



**Track & Infrastructure** 

## J. LANFRANCO & Cie

Enhancing Rail Safety with J. LANFRANCO Cie's Revolutionary THU Nuts

n the sector of rail freight, the relentless pursuit of safety and reliability remains paramount, especially when tasked with transporting hefty cargo across extensive distances.

Amidst these challenges, splice joint bars emerge as a critical component, susceptible to loosening in the face of environmentally extreme conditions. J. LANFRANCO Company introduces a solution with its THU self-locking nuts, which redefine the priority of rail safety.

Conventional fastening techniques, often comprising multifarious components, tend to falter under the exacting circumstances. In stark contrast, J. LANFRANCO Company's THU self-locking nuts emerge as a superior alternative. With their full-height design, featuring twin slots positioned on the same plane, these nuts exhibit remarkable resilience to high-frequency vibrations, imposing loads and the harshest of temperature extremes.

The efficacy of THU nuts has been proven, even in the face of extreme conditions such as temperatures as low as  $-14^{\circ}$ C.

J. LANFRANCO's THU self-locking nuts offer immediate advantages for rail freight enterprises. By preventing loosening and its consequences, THU nuts usher in an era of reduced maintenance expenditure and diminished downtime, stemming from the elimination of fastener-related costs. Unlike traditional methods that necessitate tightening on a daily or monthly basis, the self-locking capability of THU nuts obviates the need for such frequent interventions, saving precious time and curtailing labour expenses. Furthermore, the compatibility of THU nuts with impact wrenches improves the fastening process.



The success of THU nuts for fastening rail joint bars has proven itself within the extensive 1,000km of the New York transit network, the largest in North America, encompassing intercity trains and subterranean subway systems. With over 8 million passengers relying on this network's daily operation, the integration of THU nuts assures the safety and stability of joint bars, thereby a more efficient and secure transportation system.

The South American market now mirrors the footsteps of its North American counterpart by progressively embracing J. LANFRANCO's THU nuts for the secure fastening of joint bars. This trend signifies the influence THU nuts exert on joint bar fastening practices, advancing safety, reliability and standardisation throughout the expansive transportation networks of both continents.

J. LANFRANCO's THU self-locking nuts present a reliable and cost-effective solution for fastening joint bars. With their remarkable performance in environmental extremes, immediate cost-saving benefits and their pervasive adoption within the extensive New York rail network, THU nuts indisputably establish themselves as the best fixing solution. By elevating safety, diminishing maintenance costs and enhancing operational efficiency, THU nuts serve for ensuring the secure transportation of substantial cargo across extensive distances.

www.lanfranco.fr/en





J. LANFRANCO & C\*

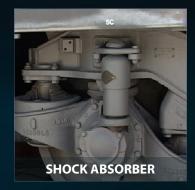
**TOP QUALITY LOCKNUTS** FOR CRITICAL JOINTS



REUSABLE, EASY TO INSTALL, NO GALLING AND LONG LIFE CYCLE



LANFRANCO'S ESL SELF-LOCKING NUT









LANFRANCO'S ERM SELF-LOCKING NUT







**ELECTRICAL RAIL CONNECTION** 



LANFRANCO'S THU/THM SELF-LOCKING NUT





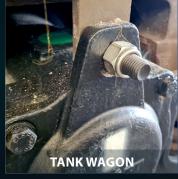


AVAILABLE FOR ANY STANDARD



**LANFRANCO'S HUP VPI SELF-LOCKING NUT BROWN NYLON INSERT** 





WAGON COUPLERS

LANFRANCO'S **MODULAR FIXTURES** 





TYPE OF NUT	РНОТО	DIAMETER	MATERIAL
<b>ESL</b> Allows better resistance to vibrations, shocks, temperatures extremes and corrosion. ESL nuts provide mounting without seizing.		M2-M68 N° 8-2″ 1/2	Steel: Grade 5-8-10 Class 8-10-12 Stainless steel: A2 70 (AISI 304) A4 80 (AISI 316L)
<b>ERM</b> The ERM nut is a single piece which saves time with its integrated washer. To obtain rapid installations and maintain clamp force under dynamic loads.		Metric: M2-M60 Imperial N° 8-2″ 1/2	Steel:     Grade 5-8-10     Class 8-10-12  Stainless steel:     A2 70 (AISI 304)     A4 80 (AISI 316L)
HCE/HCT This single-slot, all-metal nut line is capable of withstanding high temperatures unlike a nylon insert.		HCE Metric: M6-M68 HCT Metric: M3-M68 Imperial: 1/4"-2" 1/2	Steel: Grade 5-8-10 Class 8-10-12  Stainless steel: A2 70 (304) A4 80 (316L)
HUP/HMP (brown) nylon insert  Self-locking nut with nylon insert, usual ring (-40°C+120°C), high temperature brown ring (-40° C +230° C).		Metric: M3-M42	Steel: Class 8-10 Stainless steel: A2-70 - A4-80
<b>THU/THM</b> Self-locking nuts, dual locking slots positioned on the same plane, industrial type. Low type availability.		Metric: M4-M68 Imperial N° 8- 2″ 1/2	Steel: Class 8-10-12 Stainless steel: A2 70 A4 80
MODULAR FIXTURES  Modular fixings with self-locking all-metal nuts and reusable ESL type. The length, the width, the shape, the holes, are all made to measure. A completely customizable Solution!		25 mm - 6 m	Stainless steel Aluminium