



MACHINE & IRONWORKS

INTRODUCING LIFT-OFF®: INNOVATIVE, DEPENDABLE PIPE SUPPORTS AND CORROSION BARRIERS.

Backed by the experience and reputation of Delta Machine & Ironworks, our Lift-Off line of products provides the most cost-effective patented solutions for corrosion-mitigation under piping.

LIFT-OFF PIPE SUPPORTS offer cutting-edge technology to distribute pipe load evenly across the entire width of the beam, allowing for higher beam-loading capacities, and are applicable to piping systems for all industries. Our simple solutions provide long-term lower costs in maintenance by mitigating corrosive damage at contact points.

LIFT-OFF supports are molded from a composite material especially designed to meet the thermal and mechanical requirements of load bearing supports and are manufactured from a special formulation of selected synthetic resins in combination with high-strength glass reinforcements. LIFT-OFF composite material contains a benzotriazole-type UV inhibitor.

- ★ Standard 1/2" height from TOS to BOP in all configurations.
- ★ Formulated for operating temperatures ranging from -265°F (-165°C) to 550°F (288°C).
- ✓ ★ High compression strength, high tensile strength.

- **ADVANTAGES**
- ★ Low coefficient of friction on top surface.
- ★ Non-conductive, non-reactive, nonflammable, UV stable.
- ★ Can be used alone as a rest on beam sizes up to 14" wide (LOR).
- ★ Can be used with single or double U-bolt configuration (LORG).
- * No hot work required for installation.
- ★ Can be used on various pipe sizes for separation and corrosion mitigation on both surfaces (LORP).
- ★ From raw material through manufacturing . . . all brought to you with American commitment and pride.

GENERAL INFORMATION		FLAME-RESISTANCE PROPERTIES	
Max Service Temp	550 F (288 C)	UL Subject 94	НВ
Low Service Temperature:	-265°F (-165°C)	Surface Burning Characteristics –	Meets Class A (Class I) – Flame
		25' Tunnel Test	Spread Index <25 [Actual value: 20]
Continuous Use (elevated) Temp:	412°F (211°C)		Smoke Developed Index 450 or less.
Forms Available:	Pultrusion Profile, Sheet,		Char length was noted to 8.2 feet,
	Fabricated per print		discoloration was noted to 24 feet
MECHANICAL PROPERTIES		PHYSICAL PROPERTIES	
Flexural Strength	31,000 psi	Water Absorption	0.2% by weight
Tensile	>11,000 psi	Specific Gravity	123 lbs/ft (cubed)
Compressive Strength @ 75° F	49,000 psi	Coefficient of Thermal Expansion	
Compressive Modulus	1,800,000 psi	Across Thickness	11.62 In/In/°Cx10 ⁻⁵
IZO Impact Strength (notched)	8 Ft. lb./in.	Across Surface	2.21 In/In/°Cx10 ⁻⁵
Flexural / Bending Strength	29,000 psi	Thermal Conductivity	Ca. 0.30 W/mx°K
Coefficient of Friction (BOP to LOR)	µ=0.05 to 0.2	UV light stabilized	Formulated at 1%

The above values are measured and are believed to be accurate. However, final determination regarding the suitability of material should be evaluated by the end user.









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LOR (LIFT-OFF REST) supports are available for beam / angle / channel ranging from 2" to 14" wide (WIDTH IS FIRST # IN PART NAME). Length is recommended at ³/₃ of the supported pipe NPS size; however, the length can be modified up to 120" long and can support multiple pipes. Length should be specified by piping engineer based on lateral movement expected.



LORP (LIFT-OFF REST on PIPE) supports are configured to sit on pipe sizes up to 48" (NPS SIZE IS FIRST # IN PART NAME). Length is recommended at ³/₃ of the supported pipe NPS size; however, the length can be modified up to 120" long and can support multiple pipes. Length should be specified by piping engineer based on lateral movement expected.



LORG (LIFT-OFF REST with GUIDE) supports are configured to work with U-BOLTs and require drilling in support steel as with any other U-BOLT application. LORG supports are available for beam / angle / channel ranging from 2" to 16" wide (WIDTH IS FIRST # IN PART NAME) with supported pipe NPS as the LAST # IN THE PART NAME (example: 4LORG2). Multiple U-BOLTs and GOM or Liners can be specified. Alternatively, Delta can provide BOLT-ON LATERAL GUIDEs to eliminate field-drilling for installation if needed.



IN GOD WE TRUST.



