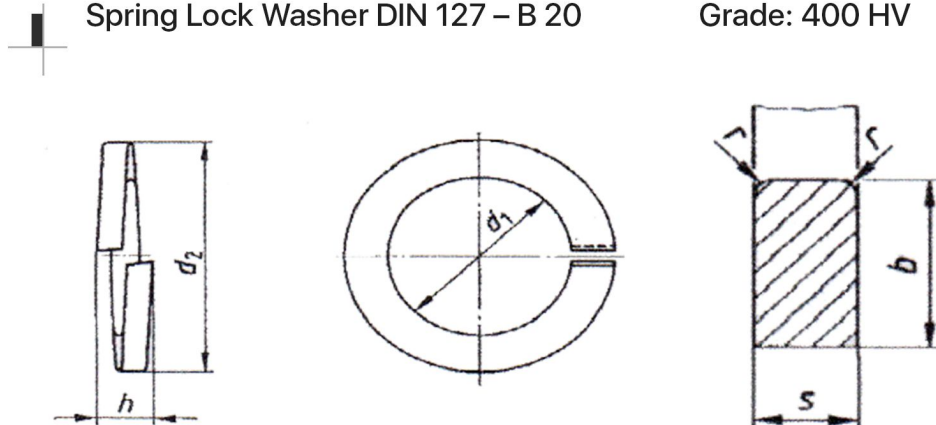


Washer DIN 125 – A21 – 100 HV



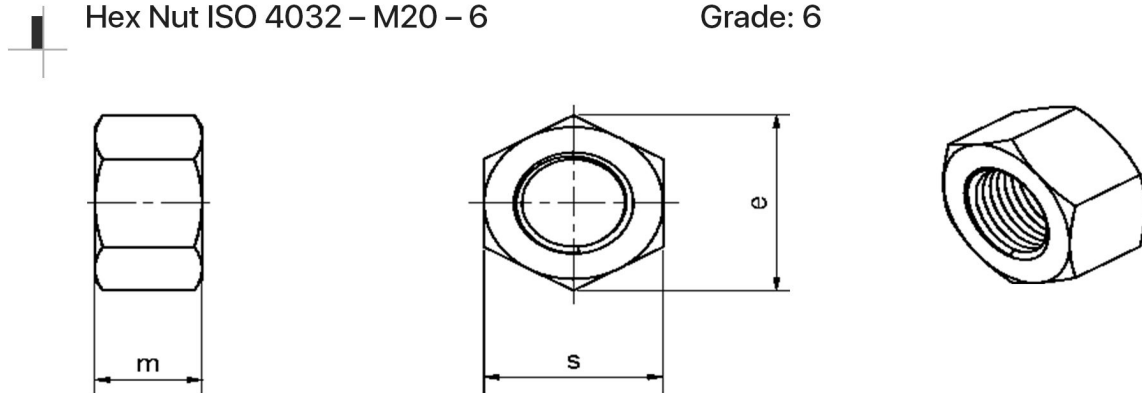
Spring Lock Washer DIN 127 – B 20

Grade: 400 HV



Hex Nut ISO 4032 – M20 – 6

Grade: 6





Assembly Types

The L type of crossarm has 4 Kinds according to GECOL specifications **No.12200**. every type has a specific quantity of accessories depending on the position of pole in the distribution line, as shown:

NAME		QTY			
		A	B	C	D
Crossarm 80x80x8x1800		1	2	2	4
Brace 40X40X6X615		2	4	4	8
Hexagon nuts M20		4	4	4	8
Machine bolt	M20X50	2	-	-	-
	M20X240	2	1	1	2
	M20X260	-	3	3	6
Plain washer		8	8	8	16
Spring washer		2	4	4	8

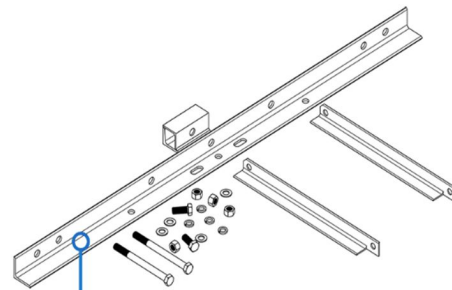
The common types that are using by the GECOL Company are the type A:



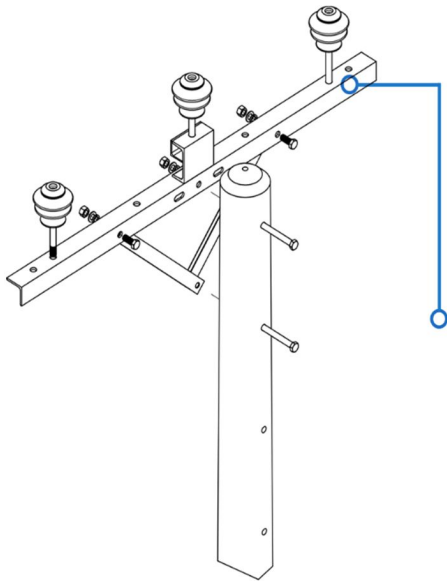
Assembly Types

This type using in Intermediate Support with Line angle not more than 10°, the GECOL name it with Single crossarm Type A, Follow the steps to get the Final shape:

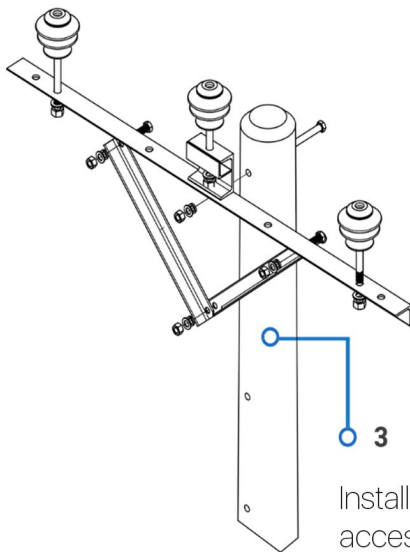
Type A



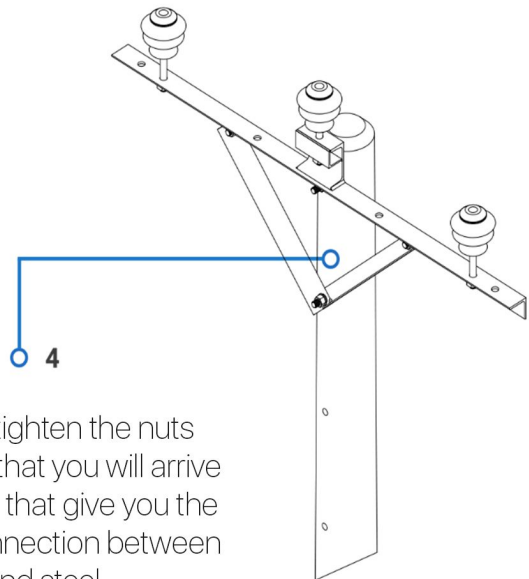
1 Prepare all the parts of the type.



2 Make sure when you make the holes for the bolts the tolerances are including.



3 Install the bolts and the other accessories in the rite position.



4 When you tighten the nuts make sure that you will arrive to the force that give you the perfect connection between the wood and steel.