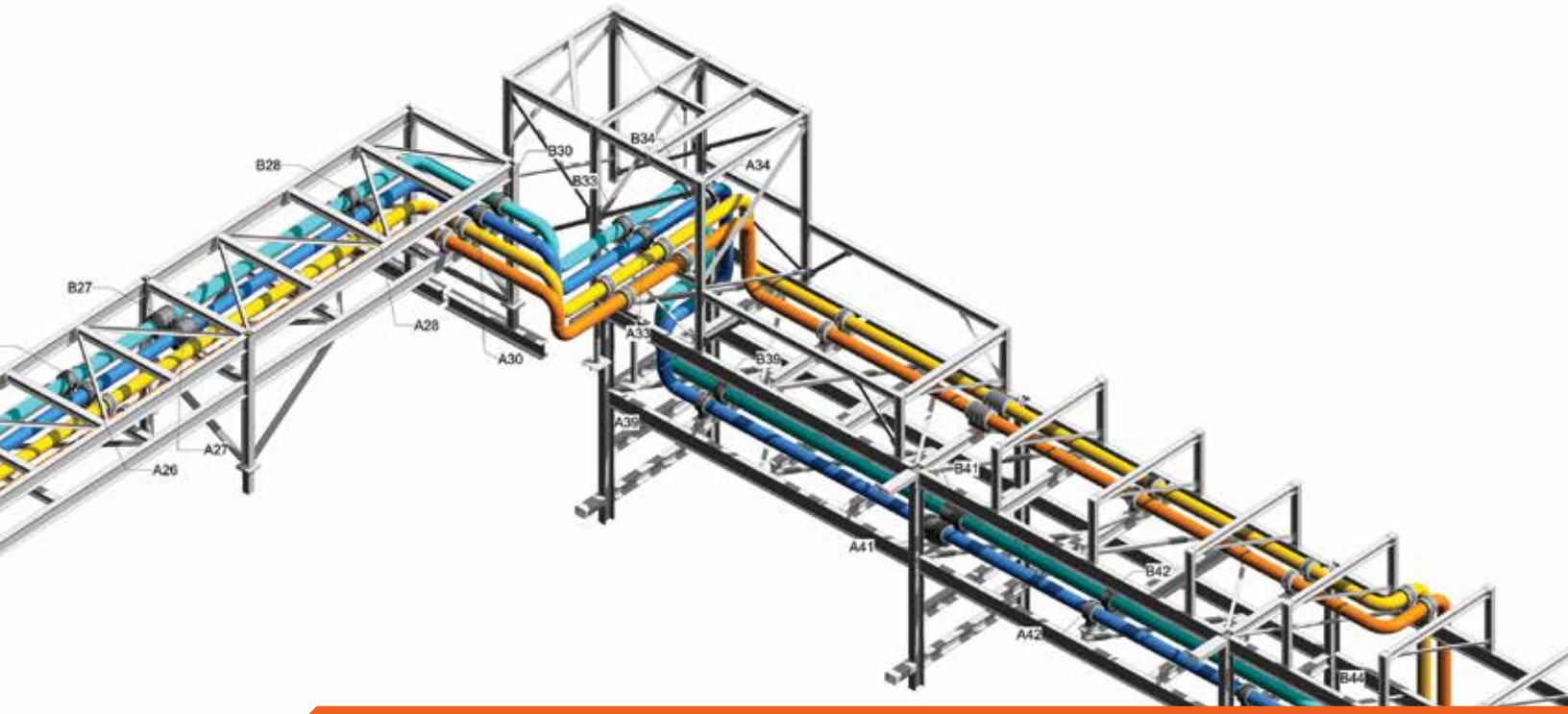
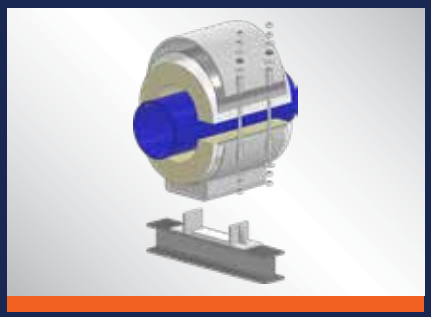


ISAT
TOTAL SUPPORT

Innovation | Engineering | BIM | Fabrication

Engineered Pipe Support Systems

- Pre-Insulated
- Non-Insulated
- Vibration Isolation
- Flexible Connectors
- Pipe Stress Analysis / Stamp
- Modularization Services
- Structural Design / Stamp
- BIM Services



877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Conractor Specialties Inc.

TABLE OF CONTENTS

TABLE OF CONTENTS

ISAT Total Support - A Unified Delivery Method

Pipe Stress • Structural Engineering • BIM Services • Fabrication

In a typical stress analysis workflow there are several stakeholders who work independently of each other, and without consideration to the challenges faced by the others. In most cases the stress analysis engineers determine the stresses and loads on systems and are not involved in the design of the supports themselves. A structural engineering group uses the results from the stress analysis to design the supports and connections to structure; however, do not generally implement the design into the project model to ensure that the supports are clash free and constructable in the field. Additionally, the support design may not take into consideration the types of materials and manufacturing processes which are readily available and cost effective to fabricate, transport and install.

EXPERIENCE MATTERS

Innovation

ISAT takes a holistic design-build approach by eliminating the separation between the stress analysis, structural engineering, modeling and fabrication groups. This ensures that all team members are working together throughout the design to anticipate and respond to design challenges as they arise. This collaborative process radically reduces the time necessary to bring a project from design to fabrication and installation.

Engineering

ISAT's engineering team performs ASME B-31 stress analysis designs for piping systems and take into consideration forces caused by thermal stresses and seismic loads, as well as gravity, pressure, wind, building drift, and even transient loads, such as water hammer. The results of the stress analysis are incorporated into a comprehensive structural support and restraint design which satisfy the most current AISC-360 and ASCE design codes.

BIM

ISAT's VDC team works together with the engineering team to implement the support design into the model using our catalog of parametric families and accurately shows all products and structural members. Once the design is verified as fully constructable and clash free, all material and product information needed to fulfill the design is spooled out of the model and provided to the fabrication team. This process ensures all materials are accounted for early in the design process.

Fabrication

ISAT's fabrication team collaborates with our engineers and modelers to share lessons learned and apply lean, labor, and material saving construction methods to fabricated utility supports.

877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Contractor Specialties Inc.

Custom Support Engineering and Fabrication

In-house design and fabrication capabilities are available to meet project requirements for utility support systems.

Value engineering is core competency of ISAT and customers have come to rely on this service to increase project profitability. Many customers consider it standard practice to bring ISAT's staff in as early as possible on projects, to review drawings and look for alternative means and methods to reduce material and labor costs.

Our in-house design and fabrication team applies lean labor and material saving construction methods to design supports that are easily implemented and primarily use available "off the shelf" components to minimize fabrication and construction lead times. When possible, we avoid using expensive construction methods, such as field welding of structural members.

Commonly Fabricated Items:

- *Supplemental Structural Supports (Angle, Channel, W, WT beams)*
- *Suspended or Base Mounted Pipe Supports*
- *Equipment Stands and Frames*
- *Insulated and Uninsulated Pipe Shoes*
- *Shared Utility Racks*
- *Modularized Utility Rack and Riser Assemblies*






877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Contractor Specialties Inc.

Insulation Options

Three standard insulation options are available (Polyurethane, FOAMGLAS®, Calcium Silicate) to meet most commercial and industrial applications. All insulation types are suitable for pipes up to 120" in diameter with an insulation thickness range of 0.5 inch to 10 inch; ASTM C585 compatible.

POLYURETHANE

- Temperature Range: -450 Deg. F to 225 Deg. F
- Formulated In-House to Meet the Strength Thermal Conductivity Requirements for the Specific Application
- Offers Superior Durability for Ease of Handling During Transport and Installation



FOAMGLAS®

- Temperature Range: -450 Deg. F to 1200 Deg. F
- 100% Moisture Impermeable and Non-Combustible
- Offers Superior Durability for Ease of Handling During Transport and Installation



CALCIUM SILICATE

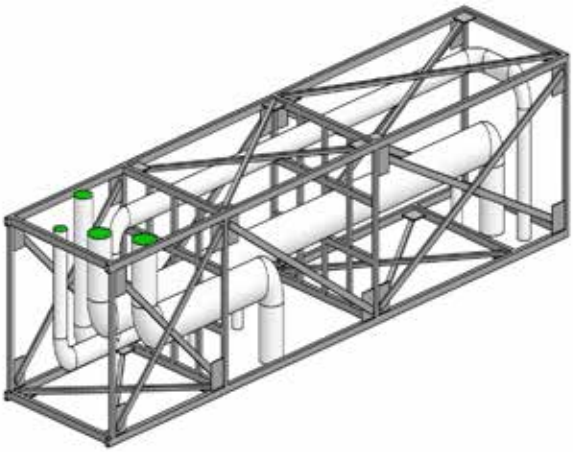
- Temperature Range: 20 Deg. F to 1200 Deg. F
- 100% Moisture Impermeable and Non-Combustible
- High Compressive Strength Suitable for the Most Demanding Load Conditions

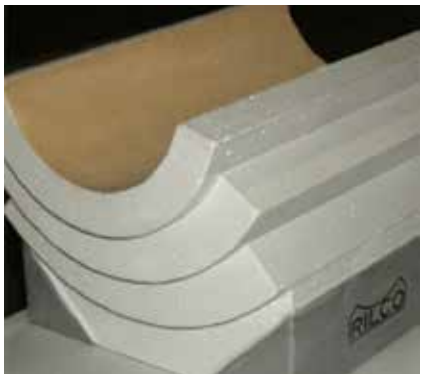


877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Contractor Specialties Inc.

Off Site Manufcturing (OSM)

ISAT's engineered supports are designed with OSM in mind by taking into consideration durability of materials, flexibility of design, ease of installation, handling and rigging capabilities, and transportation resiliency. Whether the OSM manufacturing site is down the road or across the country, ISAT ensures our products can be safely transported, rigged, and installed at the project location, while meeting the unique demands of OSM construction as well as industry cargo transportation standards.





Material Selection

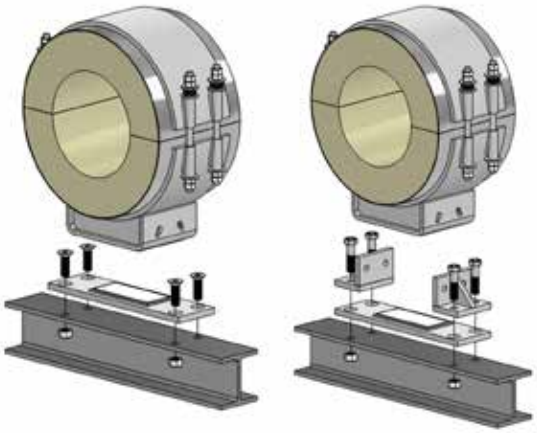
ISAT will work with owners, designers and trade partners to ensure materials are selected, designed, and packaged to withstand transportation, rigging and installation demands while also meeting the performance requirements for the project. This ensures the product arrives to the project location in the same condition that it left the manufacturing site.

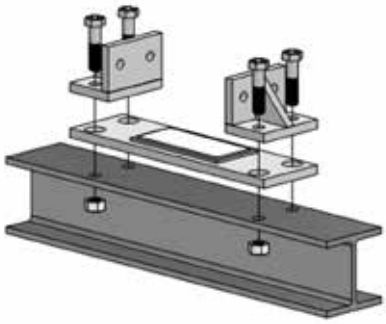
Universal Glide Housing

ISAT's universal glide housing uses the same housing for guides and slides making them interchangeable in the field. Simply adding or removing the Guide Blocks determines the end use.

Traditional supports have different housing configurations for guides and slides preventing them from being interchangeable.

ISAT's universal design allows for more flexibility in the field and enhanced preorder capabilities.





Bolted Fit-Up

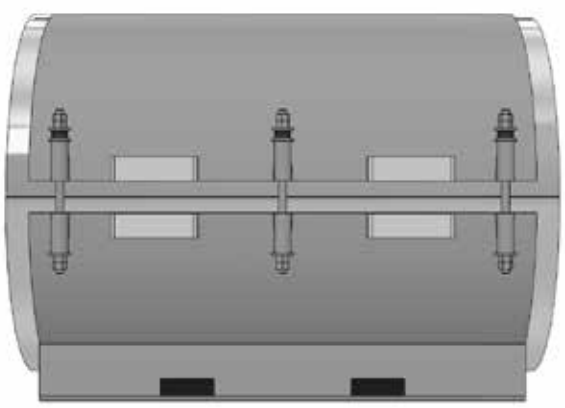
Optional bolted connections reduce installation time and minimize specialized equipment and labor.

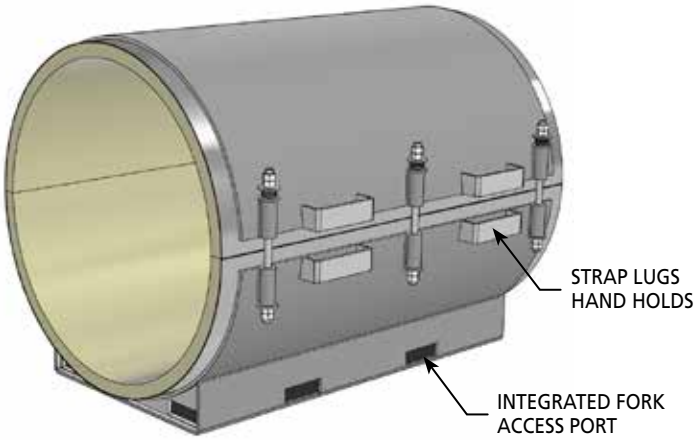
877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Contractor Specialties Inc.

Off Site Manufacturing (OSM) - *Continued*

Material Handling

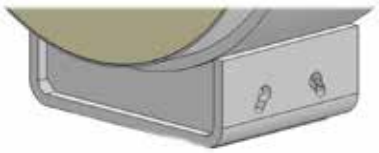
Pipe supports are equipped with a variety of material handling features to make moving, handling, and installation safer, easier and faster. Integrated lifting lugs, fork access points, and strap points are added to ensure that the supports can be easily rigged, installed, and transported.

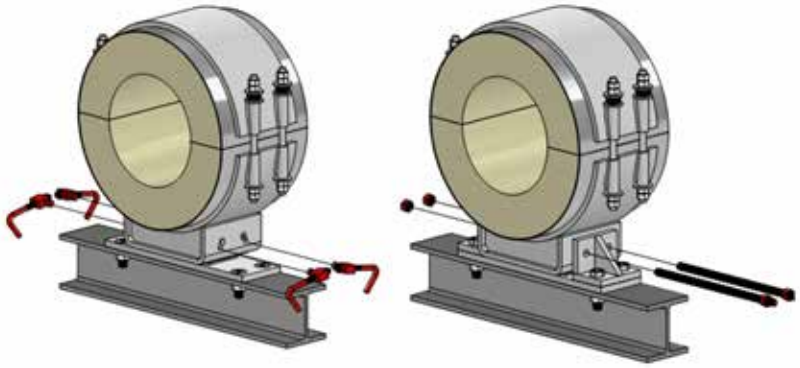


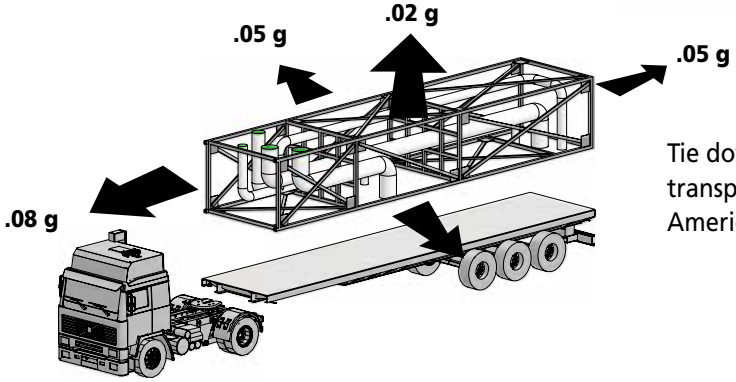


Tie Downs and Transportation Restraints

Integrated tie-down keyways allow the support to be safely secured in place during fit up and transportation. Once the supports are in their final location, the tie down devices can be removed and reused.







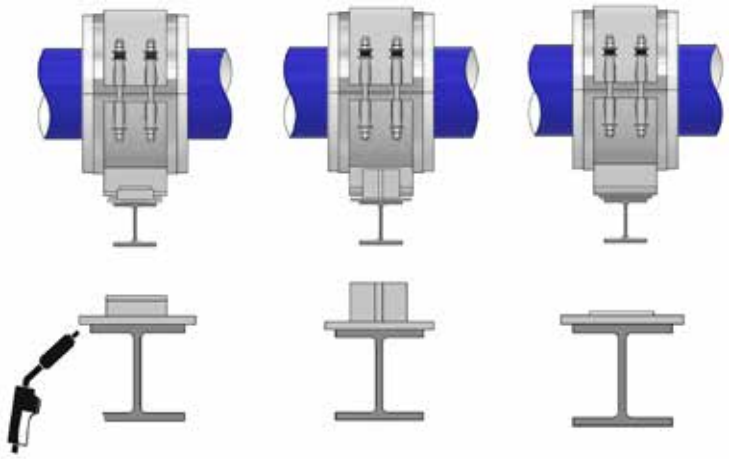
Tie down points are designed to withstand minimum transportation forces in each direction per the North American Cargo Securement Standards.

877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Contractor Specialties Inc.

Extended Base Plate - For Underside Welding

Upon request, ISAT will manufacture the support baseplate wider than the supporting steel member so that all welded connections are located below the bottom plate of the support.

This strategy can be implemented to overcome space constraints, or to facilitate a specific installation sequence. However it has been proven to significantly reduce welding labor costs and could be considered a best practice at all support locations.

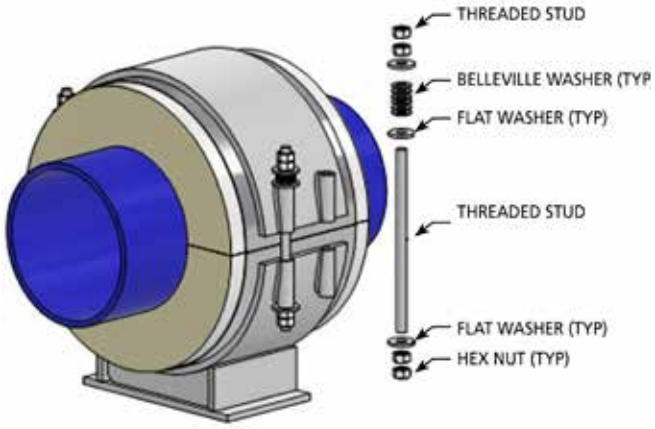


Extended Base Plate

Constant Pressure Sleeve

Our unique Constant Pressure Sleeve (CPS) is the most advanced pipe clamping method in the industry. The assembly utilizes high strength steel sleeves welded to both the upper and lower support components. Belleville washers are placed in line with the fasteners to apply constant pipe clamping force between the upper and lower component.

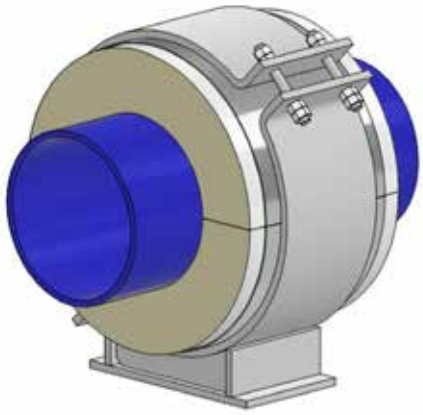
This system is engineered to prevent displacement between the process pipe and the pipe support, while maintaining a constant clamping force throughout the operational temperature range of the utility.



Constant Pressure Sleeve (CPS)

Bent Ear Design (Other Manufacturers)

Other manufacturers utilize a bent ear design, relying on the elasticity of the bent ear to maintain the clamping force throughout the pipe utility's temperature range. This system is less responsive to the expansion and contraction experienced by piping during normal thermal cycles.



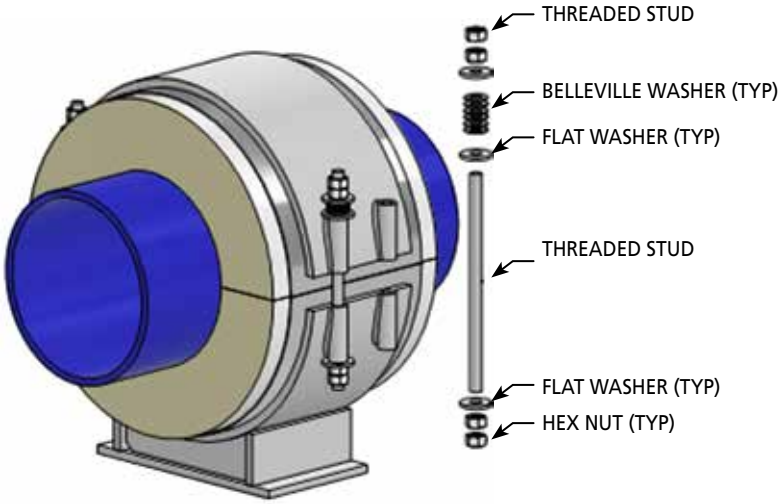
Traditional Bent Ear Design

877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Contractor Specialties Inc.

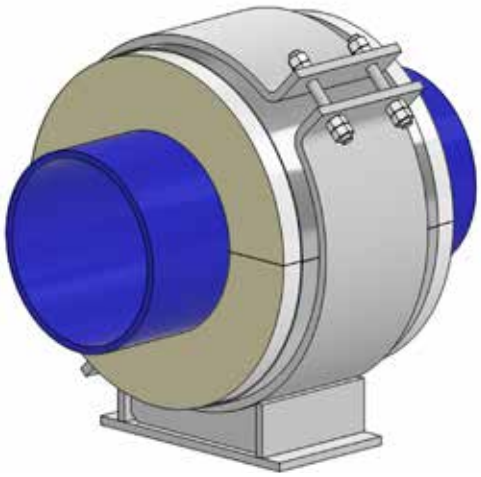
Constant Pressure Sleeve

Our unique Constant Pressure Sleeve (CPS) is the is the most advanced pipe clamping method in the industry. The assembly utilizes high strength steel sleeves welded to both the upper and lower support components. Belleville washers are placed in line with the fasteners to apply a constant pipe clamping force between the upper and lower support component.

This system is engineered to prevent displacement between the process pipe and the pipe support, while maintaining a constant clamping force throughout the operational temperature range of the utility.



Constant Pressure Sleeve (CPS)



Traditional Bent Ear Design

Bent Ear Design (Other Manufacturers)

Other manufacturers utilize a bent ear design, relying on the elasticity of the bent ear to maintain the clamping force throughout the pipe utility's temperature range. This system is less responsive to the expansion and contraction experienced by piping during normal thermal cycles.

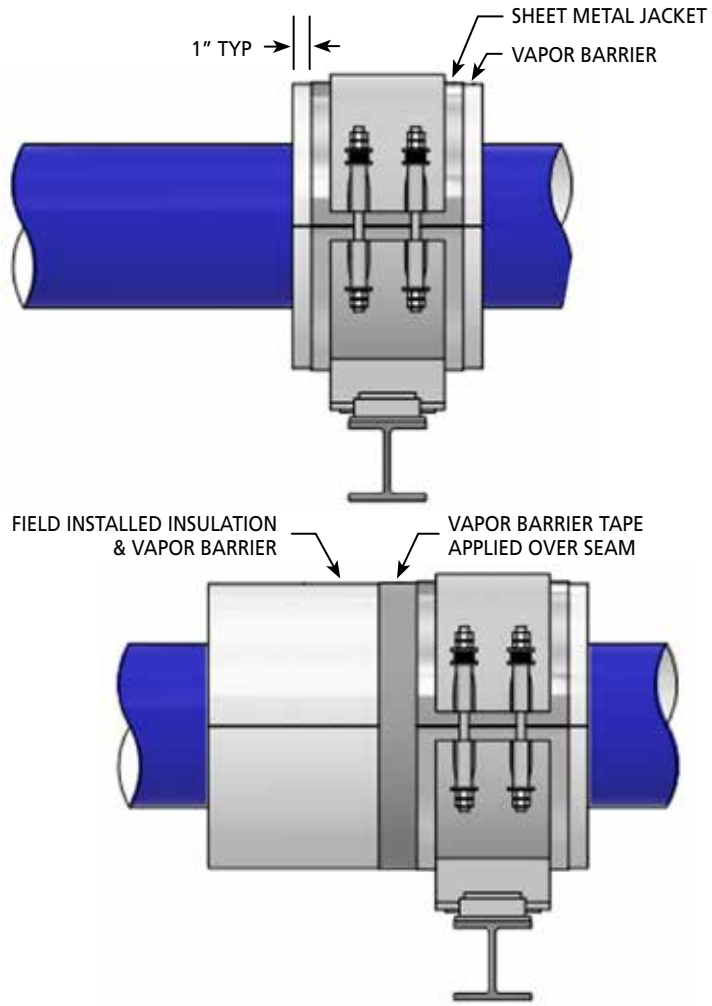
877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Contractor Specialties Inc.

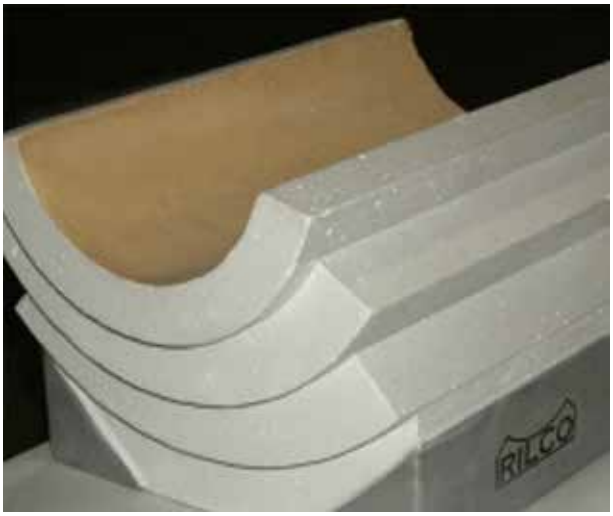
Continuous Vapor Barrier

The vapor barrier creates a shield against the elements and is essential to the integrity of an effective cold support system.

The insulation in our Low Temperate Range Supports include an integral zero permeability vapor barrier which protrudes past the sheet metal jacket. Unlike other manufacturing processes, this method leaves an exposed strip of vapor barrier which can be sealed to form an airtight barrier between the pipe and the outside environment.

This unique construction method enables the field installed insulation and vapor barrier to extend directly to the support's insulating material. The vapor barriers of the pipe and support are then unified using a sealing tape which forms a continuous vapor barrier along the entire pipe run. This construction method and installation process controls condensation which can lead to water damage, field corrosion and diminished thermal insulation.





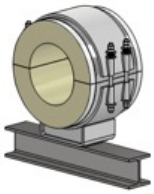
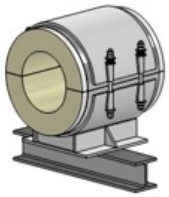
Stepped Insulation Profile

Insulation profiles can be stepped both radially and longitudinally, to tie in with the same layering thickness as the line insulation to prevent a straight heat path to the pipe. This process increases thermal heat loss / gain, as well as limits condensation.

877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Contractor Specialties Inc.

Sliding / Resting Supports (S - Series) – Selection Guide

- Base Mounted Support Used to Resist Loads in the Vertical Direction
- Accommodates Axial Movement up to 4-12" and Lateral Movement up to 2"
- Teflon Slide Plates on Shoe and Support Steel Provides Free Travel in Axial and Lateral Directions
- 1/2" – 72" Nominal Pipe Diameters
- Does Not Require Welding to the Pipe Material
- 3 Insulation Options Available (Polyurethane, Foam Glass, Calcium Silicate)
- Available With or Without Zero Permeability Vapor Barrier

ISAT PART #		AXIAL MOVEMENT	LATERAL MOVEMENT	LOAD CONDITION	PIPE SHIELDS CROSSOVER
S22A		1-1/2"	1/2"	STANDARD	B1000 / B1100
S22B				HEAVY	B1200 / B1300
S22C				EXTRA HEAVY	NO EQUAL
S32A		4-1/2"	1/2"	STANDARD	B2000 / B2100
S32B				HEAVY	B2200 / B2300
S32C				EXTRA HEAVY	NO EQUAL
S23A		1-1/2"	2"	STANDARD	B5000 / B5100
S23B				HEAVY	B5200 / B5300
S23C				EXTRA HEAVY	NO EQUAL
S33A		4-1/2"	2"	STANDARD	B6000 / B6100
S33B				HEAVY	B6200 / B6300
S33C				EXTRA HEAVY	NO EQUAL

Low Temperature Range Supports (-450 deg F to 225 deg F):
- Insulation: Polyuerethane (LP) or Foam Glass (LF)
- Vapor, Barrier: Zero Permeability (for Polyurethane) or Butyl Zero Permeability (for Foam Glass)

High Temperature Range Support, (40 deg F to 1200 deg F):
- Insulation: Calcium Silicate HC or Foam Glass (HF)

Standard Construction:
- Teflon® Slide Plates on Shoe and Supporting Steel
- A36 Steel Construction
- Gallvanized Steel Finish
- A307/A193 B7 Galvanized Fasteners
- Galvanized Sheet Metal Jacket

Special materials, finishes, pipe sizes, insulation types/thicknesses and vapor barrier types are available upon request. Please contact ISAT for custom requirements.

To Order, Please Specify:
- Model Number
- Nominal Pipe Size
- Insulation Thickness
- Pipe Material:
  1) A53/A106, 2) A33 GR6,
  3) SS 304/304L, 0) Other
- Temp Range & Insulation Type:
  Low Temp: Polyurethane (LP), Foam Glass (LF)
  High Temp: Cal. Silicate (HC), Foam Glass (HF)

Example:

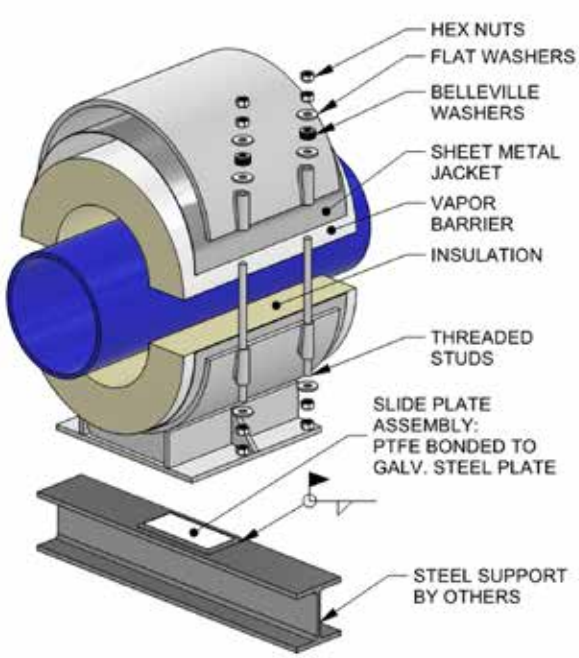
S22A - 8 x 3 x 1 x HC

Model No.	Nominal Pipe Size	Insulation Thickness	Pipe Material	Shoe and Insulation

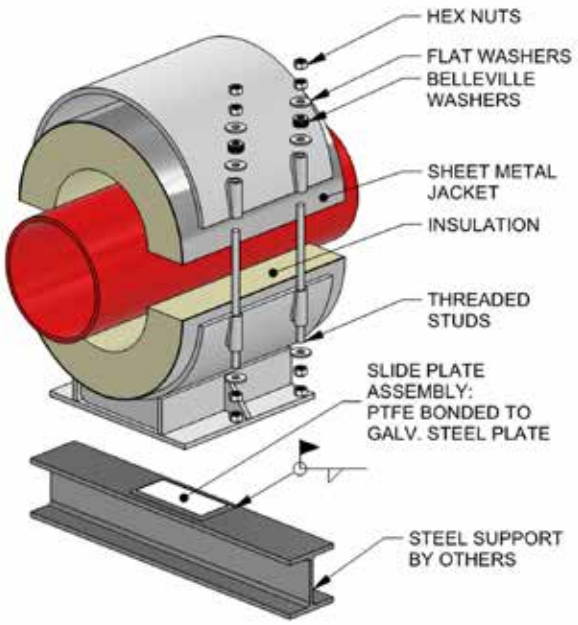
877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Contractor Specialties Inc.

Sliding / Resting Supports (S - Series) – Assembly Information

S22 & S32

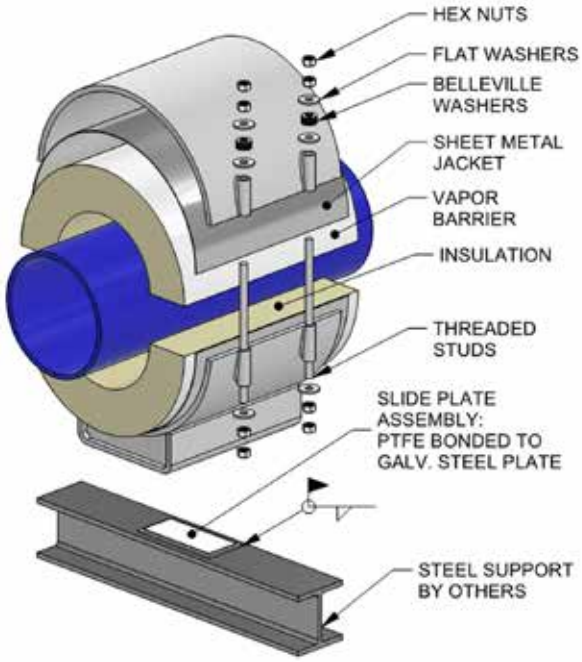


Low Temperature Range Support

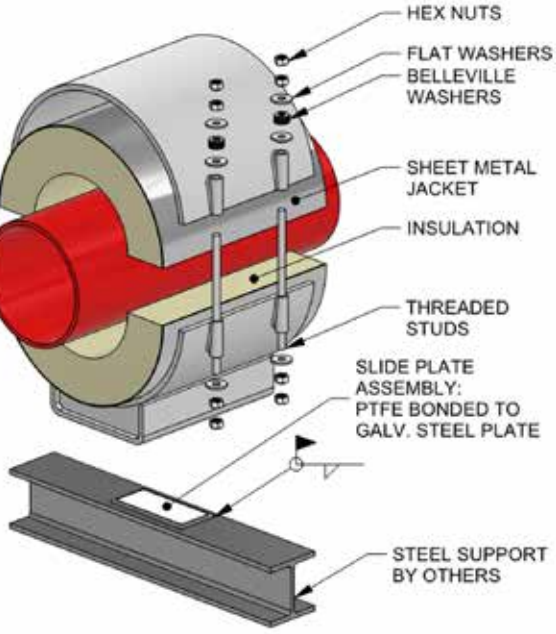


High Temperature Range Support

S23 & S33



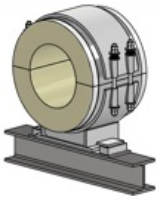
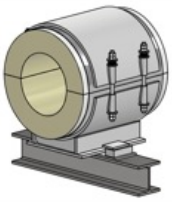
Low Temperature Range Support



High Temperature Range Support

Guided Support (G & L - Series) – Selection Guide

- Base Mounted Support Used to Resist Loads in the Vertical and Lateral Directions
- Uplift Force Restraint (G-Series)
- Accommodates Axial Movement up to 4-12”
- Teflon Slide Plates on Shoe and Support Steel Provides Free Travel in Axial Direction
- 1/2” – 72” Nominal Pipe Diameters
- Does Not Require Welding to the Pipe Material
- 3 Insulation Options Available (Polyurethane, Foam Glass, Calcium Silicate)
- Available With or Without Zero Permeability Vapor Barrier

ISAT PART #		AXIAL MOVEMENT	LATERAL MOVEMENT	UPLIFT RESTRAINT	LOAD CONDITION	PIPE SHIELDS CROSSOVER
G21A		1-1/2"	1/8"	YES	STANDARD	B3000 / B3100
G21B					HEAVY	B3200 / B3300
G21C					EXTRA HEAVY	NO EQUAL
G31A		4-1/2"	1/8"	YES	STANDARD	B4000 / B4100
G31B					HEAVY	B4200 / B4300
G31C					EXTRA HEAVY	NO EQUAL
L21A		1-1/2"	1/8"	NO	STANDARD	B7000 / B7100
L21B					HEAVY	B7200 / B7300
L21C					EXTRA HEAVY	NO EQUAL
L31A		4-1/2"	1/8"	NO	STANDARD	B8000 / B8100
L31B					HEAVY	B8200 / B8300
L31C					EXTRA HEAVY	NO EQUAL

Low Temperature Range Supports (-450 deg F to 225 deg F):
- Insulation: Polyuerethane (LP) or Foam Glass (LF)
- Vapor, Barrier: Zero Permeability (for Polyurethane) or Butyl Zero Permeability (for Foam Glass)

High Temperature Range Support, (40 deg F to 1200 deg F):
- Insulation: Calcium Silicate HC or Foam Glass (HF)

Standard Construction:
- Teflon® Slide Plates on Shoe and Supporting Steel
- A36 Steel Construction
- Gallvanized Steel Finish
- A307/A193 B7 Galvanized Fasteners
- Galvanized Sheet Metal Jacket

Special materials, finishes, pipe sizes, insulation types/thicknesses and vapor barrier types are available upon request. Please contact ISAT for custom requirements.

To Order, Please Specify:
- Model Number
- Nominal Pipe Size
- Insulation Thickness
- Pipe Material:
  1) A53/A106, 2) A33 GR6,
  3) SS 304/304L, 0) Other
- Temp Range & Insulation Type:
  Low Temp: Polyurethane (LP), Foam Glass (LF)
  High Temp: Cal. Silicate (HC), Foam Glass (HF)

Example:

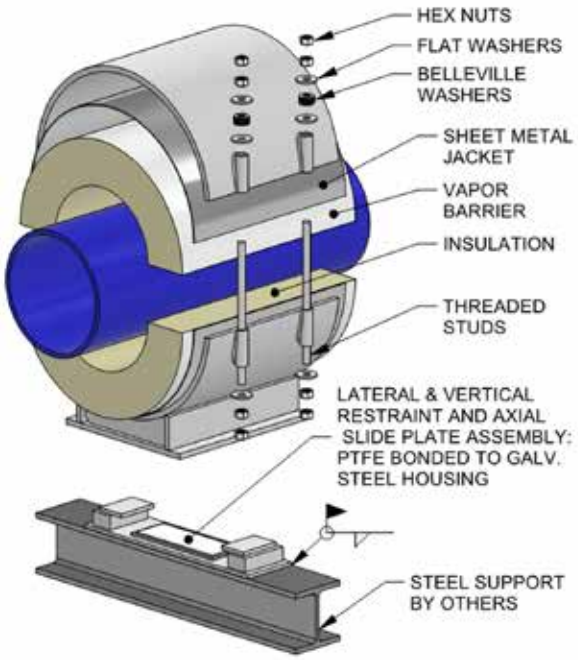
S21A - 8 x 3 x 1 x HC

Model No.	Nominal Pipe Size	Insulation Thickness	Pipe Material	Shoe and Insulation

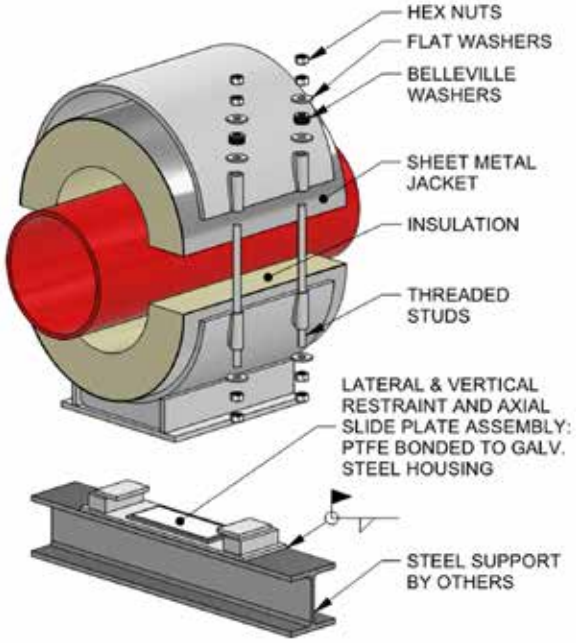
877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Contractor Specialties Inc.

Guided Support (G & L - Series) – Assembly Information

G21 & G31 – W/Uplift Restraint

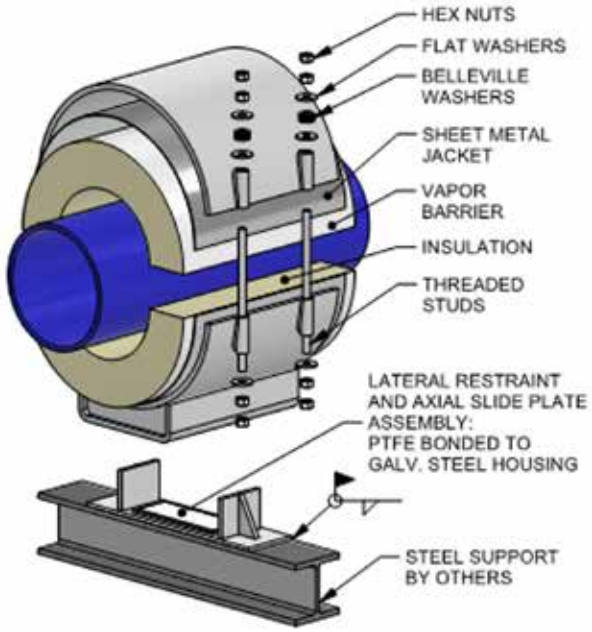


Low Temperature Range Support

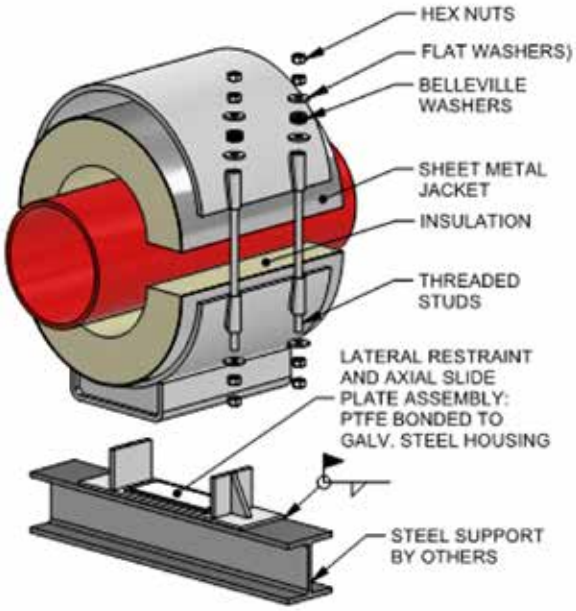


High Temperature Range Support

L21 & L31 – W/O Uplift Restraint



Low Temperature Range Support

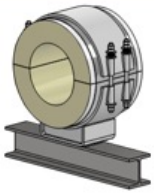
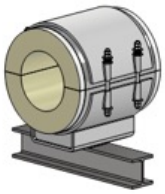


High Temperature Range Support

877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Contractor Specialties Inc.

Glide Assembly (GL Series – Guide/Slide Support) – Selection Guide

- Modular Glide Lower Assembly Allows the Universal Support Housing to be Converted Between a Guide and Slide Support
- Glide Lower Assembly May be Bolted to Support Steel to Eliminate Welding in the Field
- Resists Loads in the Vertical and Lateral (Guide Configuration Only) Direction
- Accommodates Axial Movement up to 4-12" and Lateral Movement up to 1/2" (Slide Configuration Only)
- Teflon Slide Plates on Shoe and Support Steel Provides Free Travel in Axial and Lateral Directions
- 4" – 72" Nominal Pipe Diameters
- Does Not Require Welding to the Pipe Material
- 3 Insulation Options Available (Polyurethane, Foam Glass, Calcium Silicate)
- Available With or Without Zero Permeability Vapor Barrier

ISAT PART #		AXIAL MOVEMENT	LATERAL MOVEMENT	LOAD CONDITION	PIPE SHIELDS CROSSOVER
GL21A SLIDE CONFIGURATION		1-1/2"	1/2"	STANDARD	B1000 / B1100
GL21B SLIDE CONFIGURATION				HEAVY	B1200 / B1300
GL21B SLIDE CONFIGURATION				EXTRA HEAVY	NO EQUAL
GL21A GUIDE CONFIGURATION		1-1/2"	1/8"	STANDARD	B7000 / B7100
GL21B GUIDE CONFIGURATION				HEAVY	B7200 / B7300
GL21B GUIDE CONFIGURATION				EXTRA HEAVY	NO EQUAL
GL31A SLIDE CONFIGURATION		4-1/2"	2"	STANDARD	B2000 / B2100
GL31B SLIDE CONFIGURATION				HEAVY	B2200 / B2300
GL31B SLIDE CONFIGURATION				EXTRA HEAVY	NO EQUAL
GL31A GUIDE CONFIGURATION		4-1/2"	1/8"	STANDARD	B8000 / B8100
GL31B GUIDE CONFIGURATION				HEAVY	B8200 / B8300
GL31B GUIDE CONFIGURATION				EXTRA HEAVY	NO EQUAL

Low Temperature Range Supports (-450 deg F to 225 deg F):
- Insulation: Polyuerethane (LP) or Foam Glass (LF)
- Vapor, Barrier: Zero Permeability (for Polyurethane) or Butyl Zero Permeability (for Foam Glass)

High Temperature Range Support, (40 deg F to 1200 deg F):
- Insulation: Calcium Silicate HC or Foam Glass (HF)

Standard Construction:
- Teflon® Slide Plates on Shoe and Supporting Steel
- A36 Steel Construction
- Gallvanized Steel Finish
- A307/A193 B7 Galvanized Fasteners
- Galvanized Sheet Metal Jacket

Special materials, finishes, pipe sizes, insulation types/thicknesses and vapor barrier types are available upon request. Please contact ISAT for custom requirements.

To Order, Please Specify:
- Model Number
- Nominal Pipe Size
- Insulation Thickness
- Pipe Material:
  1) A53/A106, 2) A33 GR6,
  3) SS 304/304L, 0) Other
- Temp Range & Insulation Type:
  Low Temp: Polyurethane (LP), Foam Glass (LF)
  High Temp: Cal. Silicate (HC), Foam Glass (HF)

Example:

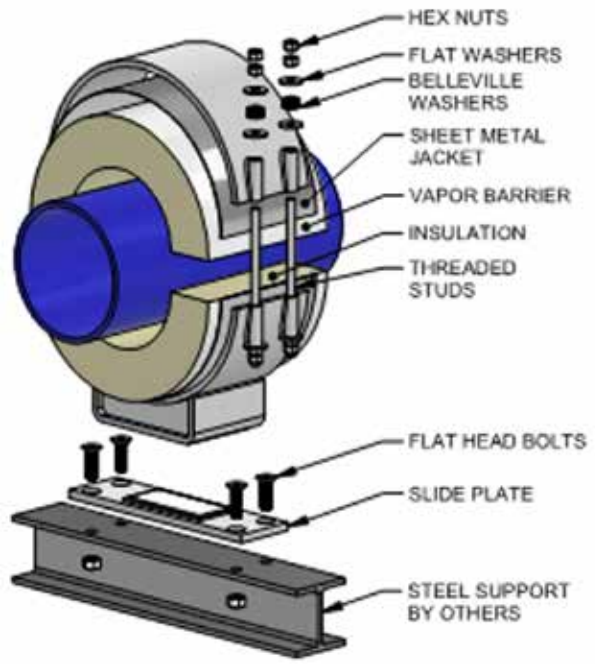
GL31B - 8 x 3 x 1 x HC

Model No.	Nominal Pipe Size	Insulation Thickness	Pipe Material	Shoe and Insulation

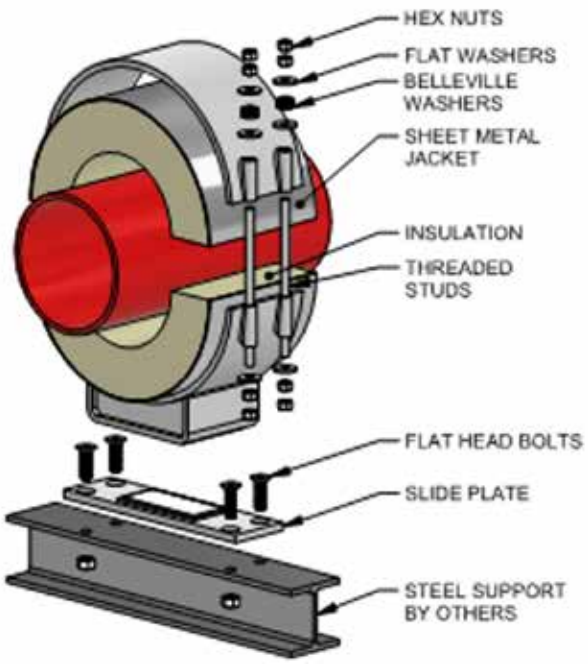
877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Contractor Specialties Inc.

Glide Assembly (GL Series – Guide/Slide Support) – Assembly Information

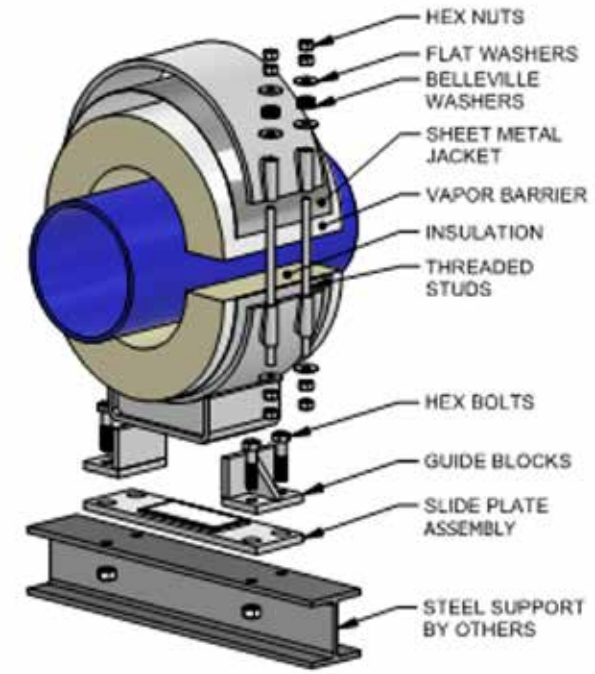
GL21 – Guide and Slide Configuration



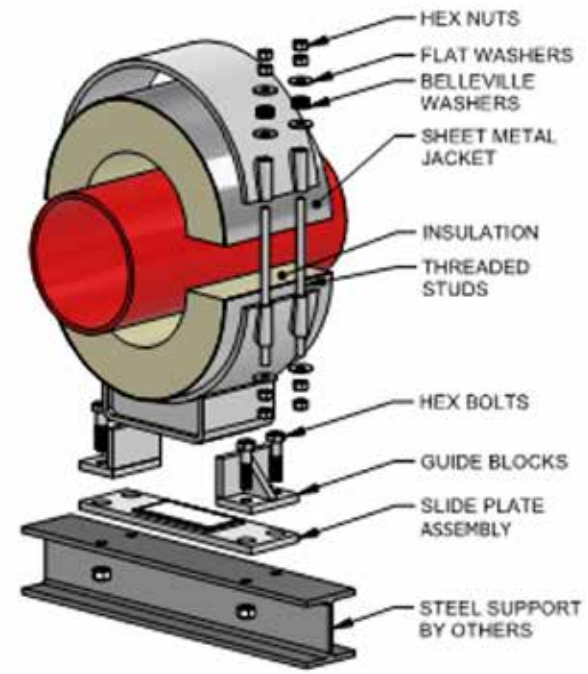
Slide Configuration - Low Temperature Range Support



Slide Configuration - High Temperature Range Support



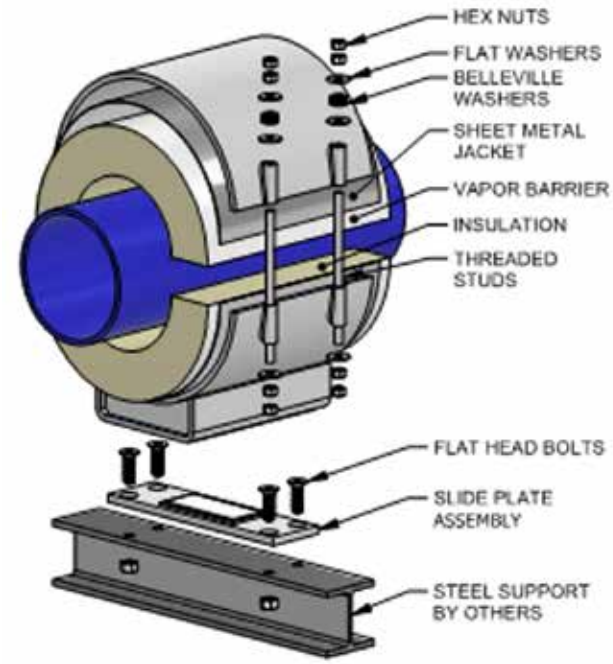
Guide Configuration - Low Temperature Range Support



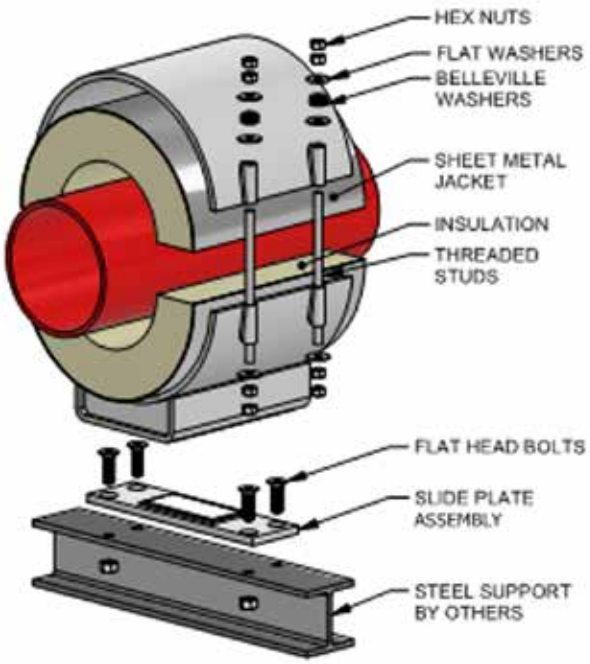
Guide Configuration - High Temperature Range Support

Glide Assembly (GL Series – Guide/Slide Support) – Assembly Information

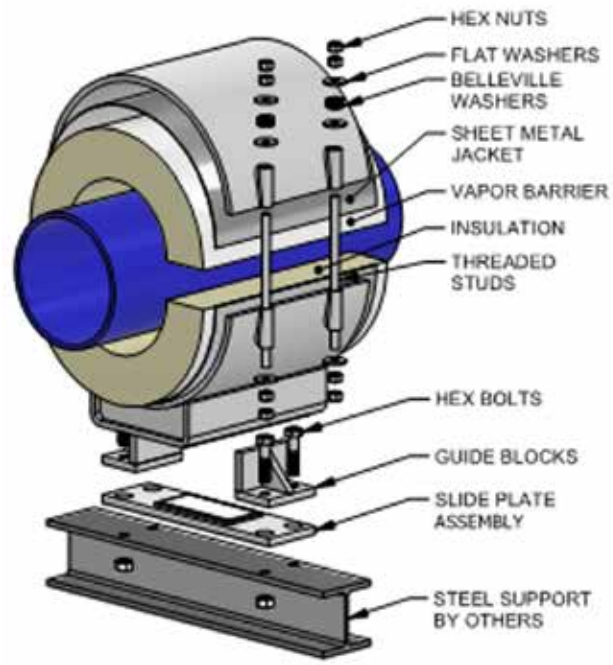
GL31 – Guide and Slide Configuration



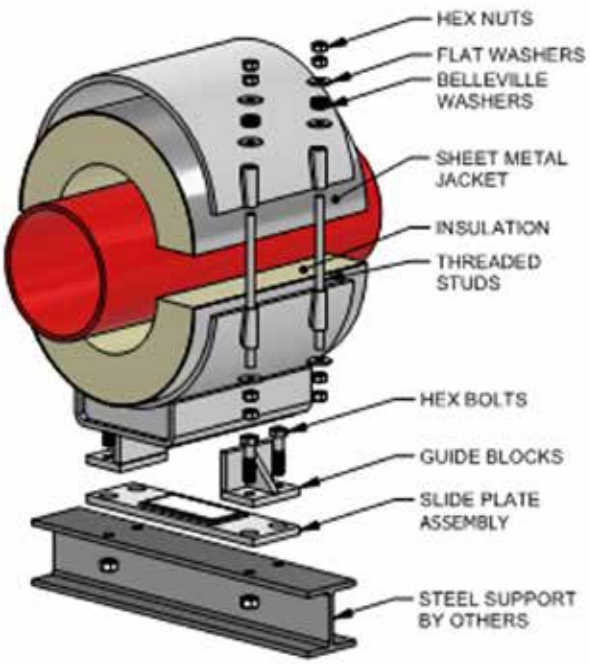
Slide Configuration - Low Temperature Range Support



Slide Configuration - High Temperature Range Support



Guide Configuration - Low Temperature Range Support

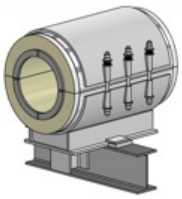


Guide Configuration - High Temperature Range Support

877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Contractor Specialties Inc.

Pipe Anchors (A – Series) – Selection Guide & Assembly Information

- Base Mounted Support Used to Resist Loads in the Vertical, Lateral and Axial Directions
- 1/2" – 72" Nominal Pipe Diameters
- 3 Insulation Options Available (Polyurethane, Foam Glass, Calcium Silicate)
- Available With or Without Zero Permeability Vapor Barrier

ISAT PART #		AXIAL MOVEMENT	LATERAL MOVEMENT	LOAD CONDITION	PIPE SHIELDS CROSSOVER
A11A		1/8"	1/8"	STANDARD	C4000 / C4100
A11B				HEAVY	C4200 / C4300
A11C				EXTRA HEAVY	NO EQUAL

Low Temperature Range Supports (-450 deg F to 225 deg F):
- Insulation: Polyuerethane (LP) or Foam Glass (LF)
- Vapor, Barrier: Zero Permeability (for Polyurethane) or Butyl Zero Permeability (for Foam Glass)

High Temperature Range Support, (40 deg F to 1200 deg F):
- Insulation: Calcium Silicate HC or Foam Glass (HF)

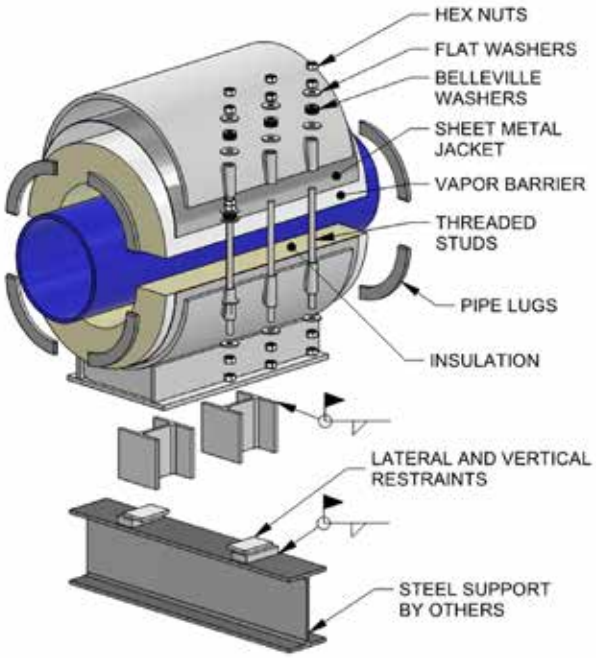
Standard Construction:
- Teflon® Slide Plates on Shoe and Supporting Steel
- A36 Steel Construction
- Gallvanized Steel Finish
- A307/A193 B7 Galvanized Fasteners
- Galvanized Sheet Metal Jacket

Special materials, finishes, pipe sizes, insulation types/thicknesses and vapor barrier types are available upon request. Please contact ISAT for custom requirements.

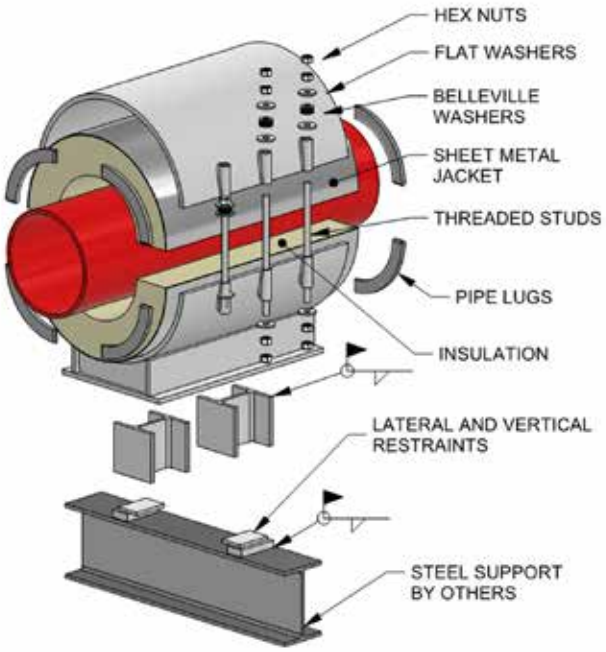
To Order, Please Specify:
- Model Number
- Nominal Pipe Size
- Insulation Thickness
- Pipe Material:
  1) A53/A106, 2) A33 GR6,
  3) SS 304/304L, 0) Other
- Temp Range & Insulation Type:
  Low Temp: Polyurethane (LP), Foam Glass (LF)
  High Temp: Cal. Silicate (HC), Foam Glass (HF)

Example:

A11A	-	8	x	3	x	1	x	HC
Model No.		Nominal Pipe Size		Insulation Thickness		Pipe Material		Shoe and Insulation



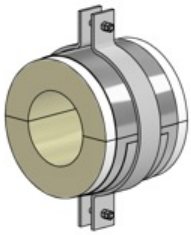
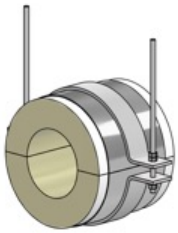
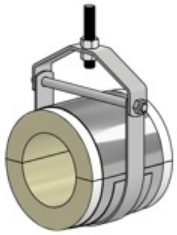
Low Temperature Range Support



High Temperature Range Support

Suspended Pipe Supports (H, B & C – Series) – Selection Guide

- Suspended Pipe Supports Used to Resist Loads in the Vertical Direction
- 1/2" – 72" Nominal Pipe Diameters
- Does Not Require Welding to the Pipe Material
- 3 Insulation Options Available (Polyurethane, Foam Glass, Calcium Silicate)
- Available With or Without Zero Permeability Vapor Barrier

ISAT PART #		PIPE SIZES	LOAD CONDITION	PIPE SHIELDS CROSSOVER
H44A		1/2" - 42"	STANDARD	D3000 / D3100
H44B			HEAVY	D3200 / D3300
H44C			EXTRA HEAVY	NO EQUAL
B44A		1/2" - 4"	STANDARD	D4000 / D5000
B44B			HEAVY	NO EQUAL
B44C			EXTRA HEAVY	NO EQUAL
C44A		1/2"-24"	STANDARD	A1000 / A2000 / A3000 / A4000
C44B			HEAVY	A9000
C44C			EXTRA HEAVY	NO EQUAL

Low Temperature Range Supports (-450 deg F to 225 deg F):
- Insulation: Polyuerethane (LP) or Foam Glass (LF)
- Vapor, Barrier: Zero Permeability (for Polyurethane) or Butyl Zero Permeability (for Foam Glass)

High Temperature Range Support, (40 deg F to 1200 deg F):
- Insulation: Calcium Silicate HC or Foam Glass (HF)

Standard Construction:
- Teflon® Slide Plates on Shoe and Supporting Steel
- A36 Steel Construction
- Gallvanized Steel Finish
- A307/A193 B7 Galvanized Fasteners
- Galvanized Sheet Metal Jacket

Special materials, finishes, pipe sizes, insulation types/thicknesses and vapor barrier types are available upon request. Please contact ISAT for custom requirements.

To Order, Please Specify:
- Model Number
- Nominal Pipe Size
- Insulation Thickness
- Pipe Material:
  1) A53/A106, 2) A33 GR6,
  3) SS 304/304L, 0) Other
- Temp Range & Insulation Type:
  Low Temp: Polyurethane (LP), Foam Glass (LF)
  High Temp: Cal. Silicate (HC), Foam Glass (HF)

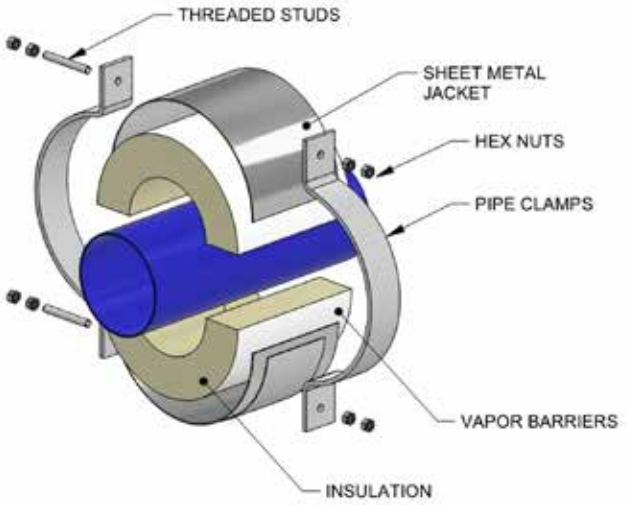
Example:

H44A	-	8	x	3	x	1	x	HC
↑ Model No.		↑ Nominal Pipe Size		↑ Insulation Thickness		↑ Pipe Material		↑ Shoe and Insulation

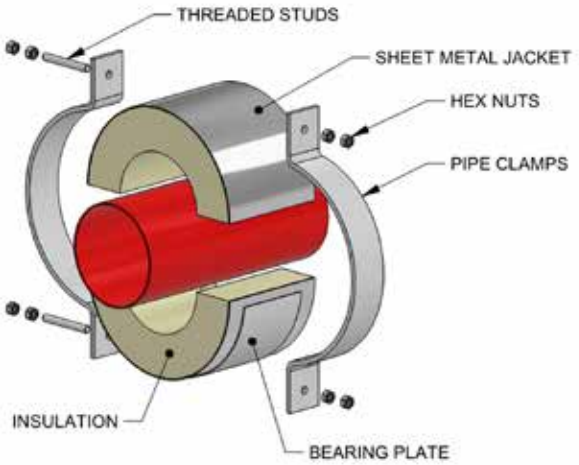
877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Contractor Specialties Inc.

Suspended Pipe Supports (H, B & C – Series) – Assembly Information

H44 A & B - Single Rod Clamp Hanger – Standard and Heavy Duty

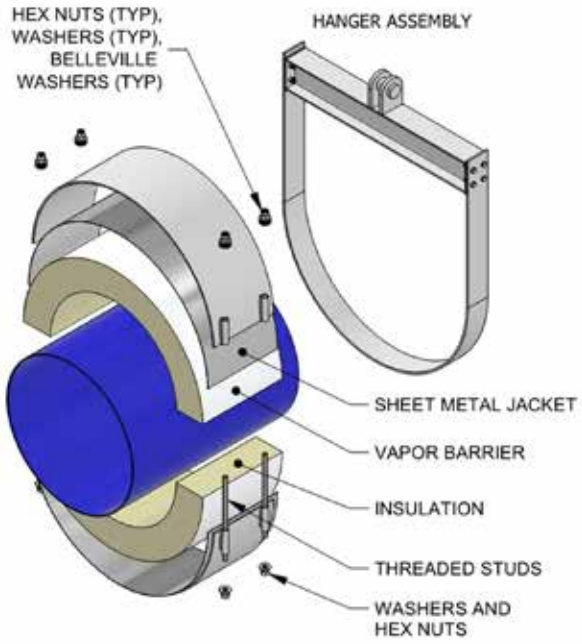


Low Temperature Range Support

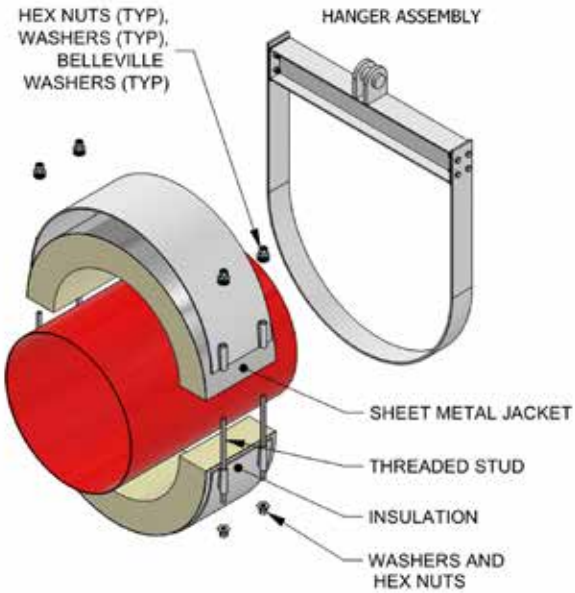


High Temperature Range Support

H44 C - Single Rod Hanger – Extra Heavy Duty



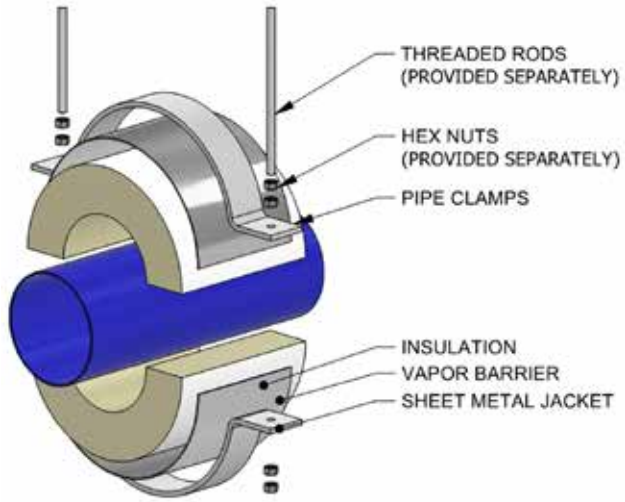
Low Temperature Range Support



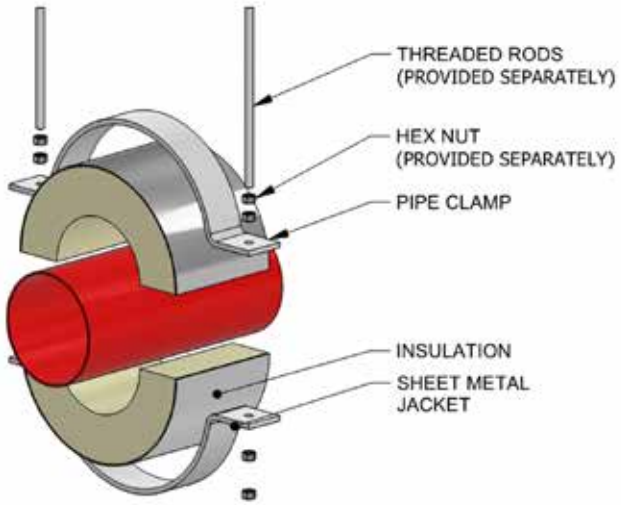
High Temperature Range Support

Suspended Pipe Supports (H, B & C – Series) – Assembly Information

B44 - Double Rod Clamp Hanger

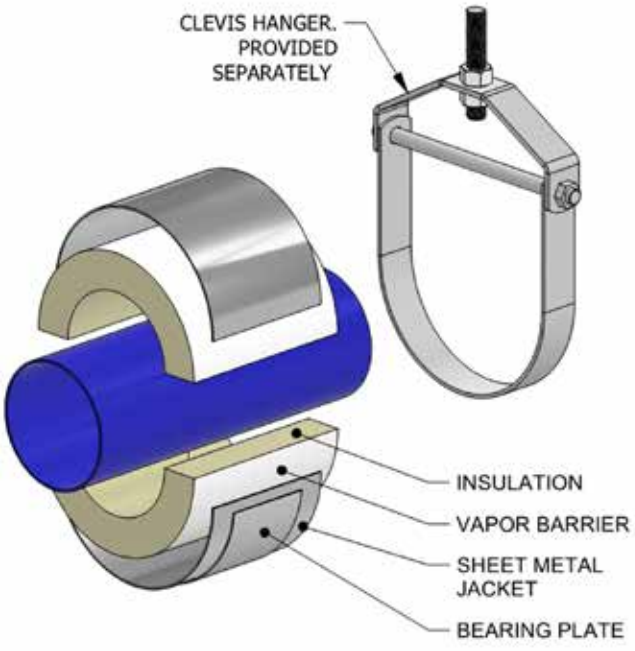


Low Temperature Range Support

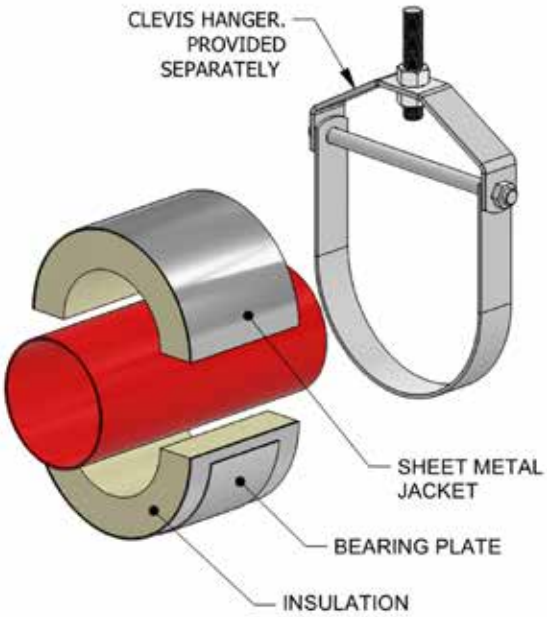


High Temperature Range Support

C44 – Clevis Hanger



Low Temperature Range Support



High Temperature Range Support

877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Contractor Specialties Inc.

Base Mounted Pipe Supports (F & R – Series) – Selection Guide

- Base Mounted Pipe Supports Used to Resist Loads in the Vertical Direction
- 1/2" – 72" Nominal Pipe Diameters
- Does Not Require Welding to the Pipe Material
- 3 Insulation Options Available (Polyurethane, Foam Glass, Calcium Silicate)
- Available With or Without Zero Permeability Vapor Barrier

ISAT PART #		PIPE SIZES	LOAD CONDITION	PIPE SHIELDS CROSSOVER
F44A		1/2" - 42"	STANDARD	A1000 / A2000 / A3000 / A4000
F44B		1/2" - 42"	HEAVY	A7000 / A7200 / A7400
F44C		1/2" - 72"	EXTRA HEAVY	NO EQUAL
R44A		1/2" - 42"	STANDARD	A3000 / A4000 / A5000 / A6000
R44B		1/2" - 42"	HEAVY	A8000 / A8200 / A8400
R44C		1/2" - 72"	EXTRA HEAVY	NO EQUAL

Low Temperature Range Supports (-450 deg F to 225 deg F):
- Insulation: Polyuerethane (LP) or Foam Glass (LF)
- Vapor, Barrier: Zero Permeability (for Polyurethane) or Butyl Zero Permeability (for Foam Glass)

High Temperature Range Support, (40 deg F to 1200 deg F):
- Insulation: Calcium Silicate HC or Foam Glass (HF)

Standard Construction:
- Teflon® Slide Plates on Shoe and Supporting Steel
- A36 Steel Construction
- Gallvanized Steel Finish
- A307/A193 B7 Galvanized Fasteners
- Galvanized Sheet Metal Jacket

Special materials, finishes, pipe sizes, insulation types/thicknesses and vapor barrier types are available upon request. Please contact ISAT for custom requirements.

To Order, Please Specify:
- Model Number
- Nominal Pipe Size
- Insulation Thickness
- Pipe Material:
  1) A53/A106, 2) A33 GR6,
  3) SS 304/304L, 0) Other
- Temp Range & Insulation Type:
  Low Temp: Polyurethane (LP), Foam Glass (LF)
  High Temp: Cal. Silicate (HC), Foam Glass (HF)

Example:

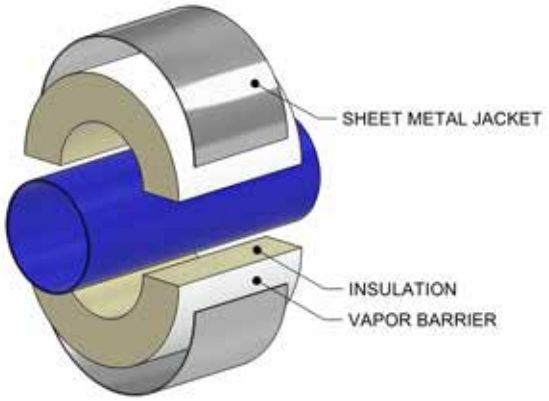
F44A - 8 x 3 x 1 x HC

Model No.	Nominal Pipe Size	Insulation Thickness	Pipe Material	Shoe and Insulation

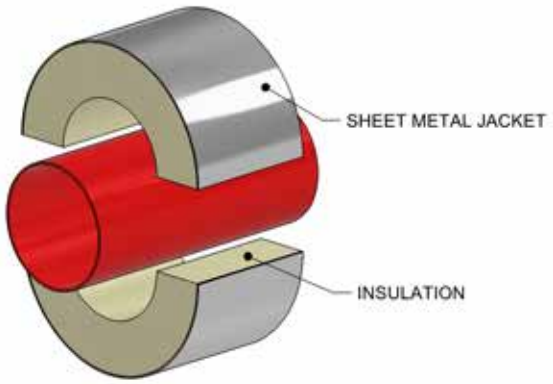
877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Contractor Specialties Inc.

Base Mounted Pipe Supports (F & R – Series) – Assembly Information

R44A & F44A Standard Duty

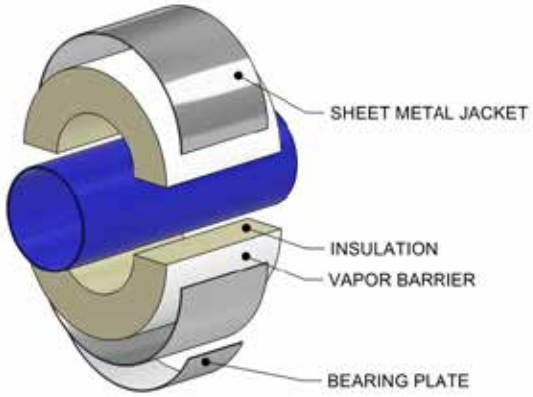


Low Temperature Range Support

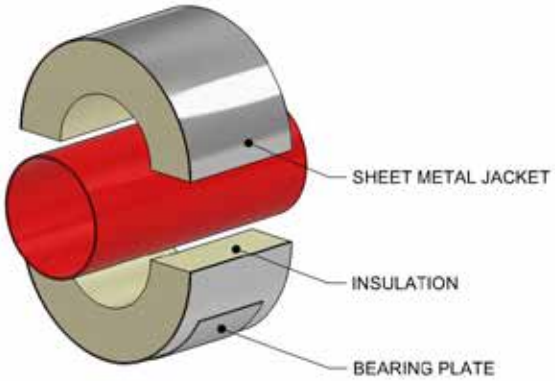


High Temperature Range Support

44B & F44B Heavy Duty

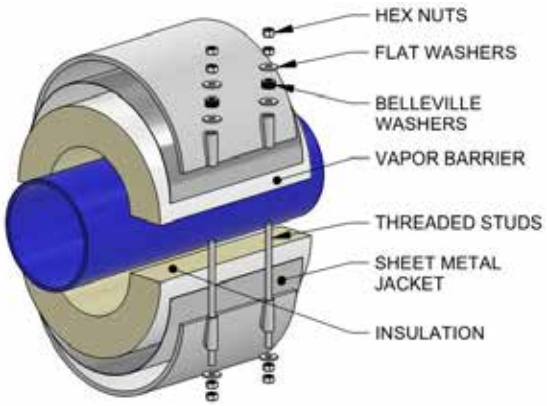


Low Temperature Range Support

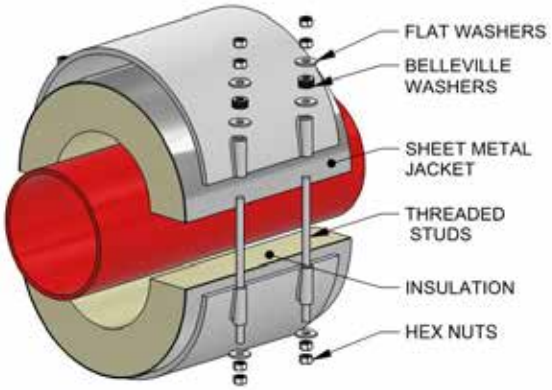


High Temperature Range Support

R44C & F44C Extra Heavy Duty



Low Temperature Range Support

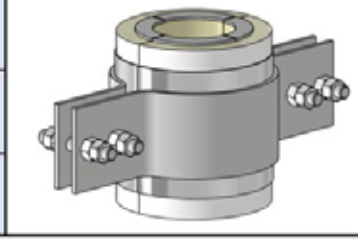


High Temperature Range Support

877-999-ISAT (4728) | supports@isatts.com
A Division of Tomarco Contractor Specialties Inc.

Vertical Pipe Supports (V – Series) – Selection Guide & Assembly Info

- Vertical Pipe Supports Used to Resist Loads in the Vertical Direction
- 1/2" – 24" Nominal Pipe Diameters
- 3 Insulation Options Available (Polyurethane, Foam Glass, Calcium Silicate)
- Available With or Without Zero Permeability Vapor Barrier

ISAT PART #		PIPE SIZES	LOAD CONDITION	PIPE SHIELDS CROSSOVER
V44A		1/2" - 24"	STANDARD	E1000
V44B		2" - 24"	HEAVY	E1100 / E1200
V44C		2" - 24"	EXTRA HEAVY	E1300

Low Temperature Range Supports (-450 deg F to 225 deg F):
- Insulation: Polyuerethane (LP) or Foam Glass (LF)
- Vapor, Barrier: Zero Permeability (for Polyurethane) or Butyl Zero Permeability (for Foam Glass)

High Temperature Range Support, (40 deg F to 1200 deg F):
- Insulation: Calcium Silicate HC or Foam Glass (HF)

Standard Construction:
- Teflon® Slide Plates on Shoe and Supporting Steel
- A36 Steel Construction
- Gallvanized Steel Finish
- A307/A193 B7 Galvanized Fasteners
- Galvanized Sheet Metal Jacket

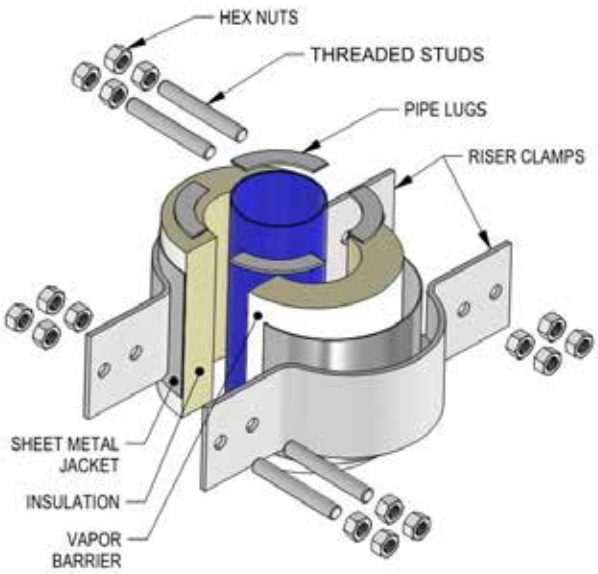
Special materials, finishes, pipe sizes, insulation types/thicknesses and vapor barrier types are available upon request. Please contact ISAT for custom requirements.

To Order, Please Specify:
- Model Number
- Nominal Pipe Size
- Insulation Thickness
- Pipe Material:
  1) A53/A106, 2) A33 GR6,
  3) SS 304/304L, 0) Other
- Temp Range & Insulation Type:
  Low Temp: Polyurethane (LP), Foam Glass (LF)
  High Temp: Cal. Silicate (HC), Foam Glass (HF)

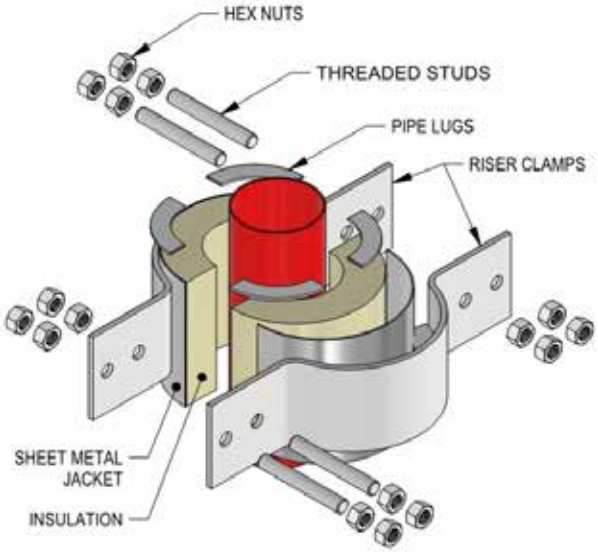
Example:

V44A - 8 x 3 x 1 x HC

Model No.	Nominal Pipe Size	Insulation Thickness	Pipe Material	Shoe and Insulation



Low Temperature Range Support



High Temperature Range Support

2-Piece Pipe Clamp (LDS2 – Series) – Selection Guide & Assembly Info

- Universal Design May Be Used for Anchor or Guide Applications
- 1/2" – 24" Nominal Pipe Clamp Diameters
- 1/8" Shim Plates Provided for Micro Adjustment of Clamp ID
- For Installation on Standard 1-5/8" Width Channel (Strut)
- May Be Used with Insulated or Uninsulated Pipe

ISAT PART #		PIPE CLAMP SIZES	PIPE CLAMP STYLE / LOAD DISTRIBUTION BASE	LOAD CONDITION	PIPE SHIELDS CROSSOVER
LDS2A		1/2" - 24"	2 PIECE PIPE CLAMP WITH LOAD DISTRIBUTION BASE	STANDARD (SINGLE WIDE)	G1000 / G1200 / G2000 / G2200
LDS2B				HEAVY (DOUBLE WIDE)	NO EQUAL

Standard Construction:
- A36 Steel Construction
- Gallvanized Steel Finish
- A307/A193 B7 Galvanized Fasteners

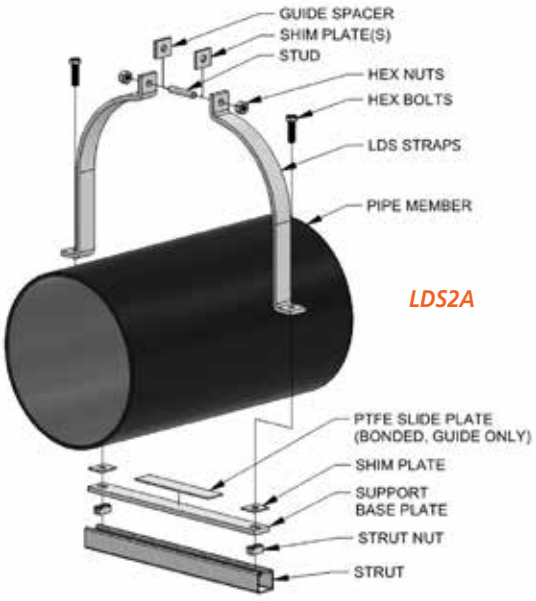
Special materials, finishes, and clamp ID are available upon request. Please contact ISAT for custom requirements.

To Order, Please Specify:
- Model Number
- Nominal Pipe Clamp ID
- (A) Anchor, (G) Guide

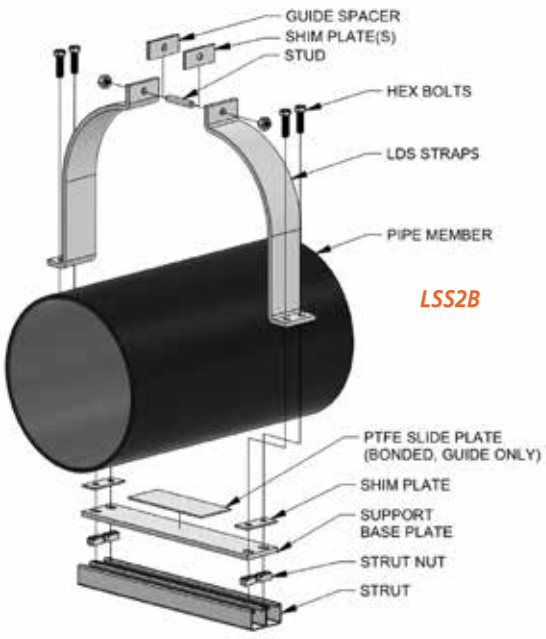
Example:

LDS2A - 8 - G

↑ Model No. ↑ Nominal Pipe Clamp ID ↑ Anchor Guide



LDS2A



LSS2B