

Rig Site Access Mat Comparison

HDPE Thermoplastic Road Mats · Steel Plates · Wooden Mats

Oil & Gas Industry

Muddy Terrain Solutions

Up to 100+ Ton Load Capacity

Criteria	HDPE Road Mat ★	Steel Plate	Wooden Mat
Unit Weight	<ul style="list-style-type: none"> ● Light — 30~50 kg/m² No crane required for placement 	<ul style="list-style-type: none"> ● Heavy — 80~200 kg/m² Crane & equipment required 	<ul style="list-style-type: none"> ● Moderate — 40~80 kg/m² Depends on wood type
Load Capacity	<ul style="list-style-type: none"> ● Up to 100+ tons Memory-resilient under compression 	<ul style="list-style-type: none"> ● Very high Rigid, no deflection 	<ul style="list-style-type: none"> ● Limited — 20~60 tons Risk of bending & cracking
Corrosion Resistance	<ul style="list-style-type: none"> ● Excellent Saltwater & chemical resistant 	<ul style="list-style-type: none"> ● Poor Rusts in humid/muddy conditions 	<ul style="list-style-type: none"> ● Poor Rot, mold & biological decay
Maintenance Cost	<ul style="list-style-type: none"> ● Near zero No painting, no coating needed 	<ul style="list-style-type: none"> ● High Regular anti-rust coating required 	<ul style="list-style-type: none"> ● High Replacement every 1~3 years
Service Life	<ul style="list-style-type: none"> ● 10~15+ years UV-stabilized, weatherproof 	<ul style="list-style-type: none"> ● 5~10 years With maintenance 	<ul style="list-style-type: none"> ● 1~3 years Heavy-duty use = shorter life
Slip Resistance	<ul style="list-style-type: none"> ● Excellent Textured surface, self-draining 	<ul style="list-style-type: none"> ● Poor Smooth surface, slip hazard 	<ul style="list-style-type: none"> ● Moderate Depends on surface treatment
Installation Speed	<ul style="list-style-type: none"> ● Fast Interlocking design, 2-man crew 	<ul style="list-style-type: none"> ● Slow Requires crane & multiple workers 	<ul style="list-style-type: none"> ● Fast Simple, but labor-intensive

Criteria	HDPE Road Mat ★	Steel Plate	Wooden Mat
Environmental Impact	<ul style="list-style-type: none"> ● Low 100% recyclable, no soil contamination	<ul style="list-style-type: none"> ● Moderate Recyclable but energy-intensive	<ul style="list-style-type: none"> ● Moderate Deforestation, single-use
Noise Level	<ul style="list-style-type: none"> ● Low Dampens vibration & noise	<ul style="list-style-type: none"> ● High Metal-on-metal noise	<ul style="list-style-type: none"> ● Low Natural absorption
Total Cost of Ownership	<ul style="list-style-type: none"> ● Lowest long-term cost Higher upfront, near-zero upkeep	<ul style="list-style-type: none"> ● High High upfront + maintenance burden	<ul style="list-style-type: none"> ● Moderate Low upfront, frequent replacement

Why HDPE Road Mats Win for Rig Site Operations

IDEAL FOR

Muddy, Wet Terrain

BEST ROI AFTER

12~18 Months

TYPICAL ORDER SIZE

1,000~5,000 m²

LEAD TIME

7~21 Days (EXW)