

- 1. Install COLDNet Pole and open application
- 2. Select File>New
- 3. Give the file a name, e.g. ComplexPointLoadExample
- 4. The following screen below will appear. Select Parameter File Locations>Add Directory to navigate to the location where the Design Parameters/Libraries have been stored locally on the machine. Once selected Close Manage Directories window and double click on the desired parameter file from the list. For this example, select the Design Parameter file called **EQCyclonic**.

G COLDNet Pole: C	C:\Users\Jacquie\Documents\COLDNet	\TestFiles\ComplexPointLoadExample.0	OLDPole						- 🗆 ×
File Designs	Configuration Reports Strength	Factors Export to DXF 3D Vie	w Job History Print Settin	gs Information	n		Display Options + Draw	Options Measure - Cross-Sections - Print	
Current Design:	32	Foundation			Job Description:	P	lan Profile		
Pole Details	5	Soil Type:							
Asset No:		Soil Passive	Use No	n-Standard					
Group:	. 🗸	Resistance (kPa/m):	Soil						
Length:		Setting Depth (m):	VISE Nor Setting	-Standard Depth					
Strengths		Stabilised Backfill:							
Measured Strength		Width Below Ground (mm):							
(kN):		Pole Bases	& Logs Offset (m)	Direction (°)					
Pole Angle (°):	210	Pole Base:							
		Upper Log:							
		Lower Log:	G Select Parameter - Doul	le click mouse to	select		– 🗆 ×		
	Add Profile		Parameter File Location	Load CATAN	Design Set Cancel Use h	ighlighted file			
Survey Data Simp	ple Point Loads Complex Point Load	ds Results Images	File Path						
Show Results	Show All Hide All		C:\Users\Jacquie\Docume	nts\COLDNet\Lit	braries\EQCyclonic.cdc.xml				
Tieleade	Foundations Holio Her	in Midness Midness	C:\Users\Jacquie\Docume	nts\COLDNet\Lit	braries\EQNonCyclonic.cdc.xm	1			
				_			Easting:-43.75 Northing	54.11	
Conductors Cross	sarms Pole Plant Stays								
Profile									
Pole Crossarn	Add New Circuit	Remove Selected	Circuit					Show Kingbolt Height Show Wire Detail	Show Height of Wires
Circuit	Common Crossarm Attach	ment Type Conductor	Everyday Load (%CBL)	Crossarm Group	Crossarm	Locked POA	POA (m)	Crossarm Span Length Ruling Span Angle (*) (m) (m)	
End Crossarms	5								
Circuit	Attachr	ment Type		Crossarm Group	Crossarm		POA (m)	Crossarm Angle (°)	

5. The design criteria and libraries can be viewed by selecting Configuration from the top menu on the main screen.

ent Libraries	nductors 14	oltages Doles D	ole Bases	rossarme	Soil To	105 St.	ove Pe	le Plant									
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					C	anne Lo	cation w	here the	libraries are S	tored					Tension Calculation Nethod	PullasCoan	
						ange co		more the								Kungapan	
Librarie															Pole Allowable Tiploa Calculation Method	d j: PoleStrength ~	
Conductor Libra	ry: C:\Use	sers\Jacquie\Docum	ents\COLDNe	it\Librarie	s\Default	COLDC	onducto	rs						Change File	Pole Tipload Bending above Stav	N	
Voltage Libra	ry: C:\Use	sers\Jacquie\Docum	ents\COLDNe	t'U.ibrarie:	s\Default	.COLDV	oltageDa	sta						Change File	Calculation Method: PoleStrength ~		
Pole Libra	ry: C:\Use	sers\Jacquie\Docum	ents\COLDNe	it\Librarie	s\Default	.COLDP	oleGroup	s						Change File	Foundation Calculation Nethod	ModifiedBroms	
Pole Base Libra	ry: C:\Use	sers\Jacquie\Docum	ents\COLDNe	styLibrarie	s\Default	COLDP	piebase							Change File			
Crossarm Libra	ry: C:\Use	sers vacquie (Docum	ents\COLDNe	stylibrarie:	sypefault	COLDX	arms							Change File	Calculation Options	Bloweut Conditions	
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Stay Libra	ry: Critose	sers bacquie (bocom	ents (COLD/re	at the set	ND-f-uk	COLDS	al official	P						Change File	Calculate Foundations	Temperature (*C): 35	
ad Cases	Temperature	Wind	Radial Thickness	Density of Ice			6	0	Live Lead		Live		Use Span	Use Span Reduction	Calculate Crossarms Uplift Load Cases Name Temperature (°C) (°C)	Default Soil Type: Medium Vid-Span 'K' factor: 0.40 Pressure (Pa)	
Name 7	Temperature (°C)	e Wind Pressure (Po)	Radial Thickness of Ice or Snow (mm)	Density of Ice or Snow (kg/m²)	A (Wn)	B (Gs)	C (Gc)	D (Pt)	Live Load Vertical (N)	E	Live Load Horz. (N)	G	Use Span Reduction Factor Synoptic Winds	Use Span Reduction Factor Downdraft Winds	Calculate Crossarms	Default Soil Type: Medium V Mid-Span 'K' factor: 0.40 Pressure (Pa)	
Name T	Temperature (°C) 2	 Wind Pressure (Po) 25 1200 	Radial Thickness of Loe or Snow (mm)	Density of Ice or Snow (kg/m²)	A (Wn) 1.00	B (Gs) 1.10	C (Gc) 1.25	D (Ft) 1.25	Live Load Vertical (N) 0.00	E 0.00	Live Load Horz. (N) 0.00	G 0.00	Use Span Reduction Factor Synoptic Winds	Use Span Reduction Factor Downdraft Winds	Calculate Crossarms	Default Soil Type: Medium v Nid-Span 'K' factor: 0.40 Pressure	
Name 1 Limit State Sustained	femperature (°C) 2 1	e Wind Pressure (Pa) 25 1200 15 0	Radial Thickness of Ice or Snow (mm) 0 0	Density of Ice or Snow (kg/m ²) 0	A (Wn) 1.00 1.00	B (Gs) 1.10 1.10	C (Gc) 1.25 1.10	D (Ft) 1.25 1.10	Live Load Vertical (N) 0.00 0.00	E 0.00 0.00	Live Load Horz. (N) 0.00 0.00	G 0.00 0.00	Use Span Reduction Factor Synoptic Winds	Use Span Reduction Fedor Downdraft Winds	Catoulate Crossarms D Uplift Load Cases Name Temperature Wind (Note: Section 2000) Section 2000	Default Soil Type: (Medium v Nid-Span Kr factor: 0.40	
Name ¹ Limt State Susteined	Femperature (°C) 2 1	 Wind Pressure (Po) 25 1200 15 0 	Radial Thickness of Ice or Snow (mm) 0 0	Density of Ice or Snow (kg/m ²) 0 0	A (Wn) 1.00 1.00	B (Gs) 1.10 1.10	C (Gc) 1.25 1.10	D (Pt) 1.25 1.10	Live Load Vertical (N) 0.00 0.00	E 0.00 0.00	Live Load Horz. (N) 0.00 0.00	G 0.00 0.00	Use Span Reduction Factor Synoptic Winds	Use Span Reduction Factor Downdraft Winds 	Catoulate Crossarms 22	Defeuit Seil Type: Medium v Néd-Span YC factor: 0.40 Pressure	



COLDNet Pole – Complex Point Load Example

- 6. If applicable, record the pole Asset No.
- 7. Select the Group, Length and Strength of the pole from the dropdown menus on the main form
- 8. Select Soil Type and Setting Depth from the dropdown menus
- 9. Select the Complex Point Loads tab
- 10. To add a new Complex Point Load select Add New Point Load
- 11. Enter in the details of the conductor load. An example has been given below

COLDNet Deley Civiliseers Incernie		t\TestEiles\Comp	levDointl ondEvans						
COLDINEL POLE: C:\USEIS()acquie	Cocuments (COCDINE	i e i e e			0 1 1 0 H				
File Designs Configuration	Reports Strengt	in Factors Exp	Soft to DXF 3D	View Job Histor	y Print Settin	gs Informatio	n		
Current Design: Design1		Foundation					Job Description:	1	
Pole Details			Soil Type: Med	dium	~				
Asset No:		Soil Pass	ive ooo		Use No	n-Standard			
Group: Wood	~	Resistan	ce (kPa/m): 900		Soil				
		Setting	Depth (m):	5		-Standard			
Length: 12.5 m	~	-	1.0	5	Setting	Depth			
Strength: 5 kN	~	Stabilis	ed Backfill:		_				
Measured Strength		Gro	und (mm):						
(kN):			Pole Bas	ses & Logs	Offset (m)	Direction (°)			
		Pole Base:	<none></none>	~					
		Lipper Log							
		opper cog.	<none></none>	~					
Add Profile		Lower Log:	<none></none>	~					
Survey Data Simple Boist Loads	Complex Point Los	ds Deculto To							
Survey Data Simple Point Loads	, complex rollic cod	Results II	nages						
					Add Net	v Point Load	F	Remove Selected I	Point Load
Description	Bearing (°)	POA (m)	POA End (m)	Conductor Group	Conductor	Everyday Load (%CBL)	No. of Wires	Span Length (m)	Ruling Span (m)
Load1	30	8.00	7.50	Standard	SC/AC 3/2.75	10.00	4	75.00	75.00
Load2	200	8.00	7.00	Standard	SC/AC 3/2.75	10.00	4	100.00	100.00

12. Select the Results tab and Show All to view the basic results

Elle Designe		ie (o ocumento (e o co	Net\TestFiles\Co	omplexPointLoadExa	mple.COLDPole							- 0 ×
File Designs	Configuration	Reports Stre	ingth Factors	Export to DXF 3	D View Job His	tory Print Setting	gs Informatio	n		Display Options • Draw Option	ns Measure • Cross-Sections • Print	
Current Design	: Design1		Foundati	ion				Job Description:		Plan Profile		
Pole Details	-			Soil Type: M	edium	~					North (Y) 0°	
Asset No:			Soil F	Passive 90	00	Use Nor	n-Standard					
Group:	Wood	~ .	Resis	stance (kPa/m):								
Length:	12.5 m	~	Setti	ing Depth (m): 1.	.85	✓ Use Non Setting I	n-Standard Depth					
Strength:	5 kN	~	Stal	bilised Backfill: 🗌								
Measured Strength				Width Below Ground (mm):							*	
(kŇ):				Pole B	Bases & Logs	Offset (m)	Direction (°)				/ 15.80kN	
			Pole Bar	se: <none></none>								
			Upper L	.og: <none></none>								
				001 alleges								
	Add Profile			<none></none>								
Survey Data Simp	ple Point Load	Is Complex Point	Loads Results	Images								
Show Results	Show	All Hide All										<u>Edst(</u>
Tiploade	Z Foundatio		Horiz Midenan	Vert Midnean		Z Stay Calce 2	Simple Point L	ade 🔽 Complex Point Loade 📿 Cross	arm Calce			
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Pole Tip Loads	Loadcase	Nominal Strength (kN)	Pole Strength Factor	Allowable Load (kN)	Calculated Load (kN)	Utilisation (%)	Vertical Load (kN)		^			
	Limit State	12.50	1.00	12.50	0 6.26	50.11	0.97	· · · · · · · · · · · · · · · · · · ·				
	Limit State Sustained	12.50 12.50	1.00	12.50	0 6.26 0 1.31	50.11	0.97					
	Limit State Sustained	12.50	1.00	12.50	0 6.26	50.11	0.97					
Foundation	Limit State Sustained Loadcase	12.50 12.50 Soil Passive Resistance (kPa/m)	1.00 1.00 Strength Factor	12.50 12.50 Allowable Load (kN)	Calculated Load (kN)	50.11 10.47 Utilisation (%))	0.97				18.23kN	
Foundation	Limit State Sustained Loadcase Limit State	12.50 12.50 Soil Passive Resistance (kPa/m) 900	1.00 1.00 Strength Factor 0.6	12.50 12.50 Allowable Load (kN) 6.16	0 6.26 0 1.31 Calculated Load (kN) 5 6.26	50.11 10.47 Utilisation (%)) 101.68	0.97				16.236N	
Foundation	Limit State Sustained Loadcase Limit State Sustained	12.50 12.50 Soil Passive Resistance (kPa/m) 900 900	1.00 1.00 Strength Factor 0.6 0.2	12.50 12.50 Allowable Load (kN) 6.16 1.75	0 6.26 0 1.31 Calculated Load (kN) 5 6.26 5 1.31	50.11 10.47 Utilisation (%)) 101.68 74.96	0.97				16.23KN	
Foundation	Limit State Sustained Loadcase Limit State Sustained	12.50 12.50 Soil Passive Resistance (kPa/m) 900 900	1.00 1.00 Strength Factor 0.6 0.2	12.50 12.50 Allowable Load (kN) 6.16 1.75	0 6.26 0 1.31 Calculated Load (kN) 5 6.26 5 1.31	50.11 10.47 Utilisation (%)) 101.68 74.96	0.97				16.23KN 1 113.04m	
Foundation Uplift (+ve means uplift)	Limit State Sustained Loadcase Limit State Sustained Loadcase	12.50 12.50 Soil Passive Resistance (kPa/m) 900 900 Profile	1.00 1.00 Strength Factor 0.6 0.2 Crossarm	12.50 12.50 Allowable Load (kN) 6.16 1.75 Common Crosserm	0 6.26 0 1.31 Calculated Load (kN) 5 6.26 5 1.31 Allowable Uplift (kN)	50.11 10.47 Utilisation (%)) 101.68 74.96 Calculated Uplift (kN)	0.97 0.56 Calculated Uplift (kg)				10.23kN 113.23kN 113.94m	
Foundation Uplift (+ve means uplift) <	Limit State Sustained Loadcase Limit State Sustained Loadcase	12.50 12.50 Soil Passive Resistance (kPa/m) 900 900 Profile	1.00 1.00 Strength Factor 0.6 0.2 Crossarm	12.50 12.50 Allowable Load (kN) 6.16 1.75 Common Crossarm	0 6.26 0 1.31 Calculated Load (kN) 5 6 6.26 5 1.31 Allowable Uplift (KN)	0 50.11 10.47 Utilisation (%)) 101.68 74.96 Calculated Uplift (kN)	0.97 0.56 Calculated Uplift (kg)			Easting: -34.20 Northing: -53.5	18.2364 i 13.04m 180* 7	
Foundation Uplift (+ve means uplift) Conductors Cross	Limit State Sustained Loadcase Limit State Sustained Loadcase	12.50 12.50 Soil Passive Resistance (kPa/m) 900 900 Profile	1.00 1.00 Strength Factor 0.6 0.2 Crossarm	12.50 12.50 Allowable Load (kN) 6.16 1.75 Common Crossarm	2 6.25 2 1.31 Calculated Load (kN) 5 6.26 5 1.31 Allowable Uplift (KN)	50.11 10.47 Utilisation (%)) 101.68 74.96 Calculated Uplift (kN)	0.97 0.56 Calculated Uplift (kg)			Easting : 34.20 Northing: - 53.5	10.20kN 113.04m 113.04m	
Foundation Uplift (+ve means uplift) < Conductors Cross Profile	Limit State Sustained Loadcase Limit State Sustained Loadcase arms Pole I	22.50 12.50 Soil Passive Resistance (kPa/m) 900 900 Profile	1.00 1.00 Strength Factor 0.6 0.2 Crossarm	12.50 12.50 Allowable Load (kH) 6.16 1.75 Common Crossarm	2 6.25 2 1.31 Calculated Load (kN) 5 6.26 5 1.31 Allowable Uplift	50.11 10.47 Utilisation (%)) 101.68 74.96 Calculated Uplift (KN)	Calculated Uplift (kg)			Easting:-34.20 Northing:-53.5	10.23kN 113.34m 113.94m 1809	
Foundation Uplift (+ve means uplift) Conductors Cross Profile Pole Crossann	Limit State Sustained Loadcase Limit State Sustained Loadcase arms Pole I	22.50 12.50 Soil Passive Resistance (kPa/m) 900 900 Profile Ment Stays	1.00 1.00 Strength Factor 0.6 0.2 Crossarm	12.50 12.50 Allowable Load (kH) 6.16 1.75 Common Crosserm	a 6.26 b 1.31 Calculated Load (kN) 5 6.26 5 1.31 Allowable Uplift (kN)	50.11 10.47 Utilisation (%)) 101.68 74.96 Calculated Uplift (kN)	Calculated Uplift (kg)			Easting:-34.20 Northing:-53.5	10.22KN 113.04m 113.04m 1009 7 Show Kingbok Height Show Wire Detail	Show Height of Wir
Foundation Uplift (+ve means uplift) < Conductors Cross Profile Pole Crossarn Circuit	Limit State Sustained Loadcase Limit State Sustained Loadcase arms Pole I ns Common Crr	12.50 12.50 Soil Passive Resistance (kPa/m) 900 900 Profile Mant Stays Add New Circ sssarm Att	1.00 1.00 Strength Factor 0.6 0.2 Crosserm uit	12.50 12.50 Allowable Load (kN) 6.16 3.75 Common Crosserm Remove Sel	Calculated Load (kN) Calculated Load (kN) S S Allowable Uplift (kN)	50.11 10.47 Utilisation (%)) 101.68 74.96 Calculated Uplift (kN)	0.97 0.56 Calculated Upift (kg)	Crosserm Lac	cked POA	Easting:-34.20 Northing:-53.5 POA (m) Crossarm Angle (*)	10.234m 113.04m 113.04m 100* 57 57 59 50 Wire Detail	Show Height of Wir
Foundation Uplift (+ve means uplift) < Conductors Cross Profile Pole Crossarn Circuit	Limit State Sustained Loadcase Limit State Sustained Loadcase arms Pole I ns Common Cre	12.50 12.50 Sol Passiva Rasistance (kPa/m) 900 900 Profile Nent Stays Add New Circ bssarm Att	1.00 1.00 Strength Factor 0.6 0.2 Crosserm uit	12.50 12.50 Allowable Load (kN) 6.16 1.75 Common Crossarm Remove Sel	Calculated Load (kN) Allowable Uplift (kN)	50.11 10.47 Utilisation (%)) 101.68 74.96 Calculated Uplift (kN) Uplift (kN) Uplift	0.97 0.56 Calculated Upift (kg)	Crosserm Loc	ked POA	Easting:-34.20 Northing:-53.5 POA (m) Crosserm Angle (*)	10.2354 10.2354 100 ⁺ 7 5how Kingbolt Height Show Wire Detail	Show Height of Wir
Foundation Uplift (+ve means uplift) Conductors Cross Profile Pole Crossarm Circuit End Crossarm	Limit State Sustained Loadcase Limit State Sustained Loadcase arms Pole I ns Common Cro	12.50 Soil Jasaive Reistave 900 Profile Nant Stays Add New Circ assarm Att	1.00 1.00 Strength Factor 0.6 0.2 Crosserm	12.50 12.50 Allowable Load (kt) 6.16 1.75 Common Crosserm Remove Sel	0 6.26 0 1.31 Calculated Load (kN) 6 5 6.28 6 8 1.31 Allowable Upinft (KN) lected Circuit uctor	50.11 10.47 Utilisation (%)) 101.68 74.96 Calculated Uplift (%)	0.97 0.56 Calculated Upift (kg)	Crosserm Loc	cked POA	Easting:-34.20 Northing:-53.5 POA (m) Crossarm Angle (*)	10.235N 113.04m 110.* 57 59 59 59 59 59 59 59 59 59 59	Show Height of Wire
Foundation	Limit State Sustained Loadcase Limit State Sustained Loadcase arms Pole I ms Common Cre	12.50 Soil Pasoive Resistance (kPa/m) 900 900 900 Profile Nart Stays Add New Circ Sassarm Att	1.00 1.00 Strength Factor 0.6 0.2 Crosserm uit achment Type	12.55 12.50 Allowable Load (kit) 6.16 1.75 Common Crosserm Remove Sell Condu	0 6.26 0 1.31 Calculated Load (kh) 6.265 5 1.31 Allowable Uplift (kN) 1.31 Allowable Uplift 1.31 uctor 1.31	50.11 10.47 Ublination (%)) 101.68 74.95 Calculated Uplift (kW)	Crosserm Group	Crossrm Loc	cked POA	POA (m) Crosserr POA (m) Crosserr	13.2264 13.24m 13.64	Show Height of Wire