

PEX Expanding PLATE

Product Description

Our PEX expansion plate is a pre-tensioned mechanism used for ground support in underground mining operations. It works in conjunction with wooden posts and/or cribbing (wood packs), which are commonly employed to prevent rockfalls in underground work areas.

The PEX is placed either at the bottom (base) or top end of the wooden post, without the need for an additional base plate ("patilla"), and must always be in contact with the floor, roof, or sidewalls of the excavation. It is also installed at the top of the cribbing structure.

Once properly positioned, the plate is expanded using high-pressure water, applied with a manual or pneumatic pump. The expansion process takes approximately 1.5 minutes.

The support capacity of the PEX ranges between 20 and 50 tons, depending on installation conditions.



Composición Química y Propiedades Mecánicas:

Typical Analysis (%)

Standard / Grade	Carbon (C) %	Phosphorus (P) %	Sulfur (S) %	Silicon (Si) %	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation %
ASTM A36	0.26	0.04	0.05	0.40	250	400	18

Technical Data:

Anchoring Capacity (Ton)	20 - 50
Inflation Pressure (MPa)	10 - 12

Models and Product Dimensions

Dimensions	Model PEX 140	Model PEX 160	Model PEX 183	Modelo PEX 220
Inner Diameter (mm)	140.00 (+0.5)	160.00 (+0.5)	183.00 (+0.5)	220.00 (+0.5)
Outer Diameter (mm)	177.00 (+0.5)	197.00 (+0.5)	220.00 (+0.5)	257.00 (+0.5)
Nozzle Diameter (mm)	16.00	16.00	16.00	16.00
Device Height (mm)	38.00	38.00	38.00	38.00