TECHNICAL DATASHEET

1. Description

Preformed Stainless Steel Ties with Wing Seals are convenient, ready-to-use fastening solutions comprising a specific length of stainless steel banding pre-assembled with an integrated Wing Seal style buckle. This design streamlines installation by having the buckle already attached to the band. These ties provide a strong, permanent mechanical lock achieved by hammering down the buckle's "wings" after tensioning. Manufactured from durable stainless steel, they are suitable for reliable bundling and securing in various industrial and environmental conditions.

2. Key Features

- **Pre-Assembled Unit:** Band and Wing Seal buckle are supplied together, simplifying inventory and speeding up application.
- **Rapid Installation:** Faster to apply than using separate banding and seals, reducing labor time.
- **Secure Wing Seal Lock:** Employs the widely used method of hammered wings for a dependable, permanent fastening.
- **Robust Construction:** Made from stainless steel for high tensile strength and resistance to environmental factors.
- **Corrosion Resistance:** Offered in different stainless steel grades (e.g., 201, 304, 316) to match application requirements.
- **Weather & UV Resistant:** Suitable for outdoor use with excellent resistance to sunlight and weathering.
- **Broad Temperature Tolerance:** Performs reliably across a wide range of operating temperatures.

3. Applications

- Ideal for quick and permanent fastening in numerous applications:
- Bundling electrical cables, conduits, and hoses.
- Securing communication lines.
- Attaching signs, signals, or small enclosures to poles.
- Fastening insulation materials around pipes and ductwork.
- General bundling and securing tasks in construction, manufacturing, and maintenance.
- Use in marine or corrosive environments (SS316 grade recommended).
- Utility infrastructure fastening.

4. Technical Data

- **Material:**
  - Band & Buckle: Commonly Stainless Steel Type 201 (SS201 / UNS S20100), Type 304 (SS304 / UNS S30400), or Type 316 (SS316 / UNS S31600).
- **Buckle Type:** Integrated Wing Seal / Ear-lokt Buckle.
- **Available Widths:** Manufactured in standard banding widths: 3/8" (9.5mm), 1/2" (12.7mm), 5/8" (15.9mm), 3/4" (19.1mm).
- **Preformed Lengths:** Supplied in various standard lengths, each suitable for a specific range of bundle diameters, usually 300~5,000mm.
- **Maximum Bundle Diameter:** Defined by the preformed length of the tie.
- **Thickness:** Standard banding thickness: 0.020"(0.5mm) - 0.030"(0.76mm).
- **Operating Temperature Range:** Consistent with the stainless steel grade used, typically very broad, e.g., -80°C to +538°C (-112°F to +1000°F).
- **Resistance:** Excellent resistance to UV radiation, weathering. Corrosion resistance varies based on the stainless steel grade.

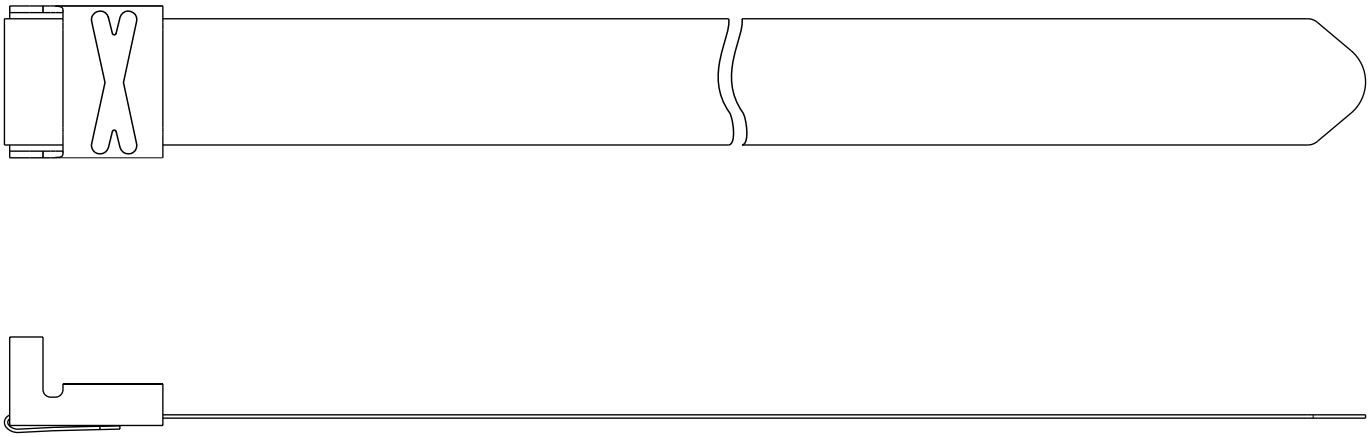
5. Installation Guidance

- **Select Tie:** Choose the preformed tie length suitable for the diameter of the items being bundled.
- **Wrap:** Encircle the object(s) with the preformed tie.
- **Insert Tail:** Feed the loose tail end of the band through the integrated Wing Seal buckle.
- **Apply Tension:** Engage the banding tensioning tool onto the band tail as per the tool's instructions. Tension the band until it is securely tightened around the object.
- **Bend & Cut:** Bend the tensioned band tail back over the buckle (most tools assist with this action) and use the tool's cutter to remove the excess band flush with the buckle.
- **Close Wings:** Use a hammer to strike the buckle's upstanding wings firmly, folding them down flat and tight over the overlapped band layers. Ensure both wings are fully closed to secure the lock.
- **Inspect:** Verify the buckle is tight and the wings are completely flattened for maximum security.
- **Safety:** Always use appropriate safety gloves (cut-resistant) and eye protection during

6. Associated Products

- **Installation Tool:** A manual or pneumatic tensioning tool designed for stainless steel banding, featuring gripping, tensioning, and cutting functions, is required.
- **Hammer:** A standard hammer is necessary for closing the wings of the seal.

7. Specifications



Width		Thickness		Length (mm)	Optional Material
inch	mm	inch	mm		
3/8	9.5	0.015~0.028	0.4~0.7	300~2,000	SS304/316
1/2	12.7	0.015~0.028	0.4~0.7	300~2,000	SS304/316
5/8	16.0	0.015~0.028	0.4~0.7	300~2,000	SS304/316
3/4	19.0	0.015~0.028	0.4~0.7	300~2,000	SS304/316

Disclaimer: The information provided in this datasheet is intended as a general guide. Specific performance characteristics can vary based on application conditions, installation quality, and the specific product variant. Users should evaluate the product suitability for their specific requirements. Manufacturer reserves the right to change specifications without notice.