

PORTA **PLINTH**®



INFORMATION
BROCHURE

PORTA PLINTH®

Revolutionising Pipe Support for the Mining Industry.

The Porta Plinth™ boasts the following features and benefits:

- UV Stable
- Flame Retardent
- It is a heavy duty product with a carrying capacity of 2 tons
- The product is lightweight weighing 3.3Kg
- The product is stackable
- The product is reusable making it an asset and not an expense
- The product can accommodate pipes varying from 2" to 18" in diameter



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Revolutionising Pipe Support for the Mining Industry.

Are you tired of dealing with cumbersome steel or concrete support cradles? TSS Global has developed the game-changing solution you've been waiting for, Porta Plinth™. Specifically designed for the mining and engineering industry, Porta Plinth™ provides a practical, efficient, and cost-effective alternative for supporting pipes over long and short distances.


Porta Plinth™ is an innovative support cradle that replaces traditional methods, setting a new industry standard. Its lightweight construction makes transportation to mining and construction sites easy and convenient and its reusable nature significantly reduces environmental impact compared to conventional pipe support techniques.



We spoke with supply chain experts Rodger Winter and Craig Kruger at TSS Global, who shared their insights about Porta Plinth™:

"Porta Plinth™ is a game-changer for design engineers needing a cost-effective pipe support cradle", says Rodger. Numerous customers have been astounded that this support solution exists and that they have not been aware of its overall benefits.

Identifying the problem, Rodger and Craig embarked on a journey to find a solution. After extensive experimentation and testing, they brought PortaPlinth™ to the Southern African market. Porta Plinth™ uses a fire-resistant polymer which allows a safe solution when laying pipes in a bush veld environment.

A close-up view of the Porta Plinth support cradle, showing its trapezoidal shape and a recessed area on the top surface for pipe support.

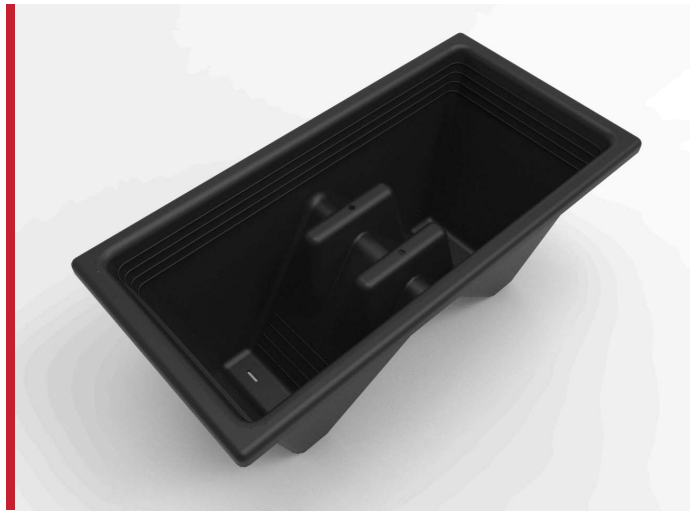
JD Rehabilitation Services CC, the developers of Porta Plinth™, owns the trademark. A 600 ton press is used to ensure that the product is well-laminated and sound.

PORTA PLINTH[®]

Cost Benefits That Speak for Themselves.

Concrete pipe support systems are up to ***300% more expensive.***

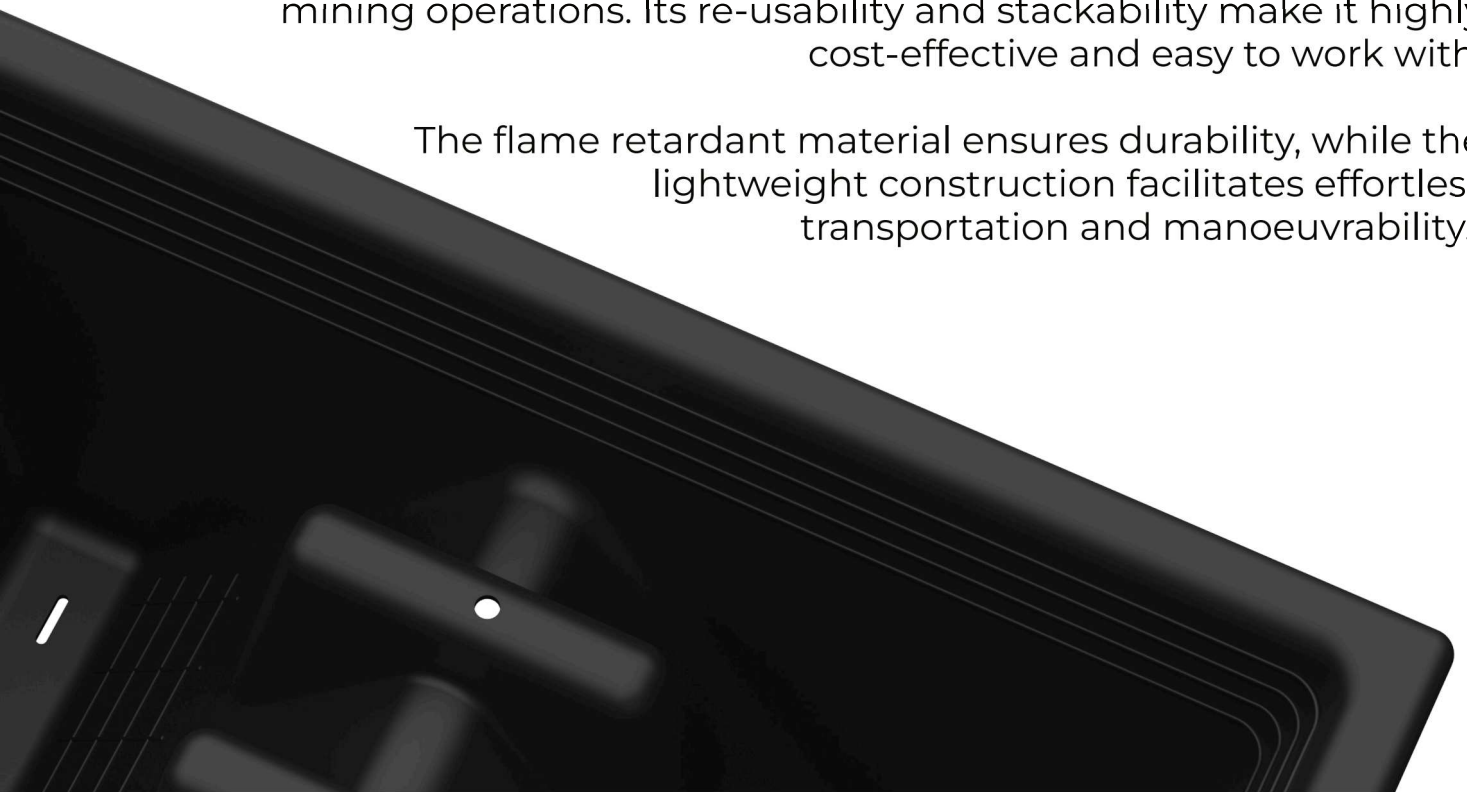
Thanks to its re-usability, Porta Plinth[™] is an asset rather than a consumable product. It's lightweight, so it's easy to lift and reuse. The stackable design opens doors to previously deemed cost-prohibitive projects.



The market response has been ***overwhelmingly positive***, with exciting projects already underway.

According to Craig and Rodger, "Porta Plinth[™] is a must-have for mining operations. Its re-usability and stackability make it highly cost-effective and easy to work with.

The flame retardant material ensures durability, while the lightweight construction facilitates effortless transportation and manoeuvrability."



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Risk Assessment.

Hazards Identified:

No Critical hazards for man and environment in case of normal storing, handling and usage.

Extinguishing Methods:

Media include:

Water

Foam

Dry chemicals

CO₂



Both self contained breathing equipment and protective clothing should be worn to prevent contact with the skin and eyes, as well as to reduce the risk of inhaling any toxic gases.



PORTA PLINTH[®]

Risk Assessment.

Physical and Chemical Properties:

| | |
|-------------------------------|----------------------|
| Melting Point / Melting Range | 262 Degrees Celsius |
| Self Igniting Temperature | >530 Degrees Celsius |
| Thermal Decomposition | >320 Degrees Celsius |

Stability and Reactivity:

Under normal circumstances the plastic is stable.

Temperatures above the melting point / melting range should be avoided.

Products formed in the case of overheating or combustion are:

- H₂O.
- CO₂.
- Mainly CO is released dependent on the availability of oxygen in the surrounding area.
- NO_x (Nitrogen Oxides).
- HCN (Hydrogen Cyanide) a flammable and toxic substance. When installed in the open the gas will not be a factor but it does have an impact should the product be used underground.



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Recommended Installation Guideline on Site.

1. Level the soil before installing the PortaPlinth™
 - The entire base of the product must make contact with the ground.
 - Remove all sharp objects that may come into contact with the base (i.e sharp stones).
 - Fill the product with surrounding soil if placed on soft ground to avoid and potential settling that may occur.
2. Determine where the Porta Plinth™ must be placed under the pipe
 - Spaced in accordance with products carrying weight.
 - No less than 2 units per length of pipe.
 - Units to be placed approximately 1.5m of each flange allowing each pipe to be independent of those it is connected to.
 - Units must not be placed more than 6m apart.
3. Lower the pipe onto the Porta Plinth™
 - Do not drop the pipe onto the unit, ensure pipe is installed in the centre of the product.
 - Lower the pipe onto the pre-placed units and connect the flange.
 - Never exceed products carrying capacity of 2 tons.
4. Regular maintenance of Porta Plinth™
 - Whilst the product has high heat resistance and self extinguishing properties, regular maintenance be undertake to reduce any risk of fire that dry foliage presents.
5. Follow the steps above for the next pipe to be installed.v



TECHNICAL DATA SHEET

| Materiale <i>Material</i> | HERAMID A NER GF030/1 K | | | |
|---|------------------------------|-----------------------|-------------------------------------|--|
| Scheda tecnica emessa il - <i>Issued</i> : 22/09/08 | | | | rev. 4 |
| CARATTERISTICA <i>PROPERTY</i> | NORMATIVA <i>STANDARD</i> | UNITA' <i>UNIT</i> | VALORE <i>VALUE</i> | CONDIZIONI <i>TEST CONDITIONS</i> |
| Proprietà Meccaniche <i>Mechanical Properties</i> | | | | |
| Modulo Elastico a Trazione <i>Tensile Modulus</i> | ISO 527-2/1A | MPa | 8.500 / 6.500 | DAM / COND Test speed 1 mm/min |
| Carico di Snervamento <i>Yield Stress</i> | ISO 527-2/1A | MPa | 130 / 85 | DAM / COND Test speed 50 mm/min |
| Deformazione Nominale a Rottura <i>Nominal Strain at Break</i> | ISO 527-2/1A | % | 2,0 / 2,5 | DAM / COND Test speed 50 mm/min |
| Modulo Elastico a Flessione <i>Flexural Modulus</i> | ISO 178/1A | MPa | 7.500 / 4.000 | DAM / COND Test speed 2 mm/min |
| Carico a Flessione <i>Flexural Strength</i> | ISO 178/1A | MPa | 200 / 130 | DAM / COND Test speed 2 mm/min |
| Res. Urto Charpy senza Intaglio@ 23° C <i>Unnotched Charpy Impact Strength@ 23° C</i> | ISO 179/1 eU | KJ/m ² | 40 / 40 | DAM / COND |
| Res. Urto Charpy senza Intaglio@ -40° C <i>Unnotched Charpy Impact Strength@ -40° C</i> | ISO 179/1 eU | KJ/m ² | 35 | DAM |
| Res. Urto Charpy con Intaglio@ 23° C <i>Charpy Notched Impact Strength@ 23° C</i> | ISO 179 eA | KJ/m ² | 6,5 / 12,0 | DAM / COND |
| Res. Urto Charpy con Intaglio@ -40° C <i>Charpy Notched Impact Strength@ -40° C</i> | ISO 179 eA | KJ/m ² | 5,0 | DAM |
| Proprietà Termiche <i>Thermal Properties</i> | | | | |
| Temperatura di Fusione <i>Melting Temperature</i> | ISO 3146/C2 | °C | 262 | Scanning rate 10°C/min |
| Temperatura di Inflessione sotto Carico <i>Temperature of Deflection under Load</i> | ISO 75-2/Af | °C | 220 | Max surface stress 1.8 MPa |
| Temperatura di Ramollimento Vicat <i>Vicat Softening Temperature</i> | ISO 306/B50 | °C | 225 | Load 50N Heating rate 50°C/h |
| Resistenza al Fuoco <i>Fire Behaviour</i> | | | | |
| Tenuta alla Fiamma <i>Flammability</i> | UL 94 | mm/class | 0,8 / HB | |
| Resistenza al Filo Incandescente <i>Glow Wire Flammability Index</i> | CEI 695-2-1/2 | mm / °C | - | Conditioned 48h Standard Atmosphere |
| Altre Proprietà <i>Other Properties</i> | | | | |
| Densità <i>Density</i> | ISO 1183 | Kg/m ³ | 1.360 | |
| Umidità assorbita, equilibrio 23°C/50% r.h. <i>Moisture absorption, equilibrium 23°C/50% rh</i> | Based to ISO 62 | % | 1,6 | |
| DAM = Dry as moulded state COND = after conditioning @ 23° C ; 50 % RH | | | | |
| <p>I dati tecnici menzionati sono solo indicativi e non possono essere considerati come specifiche di prodotto. Qualsiasi modifica / additivazione del materiale, dopo la fornitura, può comportare variazioni dei valori o delle caratteristiche tecniche. I valori sono elaborati stampando dei provini standard.</p> <p><i>The above-mentioned technical data are simply indicative for users and they are given without any guarantee. They are not to be considered as specifications. Any modification / additivation of the material after the supplying can involve variation of the values or the technical characteristics. The values are calculated on injection moulded samples.</i></p> | | | | |
| RN 009C | Emesso da: LASV | Approvato da: QAS | Mod. TDS012 - Rev. 5 del 04/07/2002 | |