

Complete line of loading and unloading arms locally made, with a guarantee of traceability of materials. We have immediate availability of spare parts and simplified maintenance at low cost.

All of our products are safety and operational efficiency focus designed for your company. Venha ser TSPro!

# LOADING AND UNLOADING ARMS

## TOP E BOTTOM LOADING



**TSPRO**

CERTIFICADA  
ISO9001

TECNOLOGIA PARA FLUÍDOS



55 11 2724.8966



[vendas@tspro.com.br](mailto:vendas@tspro.com.br)



[www.tspro.com.br](http://www.tspro.com.br)

## FEATURES AND BENEFITS

### TSPRO SWIVEL JOINTS

All articulations of the TSPRO arms use high performance swivel joints with **DOUBLE SEALING** that provides better operational ergonomics and extreme reduction in the risk of leaks.

Built with a leak detection indicator that signals when the first seal is worn, it prevents leaks and allows scheduled maintenance. There is no need for immediate stoppage of the equipment as the liquid is still retained by the second seal.

#### SEAL REPLACEMENT INDICATOR

#### NO NEED TO REMOVE SPHERES FOR MAINTENANCE

Our swivel joints are designed to allow the seals to be changed without the need of removing the balls. To access the seals it is only necessary to loosen the screws.

#### STANDARD MARKET SEALS

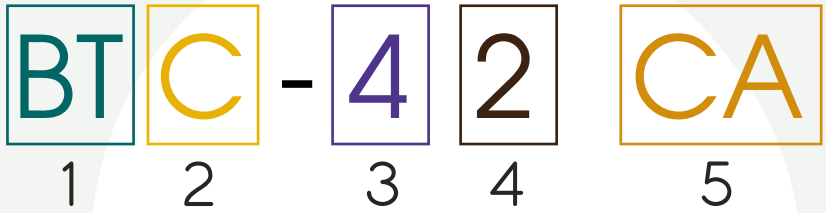
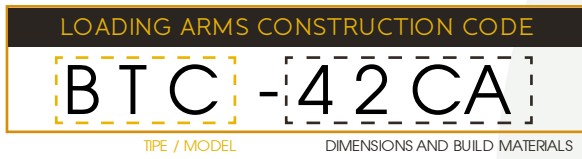
#### COUNTERBALANCE SYSTEM

Enclosed compression **spring-activated** counterbalance system that **improves safety** and ensures better balance accuracy of the arm in use with products of different densities and/or when new components are needed. No special tools are necessary for counterbalance load adjustments.

#### SPRING STRENGTH ADJUSTMENT

#### ENCLOSED PRELOAD ADJUSTMENT

# CODIFICATION



## 1 LOADING ARM TYPE

- BT** Top Loading
- BB** Bottom Loading

## 3 PIPE SIZE

- 2 inches
- 3 inches
- 4 inches
- 6 inches

## 4 SEALING MATERIALS

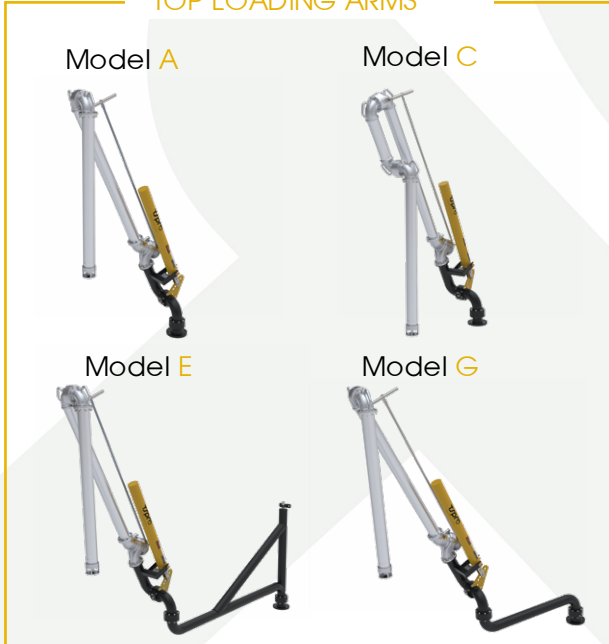
- 1 Buna-N (Nitrile) and Hydraulic Cardboard
- 2 Viton and Hydraulic Cardboard
- 3 PTFE (Teflon)

## 5 BUILDING MATERIALS

- CA** Carbon Steel/Aluminum
- CC** Carbon Steel
- C4** Carbon Steel/ SS 304
- C6** Carbon Steel/ SS 316
- I4** Stainless Steel 304
- I6** Stainless Steel 316

## 2 LOADING ARM MODEL

### TOP LOADING ARMS



### BOTTOM LOADING ARMS



## ASSEMBLY OPTIONS (INLET AND SIDE OF OPERATION)

LEFT SIDE

RIGHT SIDE

FROM UP



FROM DOWN

LEFT SIDE

RIGHT SIDE

## TECHNICAL INFORMATION

- Hydrostatic test to 128 PSI (9Kgf/cm<sup>2</sup>)
- Welding performed by Qualified Welders.
- TSPRO standards painting in black on Carbon Steel components.

# OPTIONAL ITEMS

ALSO SEPARATELY SOLD

## TOP LOADING OPTIONAL ITEMS

Deadman Valve



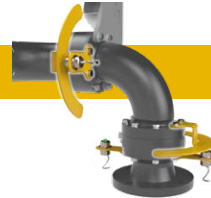
High Flow Deflector



Anti Splash Mug with claw lock



Position Sensor Laterality and Inclination



Vapor Recovery Plates and covers



Ball Valve



Position Lock



Telescopic Drop Tube



Pneumatic Drive Loading Arm



## BOTTOM LOADING OPTIONAL ITEMS

Hoses



API Swivel Joint



Gas Spring



API Coupler Semi-Automatic



API Coupler Manual



Check Valve



ATC Safety Device



## LEARN HOW TO SOLVE AND PREVENT

THE MAIN CAUSES OF OVERFLOW AND END FUEL CONTAMINATION.

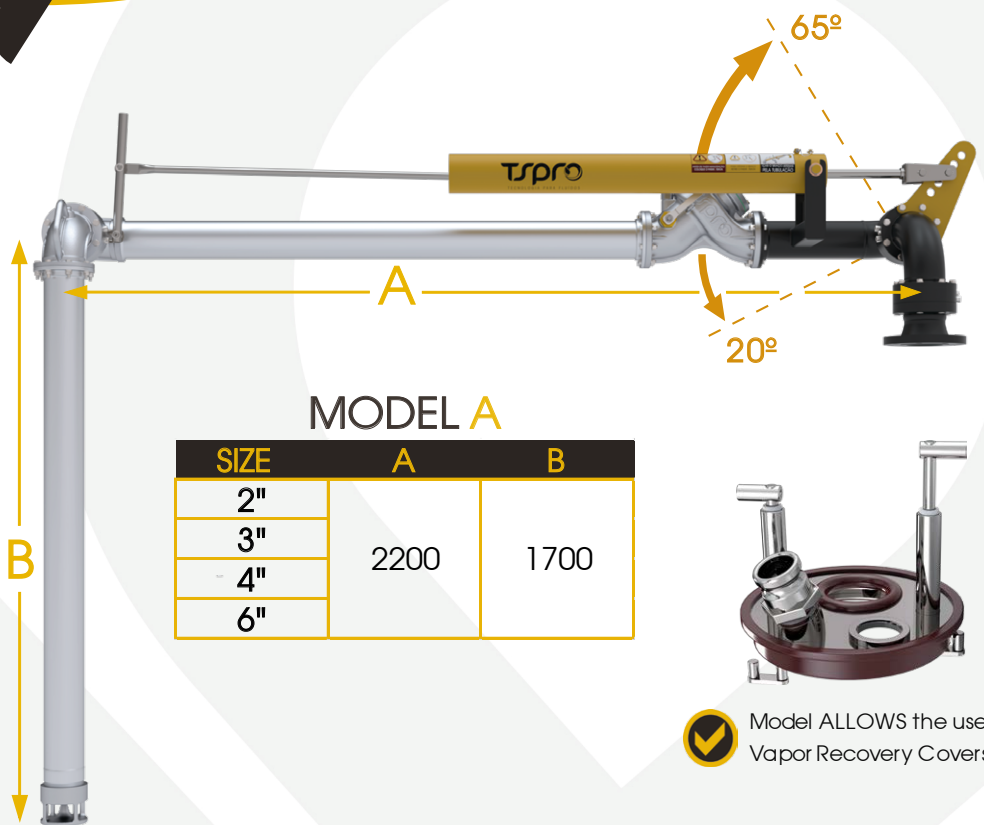


# ATC<sup>®</sup> SAFETY DEVICE

## ANTI OVERFLOW AND CONTAMINATION of fuels in BOTTOM LOADING Tank Trucks

THE ONLY PREVENTION SOLUTION FOR CONTAMINATION IN BOTTOM LOADING ARMS OF THE WORLD

# TOP LOADING TYPICAL DIMENSIONS

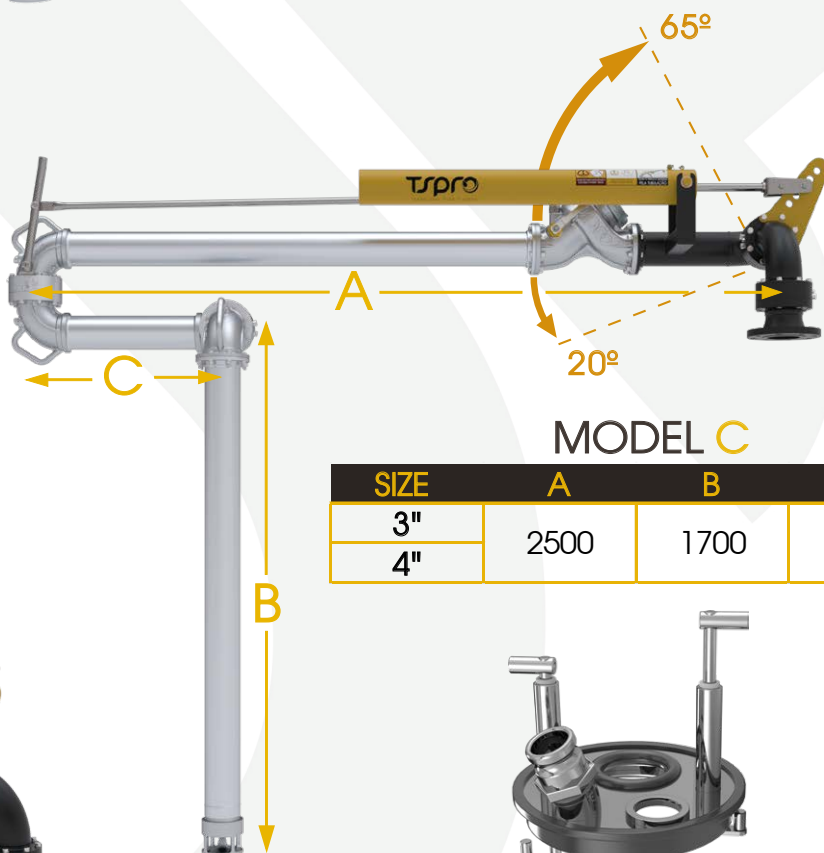


MODEL A

SIZE	A	B
2"	2200	1700
3"		
4"		
6"		




 Model **ALLOWS** the use of Vapor Recovery Covers



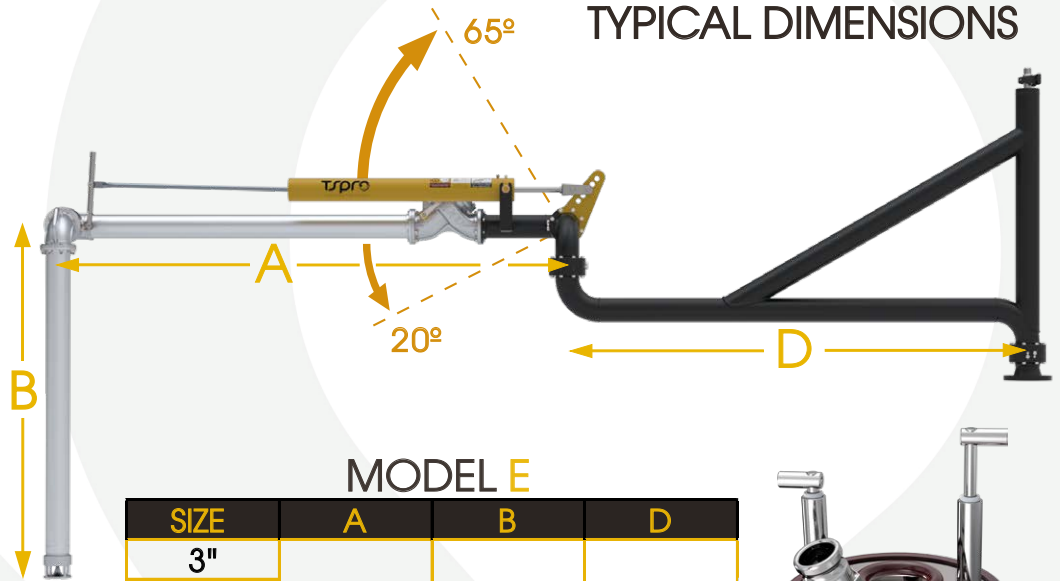
MODEL C

SIZE	A	B	C
3"	2500	1700	800
4"			



 Model **DO NOT ALLOW** the use of Vapor Recovery Covers

# TOP LOADING TYPICAL DIMENSIONS

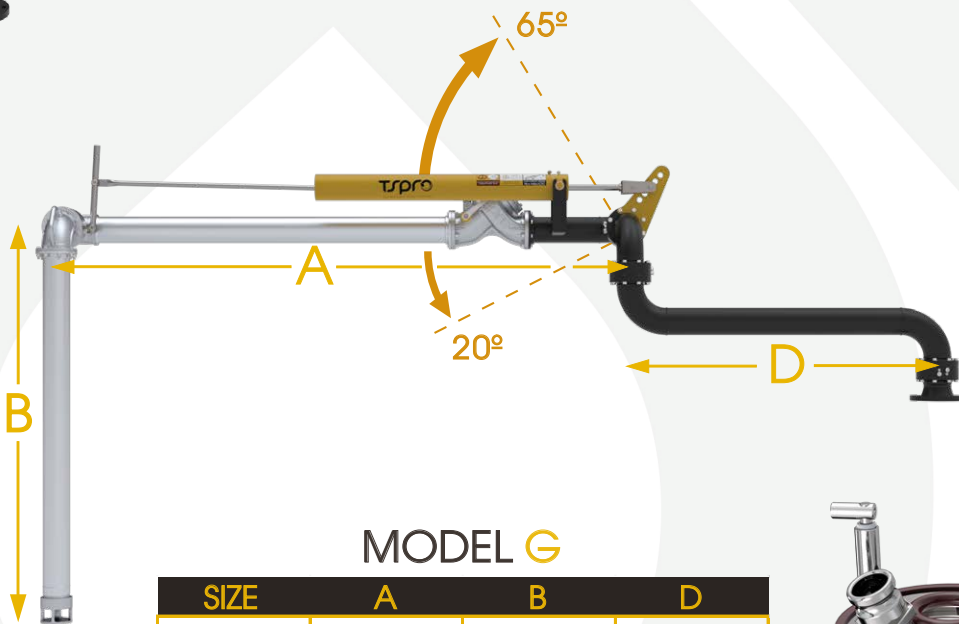


**MODEL E**

SIZE	A	B	D
3"	2000	1700	2000
4"			
6"			



Model **ALLOWS** the use of Vapor Recovery Covers



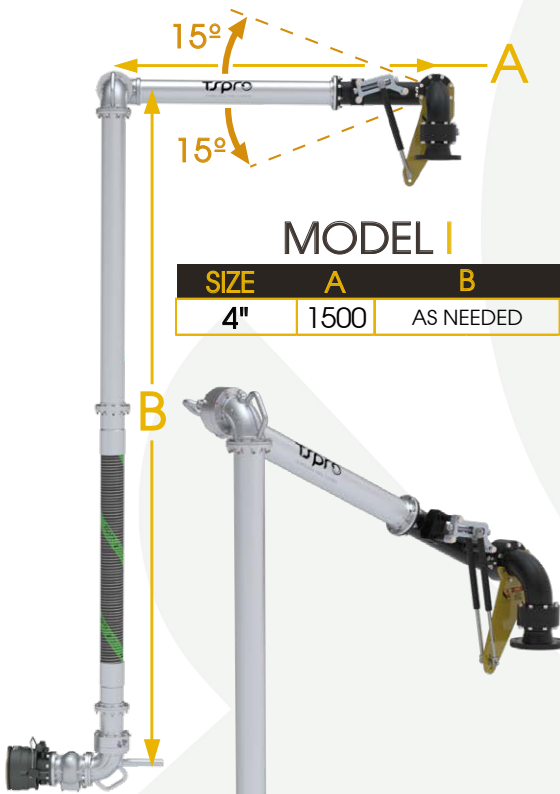
**MODEL G**

SIZE	A	B	D
3"	2000	1700	1200
4"			



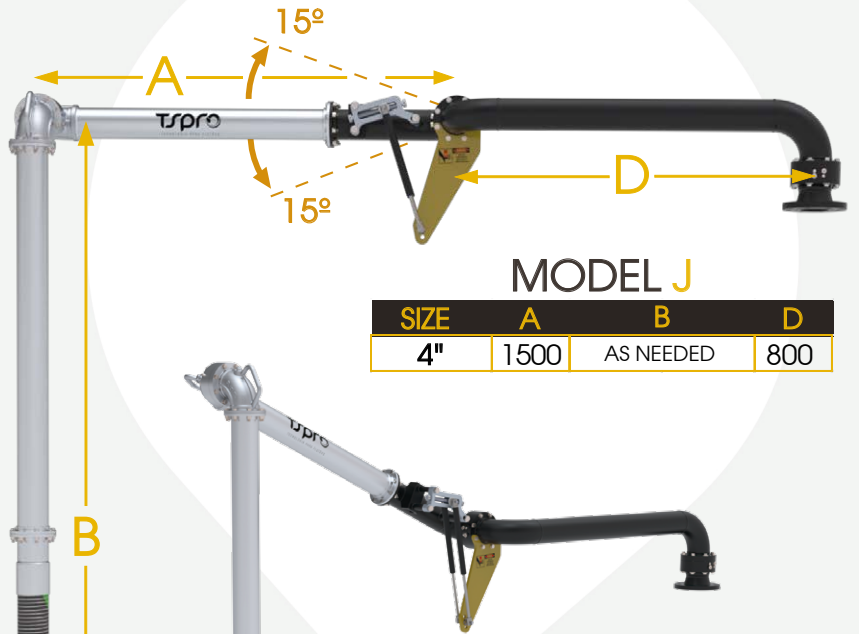
Model **ALLOWS** the use of Vapor Recovery Covers

# BOTTOM LOADING TYPICAL DIMENSIONS



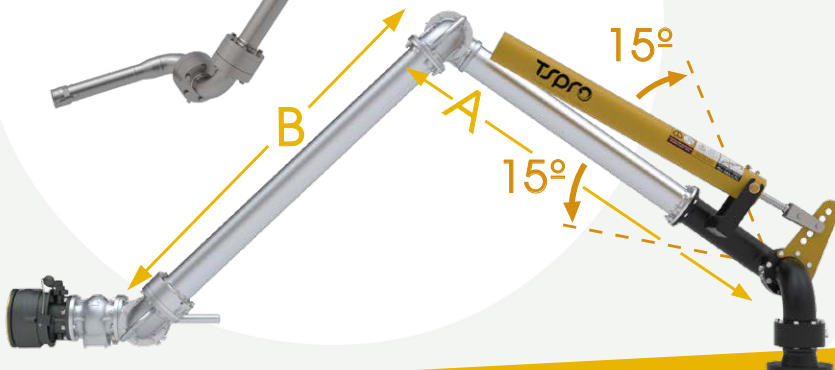
MODEL I

SIZE	A	B
4"	1500	AS NEEDED



MODEL J

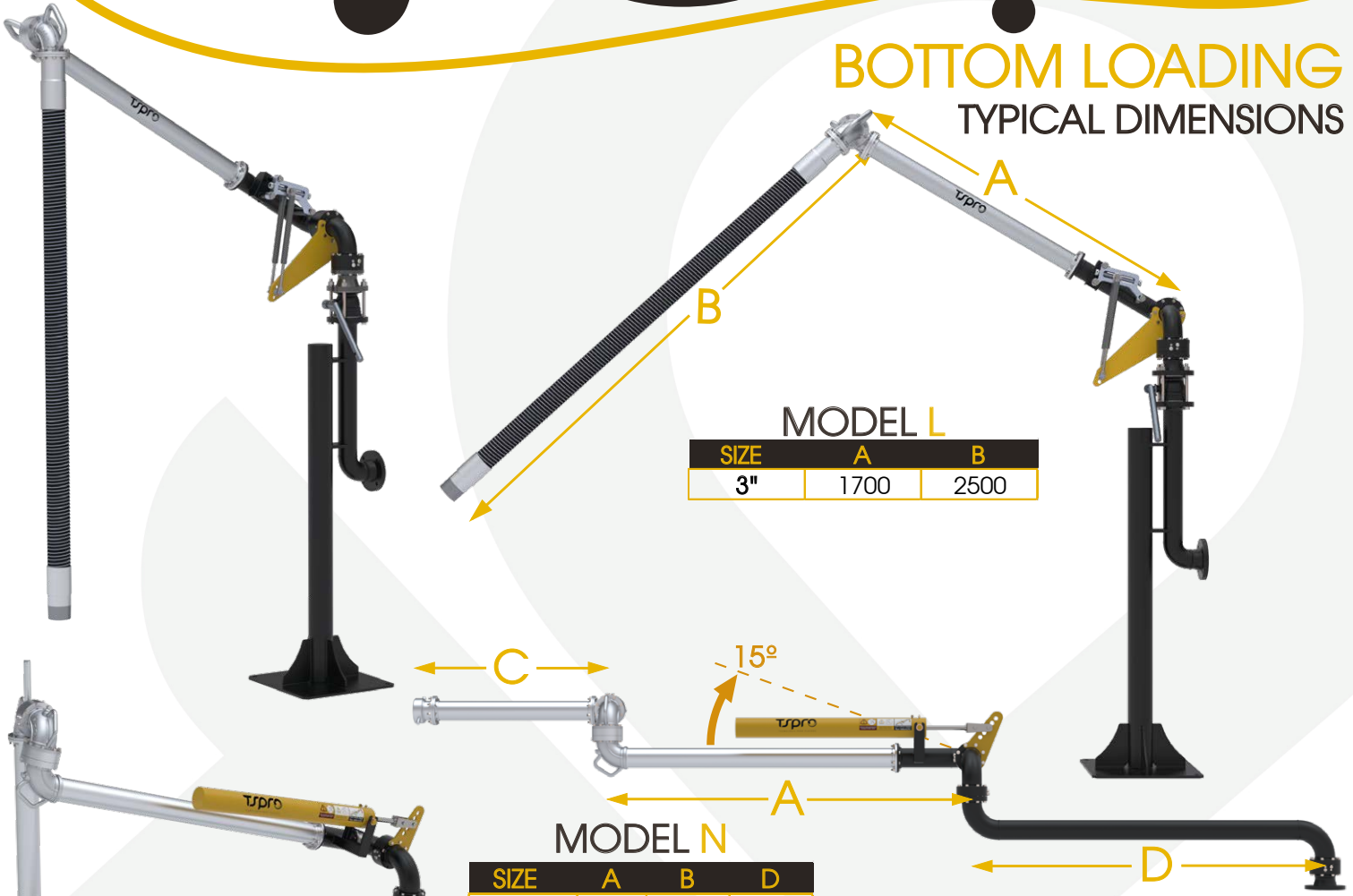
SIZE	A	B	D
4"	1500	AS NEEDED	800



MODEL K

SIZE	A	B
4"	1600	1600
2"		

# BOTTOM LOADING TYPICAL DIMENSIONS

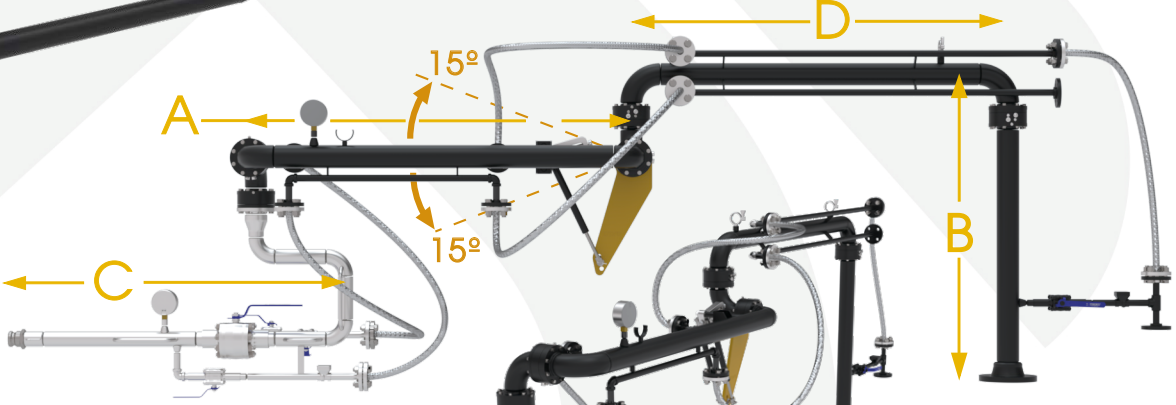


**MODEL L**

SIZE	A	B
3"	1700	2500

**MODEL N**

SIZE	A	B	D
4"	1500	1000	1200



**MODEL P**

SIZE	A	C	D	E
3"	1500	1345	1500	1225

\*Illustrative Images



**QUOTE NOW!**  
**+55 11 2724.8966**



**FOLLOW US**

**VISIT OUR WEBSITE**  
**www.tspro.com.br**