

### MAX-R™ RECON LOW FRICTION CENTRALIZERS

GO FURTHER FASTER WITH MAX-R™ RECON CENTRALIZERS



.IGHTER • STRONGER • SMARTER

## SUCCEED WHERE OTHERS FAIL

Max-R™ low friction polymer centralizers by Matrix are designed specifically for today and tomorrow's extended reach and highly deviated casing installation operations. Utilizing propriety blends of premium engineering polymers combined with the expertise of Matrix's thermoplastic engineers, material scientists and decades deep industry experience, the Max-R low friction centralizer continues to deliver solutions for well construction challenges.

As projects become more technically and commercially challenging, there is no such thing as a 'one size fits all' material. The Max-R development team is continually pursuing new material formulations to improve the viability of field development and improve returns.

With a history of tailoring Max-R centralizer design to both operational and environmental conditions, **Matrix have developed the Recon centralizer specifically for the North American market**. It maintains all the class defining features of the existing Pioneer, Extreme and Revolution designers in a material suited to market demands in the US.

Max-R centralizers are field-proven in enabling casing to reach total depth in a variety of downhole environments. It has succeeded where others have failed in delivering not only the well, but also significant direct and indirect savings.

Max-R centralizers have been used across the globe since 2011, from North America through to the North West Shelf of Western Australia. So, whether your operation is onshore, offshore, deepwater or requires the installation of a complex multilateral completion, you will confidently go further, faster with  $Max-R^{m}$ .



## PERFORMANCE AND FEATURES



### **LOW DRAG**

Typically more than 50% friction reduction compared to steel on steel. Consistent reduction in friction drag ensures casing design and deployment confidence, while lowering field development CAPEX and OPEX.

### **BETTER FIT**

Three-piece interlocked design (separate body and end-rings) allows for a closer fit, less wear and thus a higher casing standoff.

### **LOW TORQUE**

Polymer Shock rings provide polymer bearing face during casing rotation.

### **IMPACT RESISTANT**

Proven polymer body and shock rings construction provide impact resistance and unlike steel end-rings do not induce tensile stresses under axial load.

### **ROBUST**

Engineering grade polymer, 100% metal free.

### HIGH OPERATING TEMPERATURES

Up to 392°F (200°C).

### **LIGHTWEIGHT**

Improved HSE profile and reduced logistics costs.

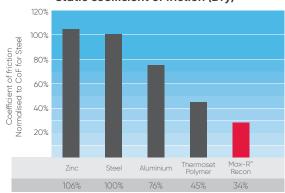
### **SIZE RANGE**

Cement casing and liners as well as cased hole/open hole completions ranging from 4 1/2" to 7".

### **ENGINEERING SUPPORT**

Matrix can assist with torque and drag simulation and evaluation to support the operator's well design process.





PIPE OD		CENTRALIZER OD		BLADE TYPE (SPIRAL)	LOW FRICTION RECON
4 1/2"	114.3 mm	5 3/4"	146.05 mm	Slim	✓
		5 13/16"	147.64 mm	Slim	✓
		5 7/8"	149.23 mm	Slim	<b>√</b>
		6 1/2"	165.10 mm	Slim	✓
5 1/2"	139.7 mm	7 3/8"	187.33 mm	Slim	<b>√</b>
		8"	203.20 mm	Slim	<b>√</b>
		8 1/4"	209.55 mm	Slim	<b>√</b>
6 5/8"	168.3 mm	8 1/4"]	209.55 mm	Mid	<b>√</b>
7"	177.8 mm	8 1/4"	209.55 mm	Mid	✓



# THE POWER OF ADVANCED MATERIALS