

Overhead Solutions: Wedge Pressure Technology

Justin Opel | Alex Czibur

EVERY CONNECTION COUNTS

ENERGY SOLUTIONS

**GRID CONNECTIVITY
+ RELIABILITY**





Justin Opel
Product Manager

justin.opel@te.com



Alex Czibur
**Field Service Solutions &
Installation Training Manager**

alexander.czibur@te.com

TE.com/overhead

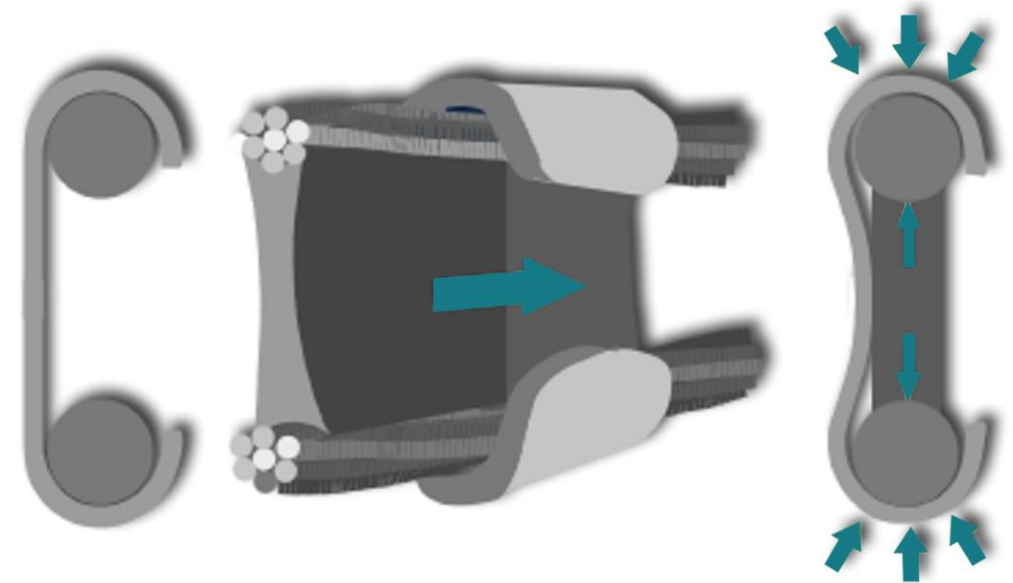
IS YOUR UTILITY NETWORK EXPERIENCING INCREASED LOAD OR DEMAND?

With TE AMPACT Wedge Pressure Technology, your Grid...



Wedge Pressure Technology

- **Elastic property** of C-member of Wedge connector maintains constant force within the connection for the life of the connector while compensating for the thermal expansion or creep.
- AMPACT wedge technology combines the **abrading action** between the conductor & connector surfaces with an inhibitor with abrasive particles which removes the oxide layers & seals the connection and prevents air from reaching the mated materials.
- Simple, foolproof method for connector installation. No fatigue for operator for series of installations. Ensured Installation Process with **Repeatability & Reliability**



Ensuring Your Grid Is More Reliable



AMPACT tap connectors use the action of an aluminum wedge to secure the two conductors to be connected at opposing ends of the C-clamp. The wedge is inserted at a speed of about 150ft/s using the AMPACT connector tool.

AMPACT Tap Connectors



Six Sigma Approach
 Recommends no more than
3.4
 defects per 1 million units



0.05
 defect/failure
 rate per 1 million units



Field Proven with
60+
 years of experience

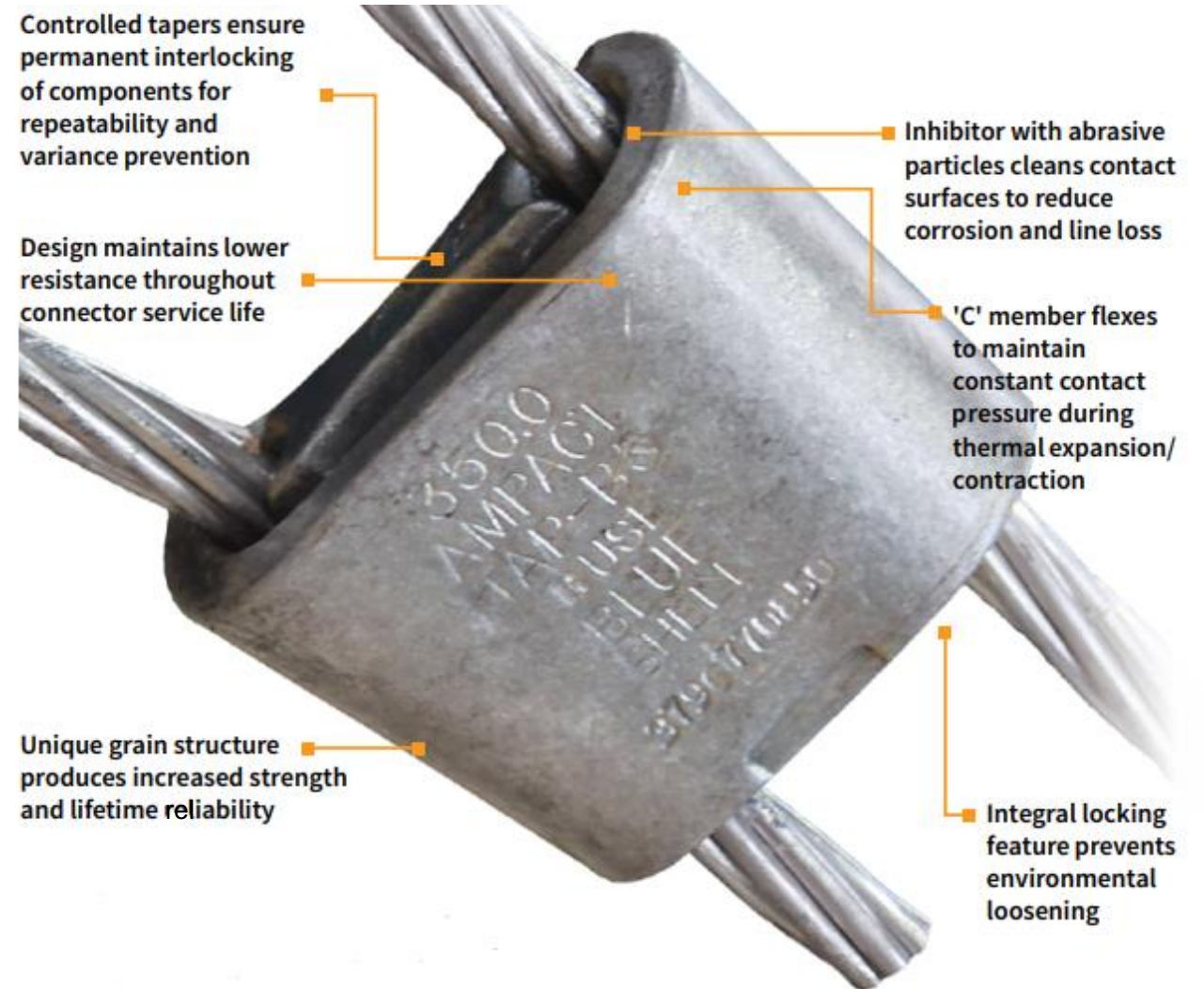


+204 million
 pieces installed
 worldwide in past
 50 years

Demonstration

Features and Benefits

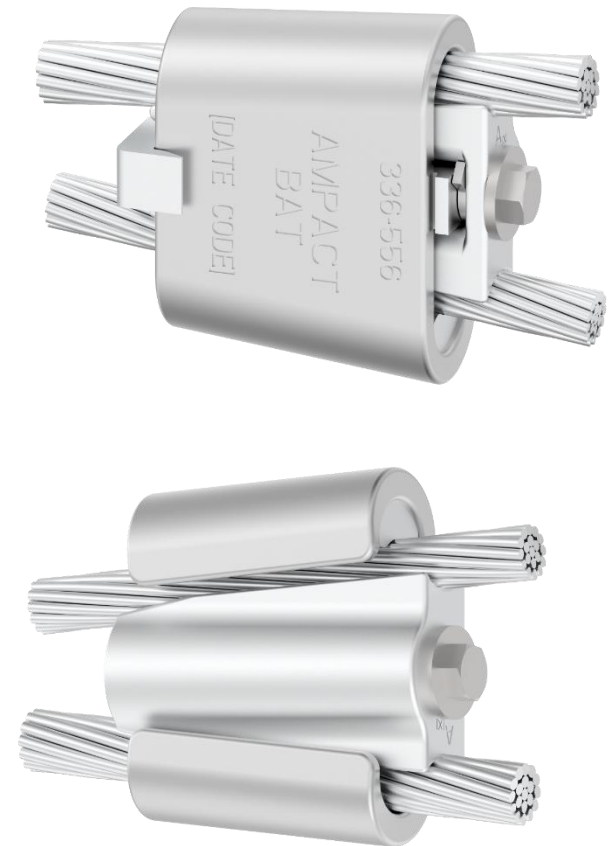
- Installing taps takes a **fraction of the time** needed for conventional crimp-type connectors
- Taps may be used to connect **multiple conductor combinations**
- No **damage** to the conductors when installing or removing tap
- Lightweight, power actuated tools require **minimum operator effort**
- Designed to **compensate for thermal fluctuations**



NEW! Product Line Extension

AMPACT BAT (Bolt Actuated Tap) Connector

- TE's AMPACT BAT is the second generation of TE's wedge-pressure connectors which provides the proven performance of AMPACT fired-on wedge connectors **without the requirement of a powder-actuated installation tool**.
- With this range extension, utilities benefit from a **broader application range served by fewer parts** – streamlining the logistics as well as easing installation.

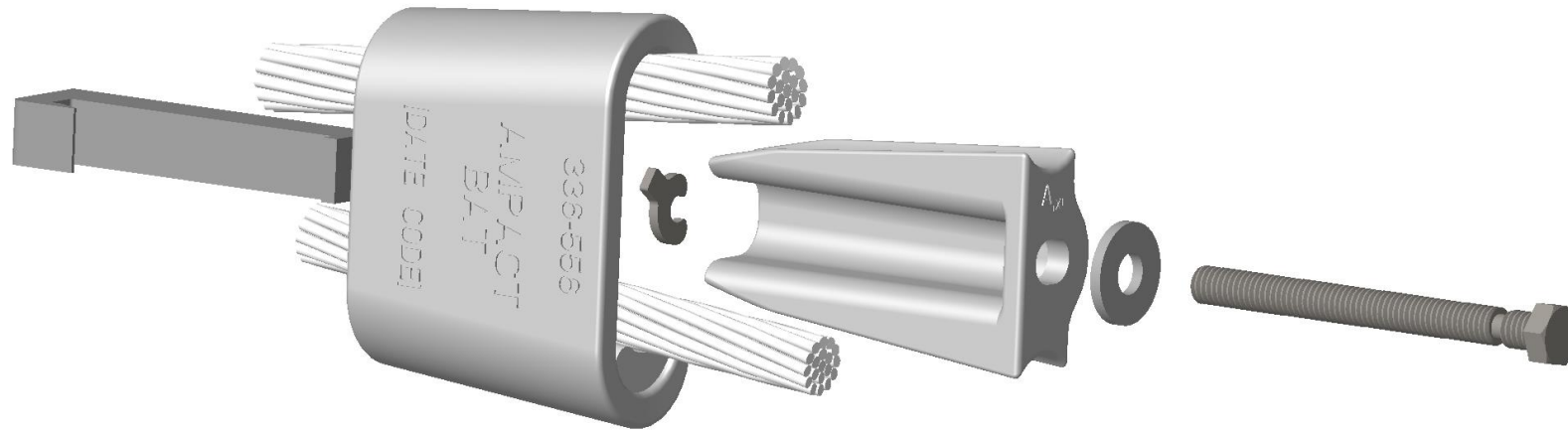


AMPACT BAT – Features & Design Considerations

A combination of class leading technical strengths and user-friendly installation with industry standard tools. It can be installed using gloved or hot stick methods instead of a special powder actuated tool.

Qualified to

- **ANSI C119.4 Class AA** standards



Connect Multiple Conductor Combinations

- The AMPACT BAT can accommodate multiple different conductor combinations within a single connector, in turn reducing the number of connector SKU's required by our customers.
- Over **50% reduction** when compared to the legacy AMPACT application range.

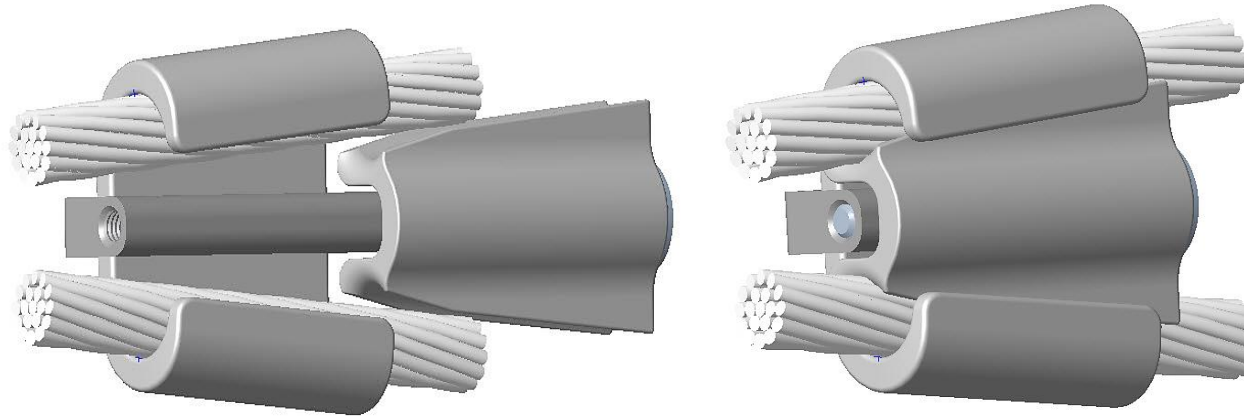
Application range:

- Main: #6 AWG to 795 MCM (4.11 to 28.14mm diameter)
- Tap: #6 AWG to 795 MCM (4.11 to 28.14mm diameter)

Conductor Range Covered by 29 Connectors



Demonstration



- Elastic property of C-member of wedge connector **maintains constant force** within the connection for the life of the connector while compensating for the thermal expansion or creep.
- Knock in feature for safety on the line and **quick hands-free** install scenario.
- The inhibitor present in wedge pressure technology has abrasive particles that remove the oxide layers and seal the connection between the conductor and the connector, **protecting the mated materials from the environment**.
- Solid stop for **visual inspection** of fully installed connector.
- No **fatigue** for operator for series of installations.
- Ensured installation process with **repeatability, safety, & reliability**.

Supporting You Through Your AMPACT Installation

- TE Supplies AMPACT tooling, provides on-site installer training
- TE reconditions/repairs tooling when required and returns reconditioned tool to installer
- Installer crews responsible for daily/weekly maintenance of tooling (regular cleaning)



EVERY CONNECTION COUNTS

