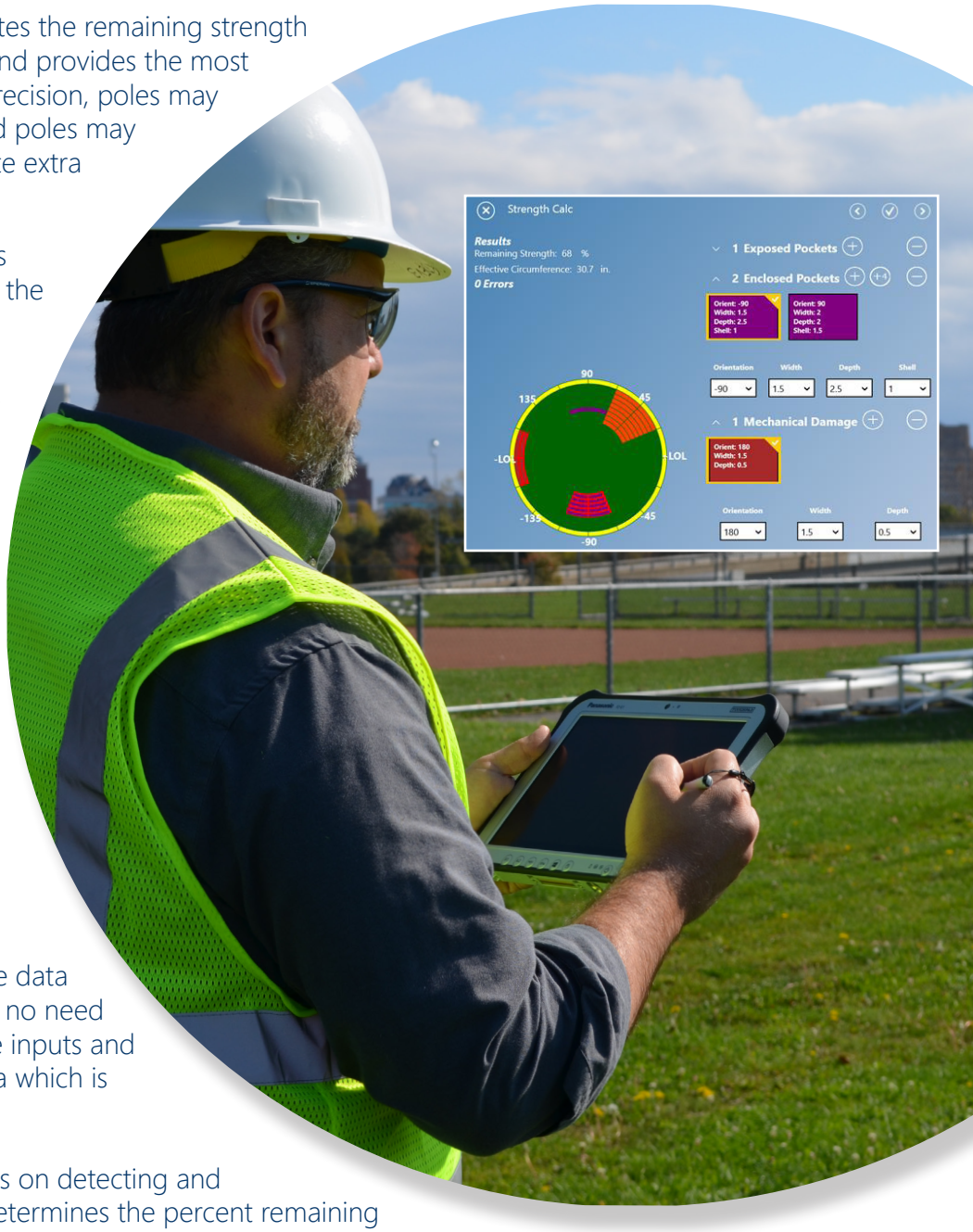
Assessing Pole Strength with StrengthCalc®

StrengthCalc software precisely calculates the remaining strength of in-service wood poles in real-time and provides the most accurate pass/fail decisions. Without precision, poles may be replaced unnecessarily or weakened poles may remain in service. Both outcomes create extra cost and risk for pole owners.

StrengthCalc software models the cross section of decaying poles in relation to the wind loading. Both the severity and orientation of decay in respect to wires and equipment are taken into account. These variables enable precise calc-ulations that provide the remaining strength as a percent of the original strength.



- ✓ Assesses the effects of decay and damage
- ✓ Provides real-time calc-ulations expressed as a percent of remaining strength
- ✓ Increases the precision of pass/fail decisions

StrengthCalc is integrated with Osmose data collection software. As a result, there is no need to transfer data. All decay and damage inputs and outputs are included with the pole data which is delivered to the pole owner.

Highly trained Osmose inspectors focus on detecting and measuring decay while StrengthCalc determines the percent remaining strength. **Using StrengthCalc, Osmose technicians produce highly accurate strength data, enabling pole owners to more effectively manage their pole plants, reduce risks, and save money.**

Reduce Risk & Lower Cost with Highly Accurate Pole Strength Analysis

Adding StrengthCalc to your pole inspection program will likely reduce the number of replacements when compared to other methods for determining remaining strength. Traditional methods, such as slide rules or automated spreadsheets, use less precise, more conservative tables or depend on subjective inspector decisions.

SAVINGS FROM STRENGTHCALC

A pole owner can typically expect 3% to 7% of the poles in their plant to have a remaining strength between 67% and 85%. On average, one-fifth (20%) of these poles would typically be rejected by less precise software or methods.

For every 10,000 poles inspected, an owner can potentially avoid $180,000 to $420,000 in unecessary replacement costs by having poles evaluated with StrengthCalc (assuming change-out costs of $3,000).

10,000 poles inspected
X 4%

400 poles with 67%-85% remaining strength
X 20%

80 poles likely rejected by less precise method
X $3000 average per pole replacement cost

$240,000 in unecessary replacement costs

COMPARING STRENGTH EVALUATION SOFTWARE & METHODS

Feature	StrengthCalc®	D-Calc™	Manual Slide-Rule	Automated Slide-Rule	Resistograph
Provides real-time section modulus calculations	✓	✓			
Is fully integrated with data collection software	✓				
Remainng strength is expressed as a percentage of original strength	✓	✓			
Provides decay details with individual pole records	✓				
Accounts for orientation of decay as it relates to the line of lead	✓	✓	*	*	
Accounts for localized buckling	✓				
Does NOT use automated circumference tables	✓	✓	N/A		N/A

* Inaccurately accounts for orientation

Contact your local Osmose representative or:

CALL 716.319.3423 | EMAIL poleinfo@osmose.com