



Incab

ACES

Advanced Cable Engineering System

Sistema Avanzado de Ingeniería de Cables

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Gerente de ventas internacionales

Registered Continuing Education Program

RCEP COMPLIANT



- Incab America has met the standards and requirements of the Registered Continuing Education Program.
- Credit earned on completion of this program will be reported to RCEP.net.
- Certificates of Completion will be issued to all participants via the RCEP.net online system.
- As such, it does not include content that may be deemed or construed to be an approval or endorsement by the RCEP.



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OBJETIVOS & DESCRIPCIÓN DEL CURSO

- Se dará una introducción sobre las capacidades del Configurador ACES.
- El webinar le enseñará el uso del sistema ACES para la selección adecuada de un cable OPGW y sus Accesorios de Instalación.
- El webinar le enseñará el uso del sistema ACES para la selección adecuada de un cable ADSS y sus Accesorios de Instalación.
- Se explicará el como construir una SAG – TENSION Chart a partir de un cable seleccionado, para comprobar que el Cable ADSS seleccionado cumple con los parámetros del proyecto, con un ejemplo practico



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OBJETIVOS DEL APRENDIZAJE

Despues de esta clasé ud estará en capacidad de:

- Entender los diferentes sistemas disponibles en el portal de Incab America.
- Seleccionar Un cable OPGW de acuerdo a los parametros del Proyecto, y obtener un listado de elementos de instalación.
- Seleccionar Un cable ADSS de acuerdo a los parametros del Proyecto, y obtener un listado de elementos de instalación.
- Utilizar criterios de Inegniería para la selección de un Cable OPGW / ADSS.
- Verificar a través de un Sag – Tension Chart la viabilidad de instalar un cable ADSS.

Incab University "School of Excellence in Fiber Optics" curriculum

Learning Hub



[INCABAMERICA.COM](https://www.incabamerica.com)

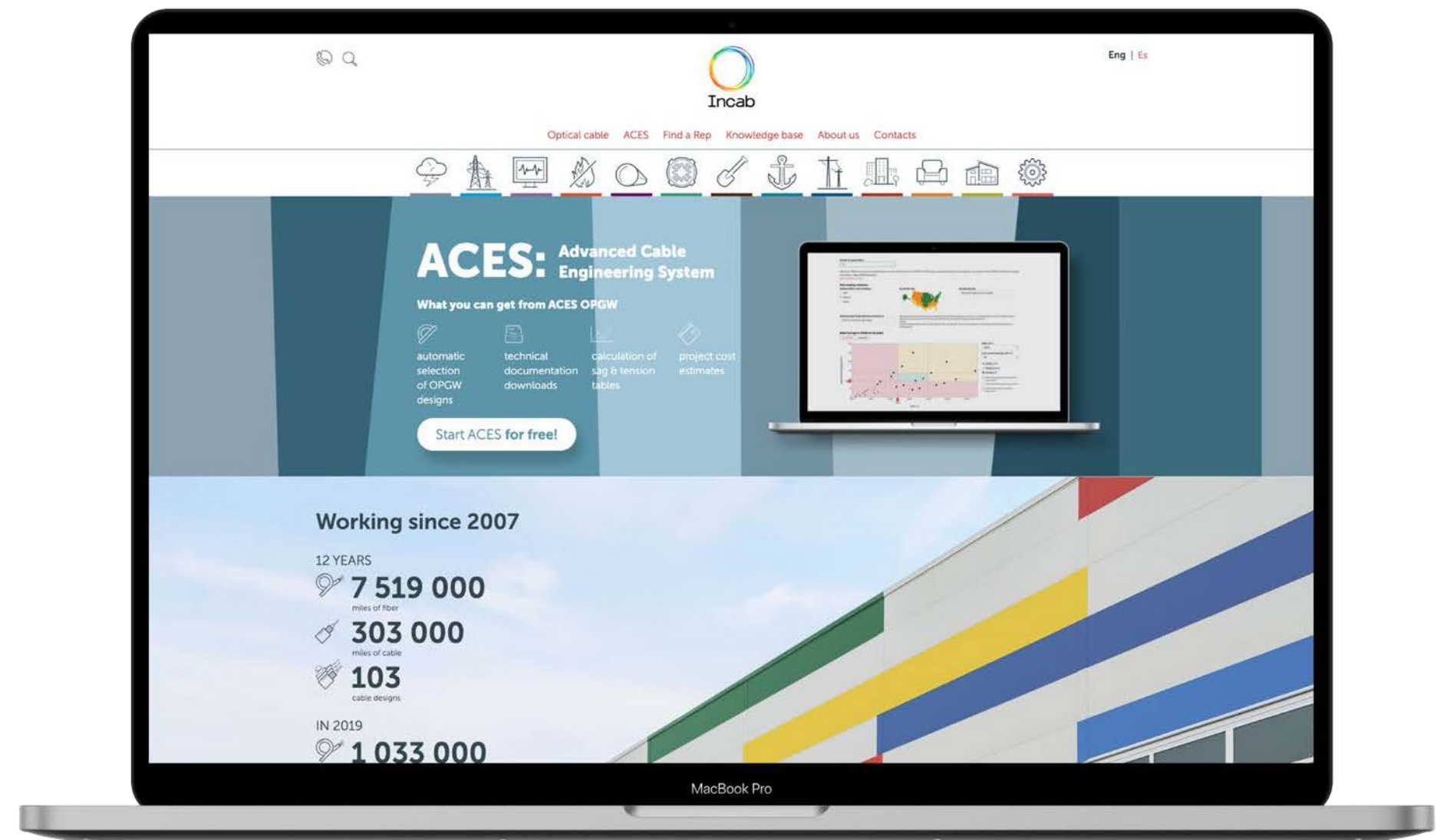
Reglas del Webinar

- Presentación y prueba de sonido
- Presentación: 60 min.
- Utilice el chat para hacer preguntas durante la presentación
- Preguntas y respuestas (Nota: sólo preguntas técnicas): 10 min
- ¡Comencemos!

ACES

SISTEMA AVANZADO DE INGENIERÍA DE CABLES

Una herramienta única para ayudar a los ingenieros a seleccionar el diseño óptimo del cable junto con los accesorios asociados



ACES

SISTEMA AVANZADO DE INGENIERÍA DE CABLES

Características claves:



Online



Totalmente
gratis



Registro
rapido



Rapido



Simple



Hecho
con Amor

Opciones de:

- Salvar tu proyecto
- Descargar la documentación técnica
- Obtener el cálculo de la flecha y la tensión



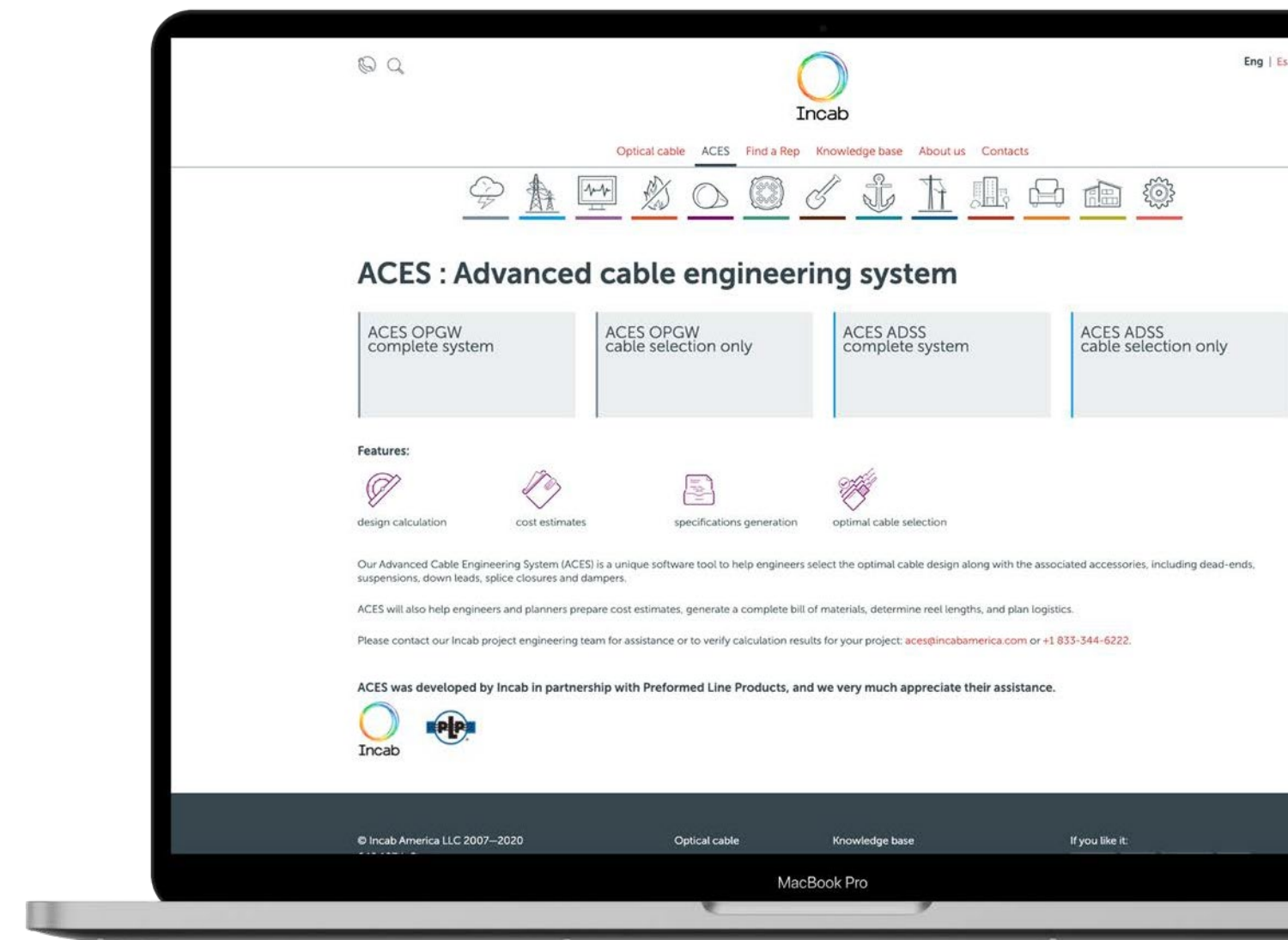
ACES was developed by Incab in partnership with Preformed Line Products, and we very much appreciate their assistance.

ACES

SISTEMA AVANZADO DE INGENIERÍA DE CABLES

Existen 4 versiones principales de ACES:

- Para OPGW: Optical Ground Wire
- Para ADSS: All-Dielectric Self-Supporting Cable
- ~~Para el Cálculo del Espacio Equipotencial en líneas de transmisión con cables ADSS (SPOTS) ❌~~
- Para El cálculo de las tablas de Esfuerzo vs Flechado (Sag – Tension) CATS



ACES OPGW

- Selección del Cable
- Sistema completo (longitudes, flechas, cargas, accesorios)

The screenshot displays the Incab website's interface for the ACES OPGW system. At the top right is the Incab logo, a colorful circle with the text 'Incab' below it. A navigation menu includes 'Optical cable', 'ACES', 'Find a Rep', 'Knowledge base', and 'About'. Below the menu is a row of icons representing various engineering and safety aspects: a lightning bolt, a power tower, a computer monitor with a waveform, a flame with a slash, a lens, a cable cross-section, a key, an anchor, and a suspension tower. The main heading reads 'ACES : Advanced cable engineering system'. Below this are three buttons: 'ACES OPGW complete system' (with a mouse cursor), 'ACES OPGW cable selection only', and 'ACES ADSS complete system'. A 'Features:' section follows, with four icons and labels: 'design calculation' (protractor), 'cost estimates' (calculator), 'specifications generation' (document), and 'optimal cable selection' (cable bundle). The bottom text describes ACES as a software tool for selecting optimal cable designs and lists additional capabilities like cost estimation and material bill generation.

Optical cable ACES Find a Rep Knowledge base About

ACES : Advanced cable engineering system

ACES OPGW complete system

ACES OPGW cable selection only

ACES ADSS complete system

Features:

design calculation cost estimates specifications generation optimal cable selection

Our Advanced Cable Engineering System (ACES) is a unique software tool to help engineers select the optimal cable design, suspensions, down leads, splice closures and dampers.

ACES will also help engineers and planners prepare cost estimates, generate a complete bill of materials, determine reel length and weight.

Please contact our Incab project engineering team for assistance or to verify calculation results for your project: aces@incab.com

ACES SELECCIÓN DEL CABLE OPGW

3 pasos

para obtener el OPGW adecuado:

1. Seleccionar # Fibras (Fiber Count)

Eng | Es

Optical cable ACES Find a Rep Knowledge base About us Contacts

ACES OPGW cable selection only

ACES OPGW complete system ACES OPGW cable selection only ACES ADSS complete system ACES ADSS cable selection only

Automatic selection of OPGW, fittings and splice closures

Show hint

Fiber count

36

12

16

24

36

48

60

72

96

144

set minimums for the MRDT or RBS that you need and the fault current capacity. If you do not know the MRDT or RBS that you

MRDT, Ib [?]

Enter the MRDT

Fault Current Capacity, $\text{kA}^2\text{-s}$ [?]

Enter the fault current capacity

- OPGW_C [?]
- OPGW_CA [?]
- OPGW_S [?]
- OPGW_AP [?]

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SELECCIÓN DEL CABLE OPGW

2. Seleccionar el Esfuerzo y las Condiciones de Carga del cable (según NESC)

Único Mapa Interactivo:
Sólo tiene que hacer clic en la región correcta o escribir el nombre de su estado o ciudad. (solo USA)

Select your OPGW as a point on the graph below. You can set minimums for the MRDT or RBS that you need and the fault current capacity. If you do not know the MRDT or RBS that you need, then click on "Select OPGW by tension".

[Select OPGW by tension](#)

Select loading conditions

Standard NESC Load Conditions

- Light
- Medium
- Heavy

By climate map



By state and city

Ar

Arizona, Phoenix (AZ) Arkansas, Little Rock (AR)
Connecticut, Hartford (CT) Delaware, Dover (DE)
Maryland, Annapolis (MD) Nevada, Carson City (NV)
North Carolina, Raleigh (NC)
North Dakota, Bismarck (ND)
Pennsylvania, Harrisburg (PA)
South Carolina, Columbia (SC)
West Virginia, Charleston (WV) Texas, Arlington (TX)
Maryland, Baltimore (MD) Arizona, Chandler (AZ)
North Carolina, Charlotte (NC)
North Carolina, Durham (NC)
North Carolina, Fayetteville (NC) Texas, Garland (TX)
Arizona, Gilbert (AZ) Arizona, Glendale (AZ)
North Carolina, Greensboro (NC)
California, Garden Grove (CA) Texas, Laredo (TX)
Arizona, Mesa (AZ) New Jersey, Newark (NJ)
Kansas, Overland Park (KS) California, Oxnard (CA)
California, San Bernardino (CA)
California, Santa Clarita (CA) Arizona, Scottsdale (AZ)
Arizona, Tucson (AZ)
North Carolina, Winston-Salem (NC)

Maximum span length between structures, ft

Enter the maximum span length

Specify the maximum distance between two adjacent structures, either suspensions or dead-ends. This distance together with the installation location will determine the maximum rated design tension that the OPGW will have to withstand throughout its entire service life.

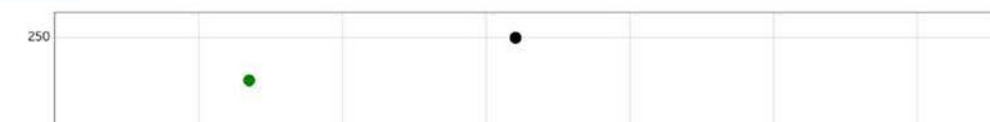
Example:

10 poles. Distances between them: 750, 600, 600, 950, 750, 750, 600, 600, 750 feet. For this example, enter the distance: 950 feet (the maximum of all the distances).

[Select OPGW by diameter](#)

Select the type of OPGW on the graph

Using MRDT Using RBS



MRDT, lb [?]

Enter the MRDT

Fault Current Capacity, kA²-s [?]

Enter the fault current capacity

ACES

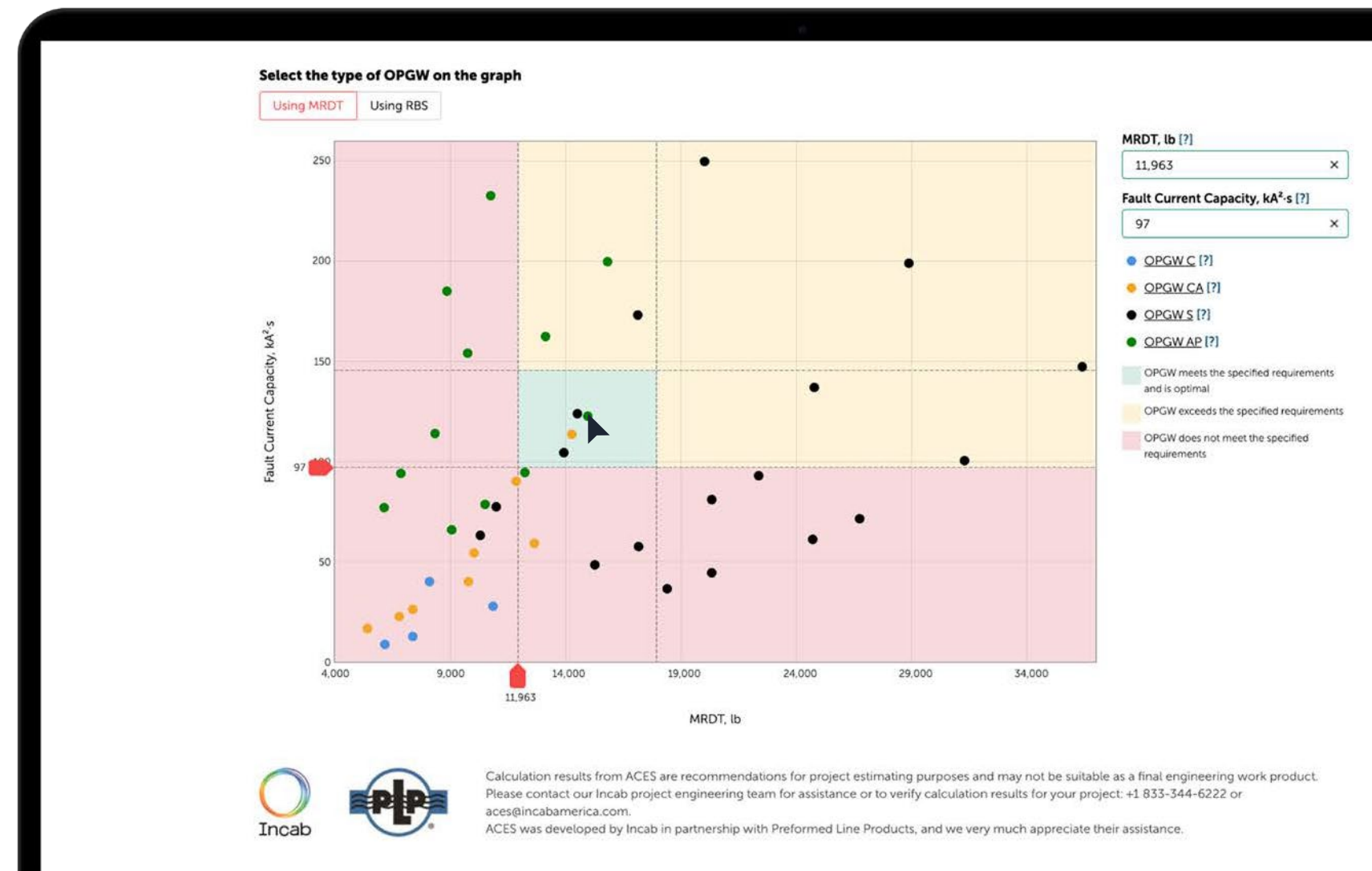
SELECCIÓN DEL CABLE OPGW

3. Introducir la Capacidad de Corto Circuito

Su cable Optimo están en la **zona verde**.



Un cómodo gráfico: ¡se acabaron las horribles tablas!



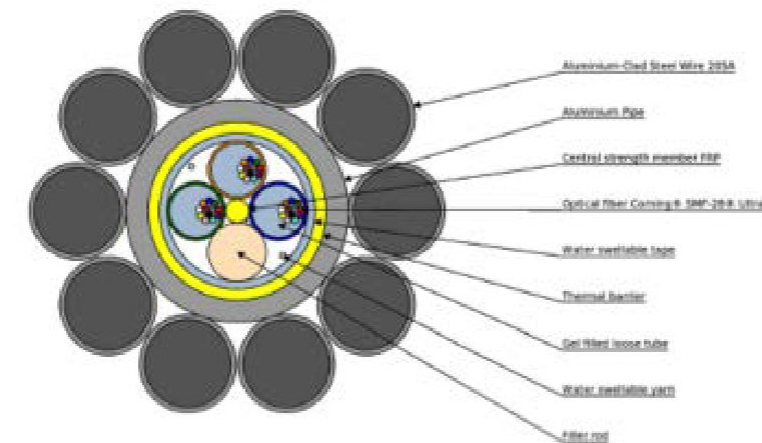
ACES SELECCIÓN DEL CABLE OPGW

Descargue su hoja de datos con la sección transversal y todos los parámetros necesarios.

ACES OPGW | Advanced Cable Engineering System

Product Datasheet
Optical Ground Wire (OPGW)
OPGW AP 36U (3x12) 15.7mm 123kA2-s 130kN

Design



Design element	Material	Count	Diameter	
			Metric (mm)	Customary (inches)
Central Member	AP	1	8.4	0.3307
1st stranded layer	20% ACS	10	3.65	0.1437

Technical Specifications

Mechanical	Metric	Customary
Cable diameter	15.7 mm	0.618 in

ACES SELECCIÓN DEL SISTEMA OPGW

5 pasos

a su proyecto :

1. Seleccione el Cable OGPW

The screenshot displays the Incab website interface for the ACES OPGW complete system. The top navigation bar includes the Incab logo, a search icon, and language options (Eng | Es). Below the navigation bar, there is a horizontal menu with icons for various services: Optical cable, ACES, Find a Rep, Knowledge base, About us, and Contacts. The main content area features the title "ACES OPGW complete system" and a list of features:

- Automatic selection of accessories (OPGW, fittings, splice closures)
- Calculation of manufactured lengths and automatic positioning of splice closures along the cable route
- Calculation of vibration damping schemes
- Calculation of loads and sags in case of maximum icing and wind
- Calculation of installation tables
- Specifications and cost estimates

Below the features list, there is a "More information" section with "Save" and "Open" buttons. A progress bar shows five steps, with "Step 1" highlighted in red. The "Step 1. ACES OPGW selection" section includes a "Show hint" button and a "Fiber count" dropdown menu. The text below the dropdown reads: "Select your OPGW as a point on the graph below. You can set minimums for the MRDT or RBS that you need and the fault current capacity. If you do not know the MRDT or RBS that you need, then click on 'Select OPGW by tension'." There are two links: "Select OPGW by tension" and "Select OPGW by diameter".

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SELECCIÓN DEL SISTEMA OPGW

2. Cree su propia línea óptica en unos minutos o cárguela en un archivo Excel

Step 1 Step 2 Step 3 Step 4 Step 5 Bill of Material

Step 2. Cable route layout

Selected: OPGW AP 36U (3x12) 15.7mm 123kA2-s 130kN

Show hint

Total number of spans

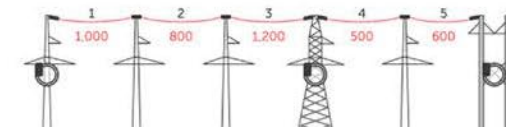
5

Automatic arrangement of splice closures

Enter data on spans and towers using an Excel file

"U-Bolt Dead-end" or "Formed Wire Dead-end?"					U-Bolt																												
What type of suspension?					Bolted																												
What type of grounding wire do you prefer?					Aluminium																												
Length of route along the towers, ft					4,100																												
Number of towers with tension clamps without splice closures, pc					0																												
Number of towers with tension clamps with splice closures, pc					3						WP LT HW																						
Number of towers with standart suspension clamps, pc					3						WP MP																						
Number of towers with double suspension clamps, pc					0																												
Span number	Span length	Tower number	OPGW fitting type [?]	OPGW suspension height, ft [?] Enter	Splice closure [?] connection scheme	Cable reserve for installation (for one cable end), ft	Type of tower [?]	Orientation of the attachment point for poles with dead-end [?]	Orientation of the attachment point for suspension poles [?]	«Free ends» at the structure side or a terminal pad for bolting (2T)	Grounding clamp adapters for lattice towers	Cable service length at the end of the route, ft	OPGW construction length, ft [?] (max manufactured length - 16,372 ft)	Increasing factor, % [?]																			
Enter values for all towers																65	500	Wood Pole	V H	P IL	2T Free												
1	1,000	0	D SS DS	65	<input checked="" type="checkbox"/>	500	Wood Pole	V H	P IL	2T Free	<input checked="" type="checkbox"/>		4,060																				
2	800	1	D SS DS	65	<input checked="" type="checkbox"/>		Wood Pole		P IL	2T Free																							
3	1,200	2	D SS DS	65	<input checked="" type="checkbox"/>		Metal Pole		P IL	2T Free																							
4	500	3	D SS DS	65	<input checked="" type="checkbox"/>	500	Lattice Tower	V H		2T Free	<input checked="" type="checkbox"/>		2,122																				
5	600	4	D SS DS	65	<input checked="" type="checkbox"/>		Wood Pole		P IL	2T Free																							
		5	D SS DS	65	<input checked="" type="checkbox"/>	500	"H"-Wood	V H		2T Free																							

Download the tower scheme, xlsx



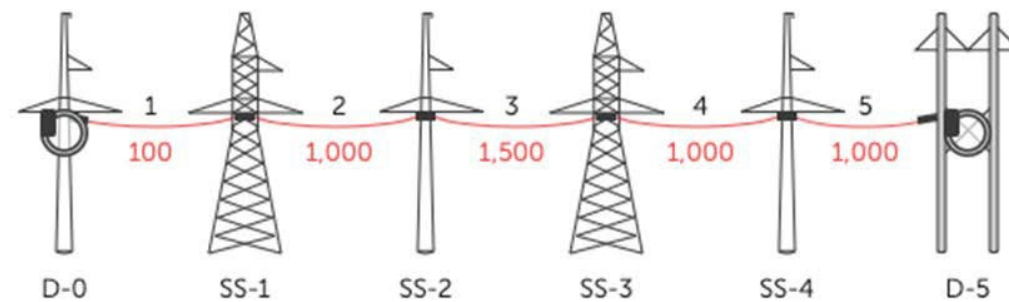
ACES

SELECCIÓN DEL SISTEMA OPGW

Clara Visualización

Number of towers with tension clamps without splice closures, pc		0											
Number of towers with tension clamps with splice closures, pc		3		WP LT HW									
Number of towers with standart suspension clamps, pc		3		WP MP									
Number of towers with double suspension clamps, pc		0											
Span number	Span length	Tower number	OPGW fitting type [?]	OPGW suspension height, ft <input checked="" type="checkbox"/> Enter	Splice closure [?] connection scheme	Cable reserve for installation (for one cable end), ft	Type of tower [?]	Orientation of the attachment point for poles with dead-end [?]	Orientation of the attachment point for suspension poles [?]	*Free end* at the structure side or a terminal pad for bolting (2T)	Grounding clamp adapters for lattice towers	Cable service length at the end of the route, ft	OPGW construction length, ft [?] (max manufactured length - 16,372 ft) Increasing factor, % [?] 2
Enter values for all towers													
				65	<input checked="" type="checkbox"/>	500	Wood Pole	V H	P IL	2T Free	<input checked="" type="checkbox"/>		
1	1,000	1	D SS DS	65	<input checked="" type="checkbox"/>	500	Wood Pole		P IL	2T Free			4,060
2	800	2	D SS DS	65			Metal Pole		P IL	2T Free			
3	1,200	3	D SS DS	65	<input checked="" type="checkbox"/>	500	Lattice Tower	V H		2T Free	<input checked="" type="checkbox"/>		
4	500	4	D SS DS	65			Wood Pole		P IL	2T Free			2,122
5	600	5	D SS DS	65	<input checked="" type="checkbox"/>	500	*H*-Wood	V H		2T Free			

Download the tower scheme, xlsx



Next step

Recommendations for project estimating purposes and may not be suitable as a final engineering work product. For more information, please contact our engineering team for assistance or to verify calculation results for your project: +1 833-344-6222 or

Partnership with Preformed Line Products, and we very much appreciate their assistance.

Knowledge base

About us

Contacts

If you like it:

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[Twitter](#)
[Facebook](#)
[Send](#)

Privacy Policy

Website creation:
made with love by Yep!, 2018

ACES

SELECCIÓN DEL SISTEMA OPGW

3. Cálculo de los largos de fabricación

📎 Cálculo automático de los largos de fabricación!

Step 1 Step 2 **Step 3** Step 4 Step 5 Bill of Material

Step 3. Calculation of manufactured lengths

[Skip this step](#)

Selected: OPGW AP 36U (3x12) 15.7mm 123kA2-s 130kN

Recommended reel

RM1-60.32.32 (reel capacity — 9,305 ft)

For automatic cable winding, select the reel and press "Automatic winding". For manual winding, drag the manufactured cable lengths onto the required reels.

Automatic winding

NRW2-58.32.28
9,436 ft

NRW2-66.36.36
12,940 ft

NRW2-72.36.36
14,787 ft

NRW2-84.42.48
18,481 ft

Choose steel reels if the reels will be stored outdoors unprotected for more than 3 – 6 months or for lengths over 20,000 ft.

RM1-60.32.32
9,305 ft

RM1-66.32.36
11,529 ft

RM1-72.36.40
15,256 ft

RM1-78.36.48
15,929 ft

RMT1-84.45.42
26,634 ft

Reels with wound cable

RM1-60.32.32
9,305 ft
filled 66% free 34%
6,182 ft 3,122 ft
1 X 2 X

[Unwind all the reels](#) **Manufactured lengths**

Results of winding

OPGW manufactured length	Reel	Length, ft	Weight, lb
Manufactured length 1	RM1-60.32.32	6,182	3,765
Total		6,182	3,765

[Download winding results, pdf](#)

Next step



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SELECCIÓN DEL SISTEMA OPGW

4. Cálculo de tensiones y flechas automáticamente en un click!

More information

Save Open

Step 1 Step 2 Step 3 **Step 4** Step 5 Bill of Material

Step 4. Calculation of tensions and sags

Skip this step

Selected: OPGW AP 36U (3x12) 15.7mm 123kA2-s 130kN

Standard NESC Load Conditions: [Light Change](#)

Anchor section	Calculated span			Set initial load by default			Tensile strength, lbs	Maximum sag relative to the current tower, ft	Sag after drawing, ft	Maximum horizontal sag, ft	Maximum vertical sag, ft	
	Numbers of towers limiting the AS	Length of the AS, ft	Towers	Length, ft	Suspension height, ft	Initial (installation) load, lb [?]						Initial sag in the longest span of the AS, ft
0-3	3,000	0-1	1,000	65-65			4,578	16.77	17.65	16.96	16.72	
		1-2	800	65-65	4,055	24	2	4,585	10.83	11.45	11.28	10.68
		2-3	1,200	65-65				4,555	23.99	25.15	23.7	24.1
3-5	1,100	3-4	500	65-65	2,027	12	2	2,411	8.18	8.65	8.52	8.08
		4-5	600	65-65				2,386	11.8	12.35	12.06	11.73

Download calculation results, zip

Next step



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Optical cable
ACES
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Privacy Policy
Website creation:
made with love by Yep!, 2018

ACES

SELECCIÓN DEL SISTEMA OPGW

5. Descarga listado de materiales e cables y accesorios en un solo click!

ACES OPGW

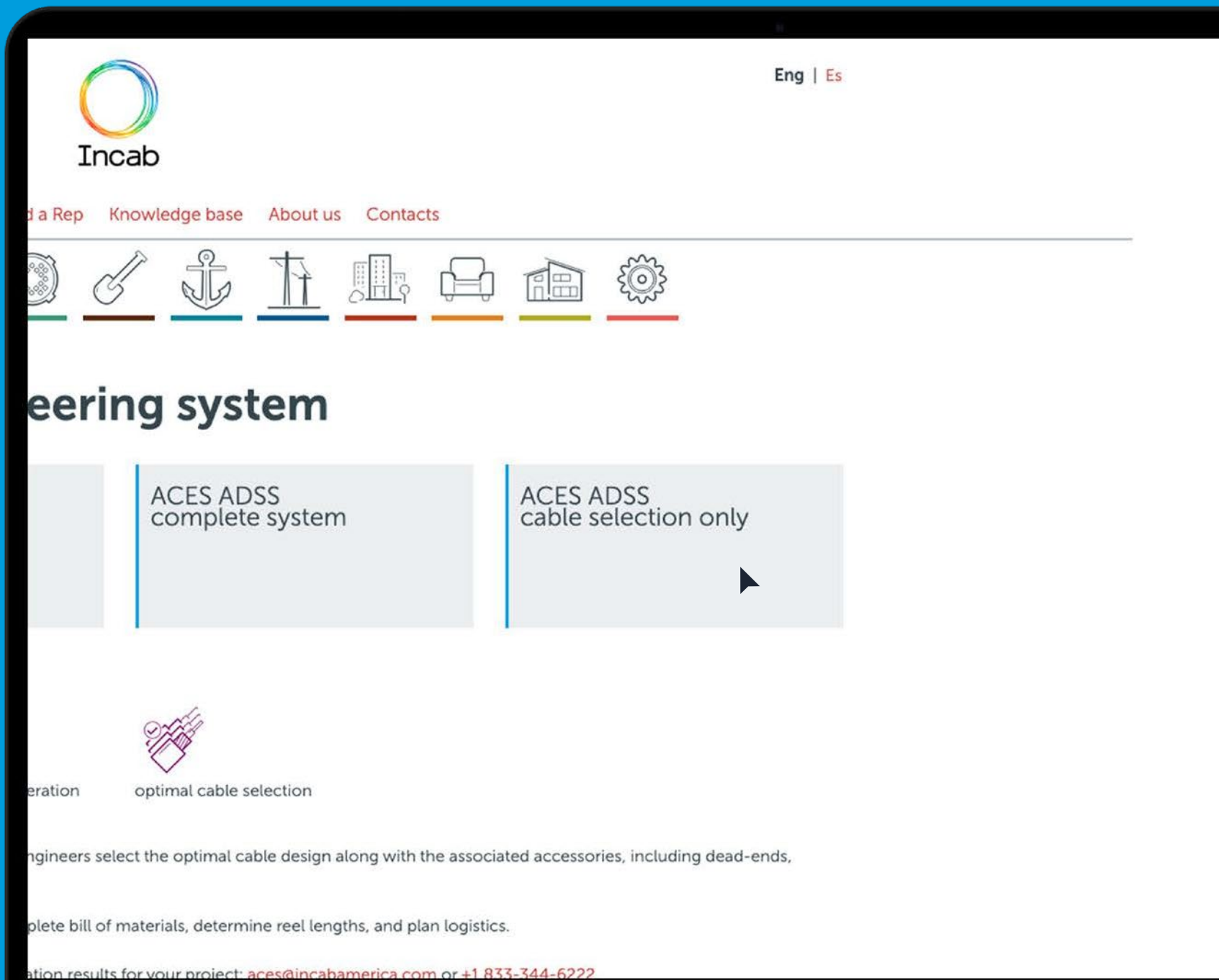
Advanced Cable Engineering System

Bill of material

#	Name	Type	Code	Unit	Count	Link
1. Cables						
1.1	Optical Ground Wire	OPGW AP 36U (3x12) 15.7mm 123kA ² -s 130kN Incab America LLC	Aluminium Pipe	ft	6,182	Link
2. Optical closure						
1.	Optical Closure for OPGW	6,5"x17" COYOTE® Dome Closure for OPGW with Stainless Steel Buffer tubes Preformed line products	COYW617S001	piece	3	Link
2.	Splice Tray	Preformed line products	80806033	piece	6	
3.	60 mm Heat Shrink Splice Protectors, 12 pack	Preformed line products	8003509	pack	12	
2.4	"FIBERLIGN® CABLE Storage 2 for OPGW, 60" Loop"	Preformed line products	80061195	piece	3	
5.	"COYOTE® Defender 2 for 6,5" Dome applications, Galvanized Steel 7 Gauge"	Preformed line products	80061194	piece	3	
6.	FIBERLIGN® Lattice Tower Clamp	Preformed line products	7000400	piece	2	Link
7.	201 Stainless Steel Band in Tote	3/4" x .030 x 100 ft ISO Stainless	BA206T	piece	1	Link
8.	201 Stainless Steel Buckles	3/4". 100 per Box ISO Stainless	BU256	pack	1	Link
3. Armature						
1.	Suspension Bolted for OPGW	Cushion Clamp, Single Preformed line products	4700109	piece	3	Link
2.	Anchor Shackle	Preformed line products	AS-5L	piece	9	
3.	Y-Clevis Eye 90	Preformed line products	YC-5207	piece	3	Link
4.	Grounding wire	Preformed line products	710010205	piece	9	
5.	Lattice Tower Ground Clamp adapter	Preformed line products	700011045	piece	2	
6.	Downlead Cushion		8003269H1	piece	16	Link

ACES ADSS

- Sólo selección de cables
- Sistema completo (longitudes, flechas, cargas, accesorios)

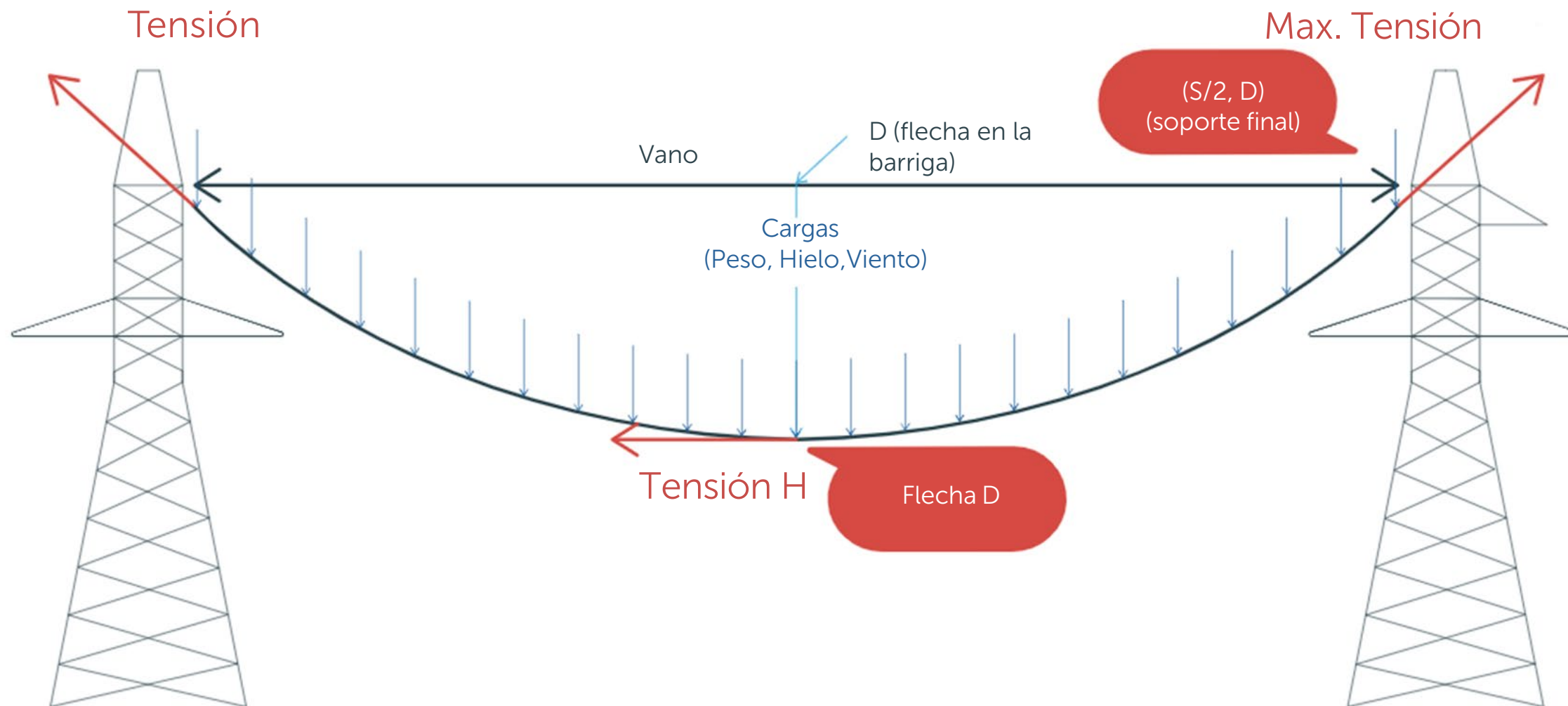


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ACES

Notas Técnicas

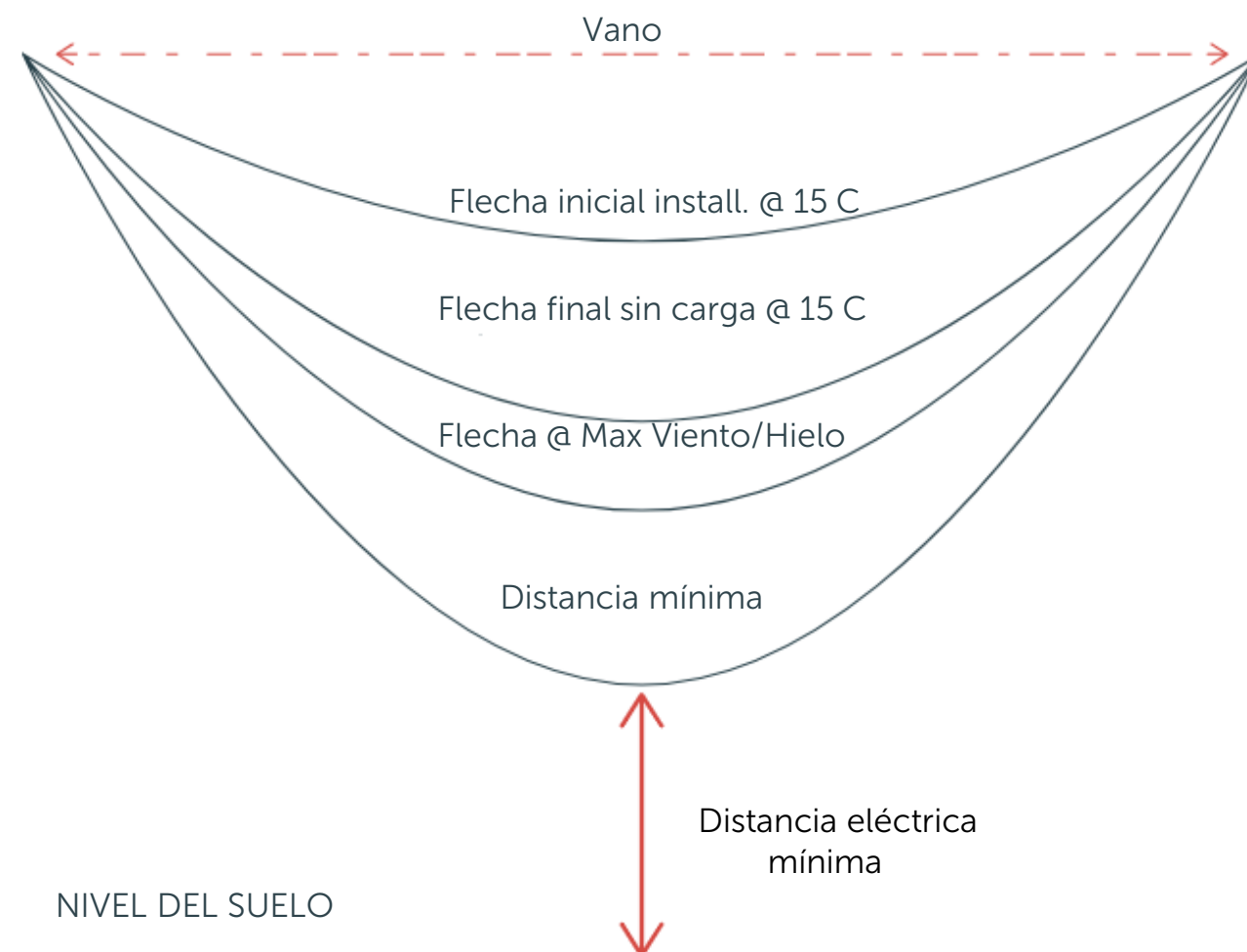
Efecto de la longitud del vano y de la tensión del flechado en las condiciones del cable



ACES

Notas Técnicas

Tension -Def envolvente



ACES ADSS SELECCIÓN DEL CABLE

6 pasos

a tu datasheet personalizado:



No más horribles tablas!

Show hint

Is protection against rodents, including squirrels, important for you? Please characterize your level of concern:

No danger of damage by rodents

Power line voltage:

From 69 to 230 kV

Is it possible that ADSS could be within 1 ft of the phase conductors or that the cable could be in an electric field ≥ 12 kV?

Yes No

Please select fiber count: [?]

36 (3x12)

Do you know the necessary value of Maximum Rated Design Tension (MRDT)?

Yes No

Select loading conditions

Standard NESC Load Conditions


Light
 Medium
 Heavy
 Custom

Ice thickness

0.8 in
20.3 mm

Wind pressure

10 lb/ft²
500 Pa

By climate map 

By state and city

Alabama, Montgomery (AL)

Maximum span length between structures

1,000 ft
305 m

Initial sag in the longest span, %

1

Specify the maximum distance between two adjacent structures, either suspensions or dead-ends. This distance together with the installation location will determine the maximum tensile load that the ADSS will have to withstand throughout its entire service life.
Example:
10 poles. Distances between them: 750, 600, 600, 950, 750, 750, 600, 600, 750 feet. For this example, enter the distance: 950 feet (the maximum of all the distances).

Selected: InAir ADSS Aramid DJ-P-36U (3x12)-20kN

ACES ADSS SELECCIÓN DEL CABLE

Descargue su hoja de datos con la sección transversal y todos los parámetros necesarios!



Aug-28-2020

Product Datasheet
fiber optic cable InAir ADSS Aramid DJ-P-36U (3x12)-20kN

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Arlington, TX 76011
+1-833-34-INCAB
+1-833-344-6222
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www.incabamerica.com

Application and features



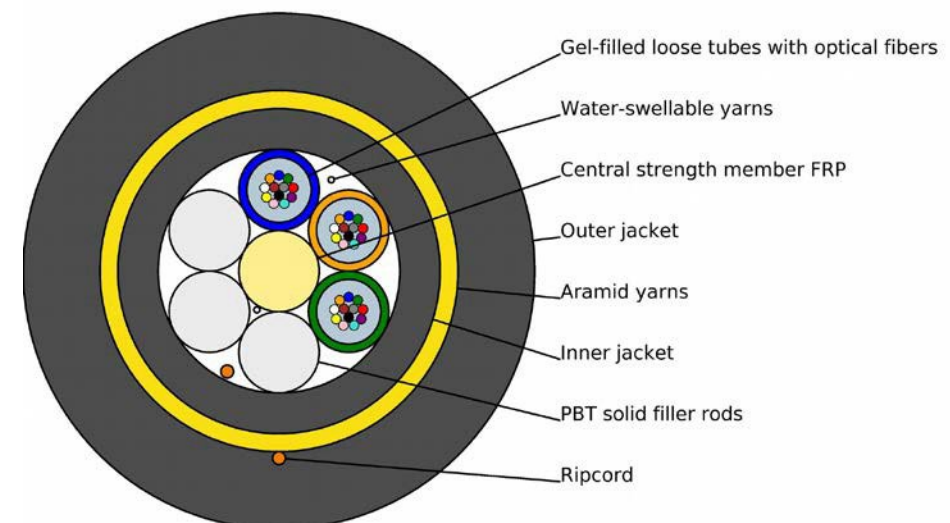
All-dielectric design



UV-resistant

As all-dielectric self-supporting (ADSS) cable for aerial installation between buildings and structures, or for cabling in ground, ducts, tubes, tunnels, manifolds, on bridges and overpasses.

Design



ACES ADSS SISTEMA COMPLETO

5 pasos

para obtener el ADSS optimo:

1. Seleccione el diseño de ADSS
2. Construya una linea con sus datos de entrada

Step 1 Step 2 Step 3 Step 4 Step 5 Bill of Material

Step 2. Cable route layout

Selected: InAir ADSS Aramid DJ-P-36U (3x12)-30kN

Show hint

Total number of spans

5

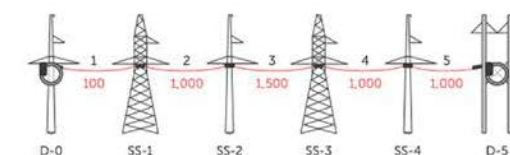
[Automatic arrangement of splice closures](#)

[Enter data on spans and towers using an Excel file](#)

Length of route along the towers, ft	4,600
Number of towers with tension clamps without splice closures, pc	0
Number of towers with tension clamps with splice closures, pc	2
Number of towers with standart suspension clamps, pc	4
Number of towers with double suspension clamps, pc	0
ADSS construction length, ft [?] (max manufactured length - 26,247 ft)	5,692
Increasing factor, % [?]	2

Span number	Span length	Tower number	ADSS fitting type [?]	ADSS suspension height, ft [?] Enter	Splice closure [?]	Cable reserve for installation (for one cable end), ft	Type of tower [?]	Orientation of the attachment point for poles with dead-end [?]	Orientation of the attachment point for suspension poles [?]	Cable service length at the end of the route, ft
Enter values for all towers				65	<input type="checkbox"/>	500	Wood Pole	V H	P IL	
1	100	0	D SS DS	65	<input checked="" type="checkbox"/>	500	Wood Pole			
2	1,000	1	D SS DS	65			Lattice Tower		P IL	
3	1,500	2	D SS DS	65			Wood Pole		P IL	
4	1,000	3	D SS DS	65			Lattice Tower		P IL	
5	1,000	4	D SS DS	65			Wood Pole		P IL	
		5	D SS DS	65	<input checked="" type="checkbox"/>	500	H-Wood	V H		

[Download the tower scheme, xlsx](#)



Next step

ACES ADSS SISTEMA COMPLETO

3. Cálculo de los largos de fabricación

Step 1 Step 2 **Step 3** Step 4 Step 5 Bill of Material

Step 3. Calculation of manufactured lengths

[Skip this step](#)

Selected: InAir ADSS Aramid DJ-P-36U (3x12)-30kN

Recommended reel

NRW2-58.32.28 (reel capacity — 10,155 ft)

For automatic cable winding, select the reel and press "Automatic winding". For manual winding, drag the manufactured cable lengths onto the required reels.

Automatic winding

NRW2-58.32.28
10,155 ft

NRW2-66.36.36
13,938 ft

NRW2-72.36.36
18,373 ft

NRW2-84.42.48
26,342 ft

Reels with wound cable

[Unwind all the reels](#)

Manufactured lengths

NRW2-58.32.28
10,155 ft
filled 56% free 44%
5,692 ft 4,462 ft
1 X

Results of winding

OPGW manufactured length	Reel	Length, ft	Weight, lb
Manufactured length 1	NRW2-58.32.28	5,692	1,016
Total		5,692	1,016

[Download winding results, pdf](#)

Next step



Calculation results from ACES are recommendations for project estimating purposes and may not be suitable as a final engineering work product. Please contact our Incab project engineering team for assistance or to verify calculation results for your project: +1 833-344-6222 or aces@incabamerica.com. ACES was developed by Incab in partnership with Preformed Line Products, and we very much appreciate their assistance.

ACES ADSS SISTEMA COMPLETO

4. Cálculo de tensiones y descensos de forma automática en un solo click!

Step 1 Step 2 Step 3 **Step 4** Step 5 Bill of Material

Step 4. Calculation of tensions and sags

[Skip this step](#)

Selected: InAir ADSS Aramid DJ-P-36U (3x12)-30kN

Standard NESC Load Conditions: **Custom**. [Change](#)

Anchor section	Calculated span			Set initial load by default			Tensile strength, lbs	Maximum sag relative to the current tower, ft	Sag after drawing, ft	Maximum horizontal sag, ft	Maximum vertical sag, ft	
	Numbers of towers limiting the AS	Length of the AS, ft	Towers	Length, ft	Suspension height, ft	Initial (installation) load, lb [?]						Initial sag in the longest span of the AS, ft
0-5	4,600	0-1	100	65-65			1,585	1.5	0.19	1.17	1.4	
		1-2	1,000	65-65			4,806	43.89	16.31	35.65	41.21	
		2-3	1,500	65-65	1,109	30	2	5,925	77.65	34.47	62.72	73.65
		3-4	1,000	65-65				4,806	43.89	16.31	35.65	41.21
		4-5	1,000	65-65				4,806	43.89	16.31	35.65	41.21

[Download calculation results, zip](#)

[Next step](#)



Calculation results from ACES are recommendations for project estimating purposes and may not be suitable as a final engineering work product. Please contact our Incab project engineering team for assistance or to verify calculation results for your project: +1 833-344-6222 or aces@incabamerica.com. ACES was developed by Incab in partnership with Preformed Line Products, and we very much appreciate their assistance.

ACES ADSS SISTEMA COMPLETO

5. Descarga el listado de materiales del cable y los accesorios en un solo click!

ACES ADSS

Advanced Cable
Engineering System

Vibration damping scheme

ADSS type: InAir ADSS Aramid DJ-P-36U (3x12)-30kN

List of vibration dampers

Anchor section. Numbers of towers limiting the anchor section	Numbers of towers limiting the span	Span length, ft	Mean operating tension, lb	Number of SVDs in the span	SVD type
1 0-1	0-1	100	1,109	2	50509862
	1-2	1,000		4	50509862
	2-3	1,500		4	50509862
	3-4	1,000		4	50509862
	4-5	1,000		4	50509862
TOTAL:				18	

Note:

Install SVDs according to the installation instruction.

ACES ADSS SISTEMA COMPLETO

Guarda tu proyecto o abre el guardado.

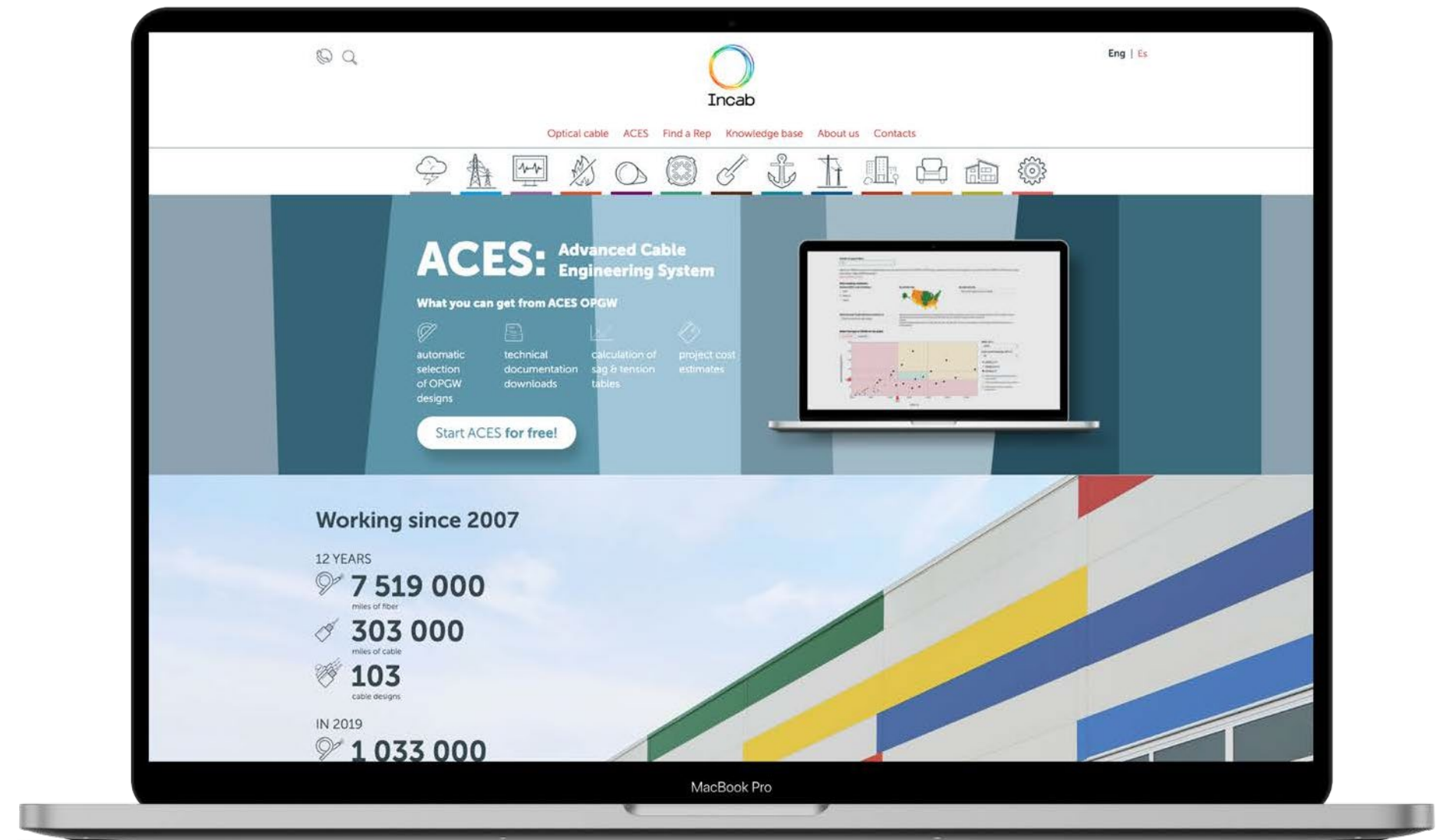
También puedes compartirlo con otros usuarios.

The screenshot shows the web application interface for the ACES ADSS complete system. At the top, there is a search icon and the Incab logo. The navigation menu includes links for Optical cable, ACES, Find a Rep, Knowledge base, About us, and Contacts. Below the navigation menu is a row of icons representing various engineering and project management functions. The main content area is titled "ACES ADSS complete system" and includes a sub-menu with options for ACES OPGW complete system, ACES OPGW cable selection only, ACES ADSS complete system (selected), and ACES ADSS cable selection only. A welcome message explains the tool's purpose for automatic selection of ADSS cable design. Below this, there is a "More information" section with "Save" and "Open" buttons. A "Step 1" and "Step 2" progress indicator is visible. A "Bill of Material" section contains a "Calculate" button and a "Specification, pdf" download link. An "Open" dialog box is open, showing a table with columns for Name, Share, and Actions. The table has one row for "Project code:" with an input field and an "OPEN" button. At the bottom, there are logos for Incab and PIP, along with a disclaimer: "Calculation results from ACES are recommendations for project estimating purposes and may not be suitable as a final engineering work product. Please contact our Incab project engineering team for assistance or to verify calculation results for your project: +1 833-344-6222 or aces@incabamerica.com. ACES was developed by Incab in partnership with Preformed Line Products, and we very much appreciate their assistance."

ACES SISTEMA AVANZADO DE INGENIERÍA DE CABLES

Intentalo!

Start ACES





Incab

Agradeceremos sus comentarios sobre el software



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