

# Guide Specifications

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## **Specification #TB11-01**

### **Revision # New: 11-15-01**

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#### **Guidelines for using Tru-Balance Insulated Saddles on Cold Piping At Clevis Hangers and Roller Support Locations.**

#### **1. Scope**

1.1. This specification provides guidelines for the use of Tru-Balance Insulated Saddles at pipe hanger and support locations. This specification will address precautions, limitations and application details for the use Tru-Balance Insulated Saddles at the above locations.

1.2. The product data sheets referenced in the text are listed at the end of this specification.

#### **2. General**

2.1. All of the general preparatory precautions and procedures of installing insulated pipe supports shall be followed. They shall include, but not be limited to the following:

2.1.1. All piping to be supported shall be clean and free of oil, rust, frost and moisture prior to and during support installation.

2.1.2. All insulated saddles and accessories shall be stored in a dry area protected from the weather before and during application.

2.2. There is one method of supporting insulated piping using Tru-Balance Insulated Saddles.

2.2.1. The piping shall be supported on the exterior of the insulation requiring either that the insulation bears the weight of the insulation and piping, or that a load bearing insert composed of Marinite-P structural insulation be provided.

2.3. The method of supporting insulated pipe as described above shall be dealt with in following sections of this guide specification.

### **3. Materials**

3.1. Insulated Saddles shall be made from either rigid polyisocyanurate foam per ASTM C518, available in 3#, 4# and 6# per cubic foot density, or rigid cellular glass insulation per ASTM C552, with a factory applied vapor barrier laminated to a steel support saddle.

3.2. For applications where joint sealant is required (such as below freezing) a non-curing butyl sealant should be applied. For Cellular Glass systems on Chilled Water lines, all joints shall be sealed with a Styrene-Butadiene-Rubber (SBR) sealant.

### **4. Application (cold piping)**

4.1. Completely seal all insulation on cold systems to avoid potential condensation and icing. To avoid these problems, insulated piping shall be supported using Clevis Hangers and Tru-Balance Insulated Saddles designed for cold applications, including but not limited to, the Model 3300E for indoor applications and Models 3300R and model 8900 for outdoor applications.

4.2. MSS-SP 58, Paragraph 4.4 shall govern the dimensions and physical properties of the pipe support saddle.

4.3. MSS-SP 69 shall govern the span distance between pipe support locations.

4.4. When Excessive movement due to expansion or contraction of the pipe system is expected, Roller Supports are indicated. These are generally larger bore pipes and have greater loads. Roller and trapeze type supports create concerns for "point loading" of the support saddle. Install Tru-Balance Model 3300P up to 10" i.p.s., Model 4300P up to 20" i.p.s. or Model 6300P up to 24" i.p.s. and larger. These Insulated Saddles all possess integral ¼" thick structural steel load-bearing plates attached to 12 gauge saddles to accommodate pipe-roller travel.

4.5. The recommended method of attachment on metal jacketed systems is banding at each end with minimum ½" wide .020 Stainless Steel Bands and wing seals, or on indoor applications, tape matching the adjoining jacket may be used. Installers may utilize owner-approved security methods.

4.6. Inspection of the Insulated Pipe Supports and procedures before, during and after installation is the responsibility of the owner.

### **Product Data Sheets:**

1. **Buckaroos Tru-Balance Insulated Saddles Model 3300E**
2. **Buckaroos Tru-Balance Insulated Saddles Model 3300R**
3. **Buckaroos Tru-Balance Insulated Saddles Model 8900**
4. **Buckaroos Tru-Balance Insulated Saddles Model 3300P**
5. **Buckaroos Tru-Balance Insulated Saddles Model 4300P**
6. **Buckaroos Tru-Balance Insulated Saddles Model 6300P**

**This Specification is offered by Buckaroos, Inc. using generally accepted and appropriate technical information, but is not intended to be solely relied upon for specific design or technical applications. Having no control over the elements of design, installation, workmanship or site conditions, Buckaroos, Inc assumes that all design choices and installation will be made by professional persons trained and qualified in the appropriate disciplines. Buckaroos, Inc. disclaims all liability potentially arising from use or misuse of this specification.**

## **Tru-Balance Insulated Saddles Specification**

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**Specification #TB11-02**

**Revision # New: 11-15-01**

### **Guidelines for using Tru-Balance Insulated Saddles on Hot Piping At Clevis Hangers and Roller Support Locations.**

#### **1. Scope**

1.1. This specification provides guidelines for the use of Tru-Balance Insulated Saddles at pipe hanger and support locations. This specification will address precautions, limitations and application details for the use Tru-Balance Insulated Saddles at the above locations.

1.2. The product data sheets referenced in the text are listed at the end of this specification.

#### **2. General**

2.1. All of the general preparatory precautions and procedures of installing insulated pipe supports shall be followed. They shall include, but not be limited to the following:

2.1.1. All piping to be supported shall be clean and free of oil, rust, and moisture prior to and during support installation.

2.1.2. All insulated saddles and accessories shall be stored in a dry area protected from the weather before and during application.

2.2. There is one method of supporting insulated piping using Tru-Balance Insulated Saddles.

2.2.1. The piping shall be supported on the exterior of the insulation requiring either that the insulation bears the weight of the insulation and piping, or that a load bearing insert composed of Marinite-P structural insulation be provided.

2.3. The method of supporting insulated pipe as described above shall be dealt with in following sections of this guide specification.

### **3. Materials**

3.1. Insulated Saddles shall be made from either rigid Calcium Silicate insulation per ASTM C303 for indoor applications, or Perlite Silicate insulation per ASTM C303 for outdoor applications, with a factory applied All-Service Jacket, laminated to a steel support saddle.

### **4. Application (hot piping)**

4.1. Completely cover all insulation on hot systems to avoid intrusion of water and loss of thermal performance. To avoid these problems, insulated piping shall be supported using Clevis Hangers and Tru-Balance Insulated Saddles designed for hot applications, including but not limited to, the Model 1200E for indoor applications and Models 1200R and model 1200WR for outdoor applications.

4.2. MSS-SP 58, Paragraph 4.4 shall govern the dimensions and physical properties of the pipe support saddle.

4.3. MSS-SP 69 shall govern the span distance between pipe support locations.

4.4. When Excessive movement due to expansion of the pipe system is expected, Roller Supports are indicated. These are generally larger bore pipes and have greater loads. Roller and trapeze type supports create concerns for "point loading" of the support saddle. Install Tru-Balance Model 1200P or 1200WRP. These Insulated Saddles all possess integral ¼" thick structural steel load-bearing plates attached to 12 gauge saddles to accommodate pipe-roller travel.

4.5. The recommended method of attachment on metal jacketed systems is banding at each end with minimum ½" wide .020 Stainless Steel Bands and wing seals, or on indoor applications, tape matching the adjoining jacket may be used. Installers may utilize owner-approved security methods.

4.6. Inspection of the Insulated Pipe Supports and procedures before, during and after installation is the responsibility of the owner.

**Product Data Sheets:**

7. **Buckaroos Tru-Balance Insulated Saddles Model 1200E**
8. **Buckaroos Tru-Balance Insulated Saddles Model 1200R**
9. **Buckaroos Tru-Balance Insulated Saddles Model 1200WR**
10. **Buckaroos Tru-Balance Insulated Saddles Model 1200P**
11. **Buckaroos Tru-Balance Insulated Saddles Model 1200WRP**

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