

Powering Tomorrow, Today

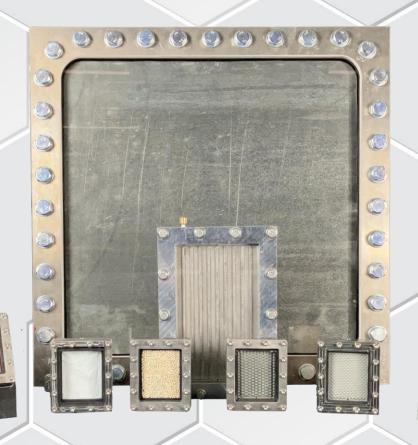
Redeem Flow Reactor RFR Product Catalogue



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Redeem Arrow Reactor

REDEEM SOLAR TECHNOLOGIES

The advanced phase mixing Redeem Arrow Flow Reactor is tailored to handle multiple phases seamlessly, this reactor is the epitome of innovation, designed to enhance mass and heat transfer rates, reduce processing times, and improve yield across a diverse range of chemical reactions. Whether you're dealing with liquid-liquid, gas-liquid, or solid-phase reactions, our reactor ensures a perfect blend of components at every stage, thanks to its state-of-the-art mixing technology. Robust in design and easy to operate, it fits effortlessly into your existing setup, minimizing downtime and maximizing productivity.





Redeem Bubble Channel Reactor

The Redeem Bubble Channel Flow Reactor is designed to optimize mixing and reaction rates, our reactor features advanced fluid dynamics technology that ensures consistent, high-quality outputs. Whether you're working with complex polymers, pharmaceuticals, or fine chemicals, our reactor minimizes reaction time and maximizes yield. Built for durability and ease of operation, it guarantees a seamless integration into any production line.

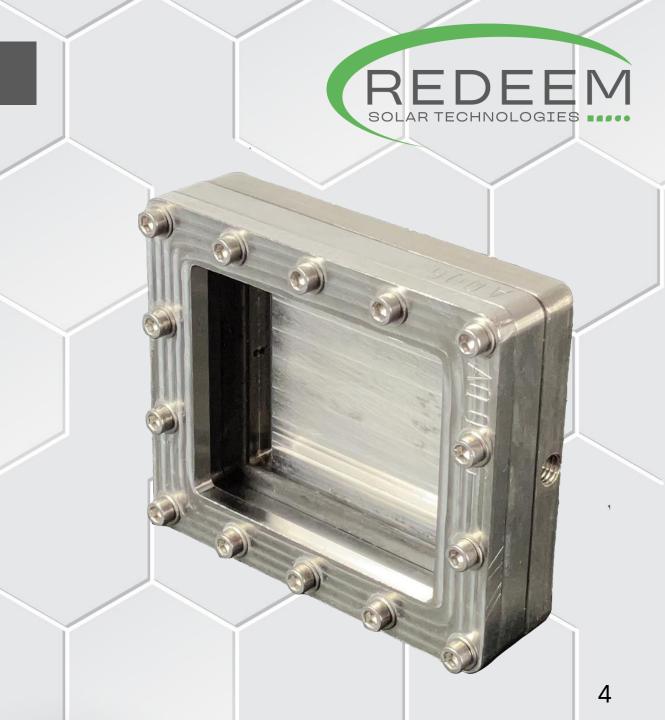






Redeem Deep Channel Reactor

The Redeem Deep Channel Flow Reactor is designed to transform the efficiency and effectiveness of your photochemical reactions. This state-of-the-art reactor utilizes deep channel technology to ensure uniform photoactivation across a wide range of chemical substrates. Ideal for applications in pharmaceuticals, fine chemicals, and environmental technologies, it offers precise control, rapid processing times, and scalability. Its compact, modular design makes integration into existing systems seamless, reducing operational costs and footprint.





Redeem Pellet-Packed Reactor

The Redeem Pellet-Packed Reactor ensures a uniform flow through a meticulously arranged pellet-packed core of your choice, optimizing contact efficiency and enhancing reaction kinetics without compromising on pressure drop. The unique configuration minimizes resistance, allowing smoother operation and extended run times without pressure-related interruptions. Engineered for low downtime, this system features a robust design that is easy to maintain and quick to service, ensuring your operations continue with minimal interruption. Ideal for industries requiring precise catalytic processes, such pharmaceuticals, petrochemicals, and specialty chemicals.







Redeem Coated Reactor

The Redeem Coated Reactor features an innovative interior surface uniformly coated with finely dispersed catalyst powder that has the composition of your choice, enhancing the catalytic activity and ensuring faster reaction times across a wide range of chemical processes. The powder coating facilitates a high degree of contact between reactants and catalyst, leading to improved conversion rates, reduced energy usage, and a significant decrease in byproduct formation. Built to integrate seamlessly into your production line, our reactor offers a compact design, low maintenance requirements, and robust durability, significantly reducing downtime.







Redeem Membrane Reactor

The Redeem Membrane Flow Reactor integrates a selective membrane of your choice to optimize the separation and reaction processes simultaneously. The membrane allows for precise control over reactant flow and product separation, enhancing reaction rates while minimizing undesirable byproducts. This reactor ensures cleaner, safer, and more sustainable chemical processing. With its compact footprint, easy scalability, and reduced operational costs, our Membrane Flow Reactor delivers unmatched performance, helping you achieve superior product quality and throughput while adhering to stringent environmental standards.





Redeem Holey Reactor

The Redeem Holey Flow Reactor is engineered to enhance operational efficiency and ensure smoother processing in water-intensive chemical reactions. This innovative reactor design features strategically placed drain holes that facilitate quick and easy removal of water and other byproducts, minimizing downtime and improving the consistency of your chemical outputs. Ideal for aqueous phase reactions and industries requiring meticulous separation processes, our reactor not only streamlines production but also optimizes safety by preventing unwanted accumulation.



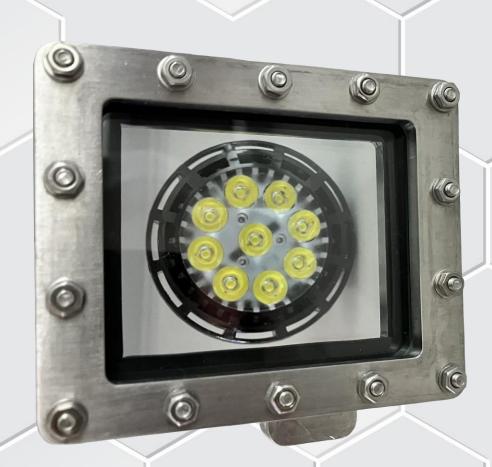




Redeem See-Through Reactor

The Redeem See-Through Flow Reactor can be illuminated from both sides, ensuring optimal light exposure and significantly enhancing the rate of photochemical reactions. The dual-sided illumination facilitates even distribution of light, making it perfect for scalable photo-synthesis of complex chemicals and pharmaceuticals, where consistent quality and high throughput are paramount. This advanced technology reduces energy consumption, contributing to more sustainable production processes. Compact and easy to integrate into existing systems.







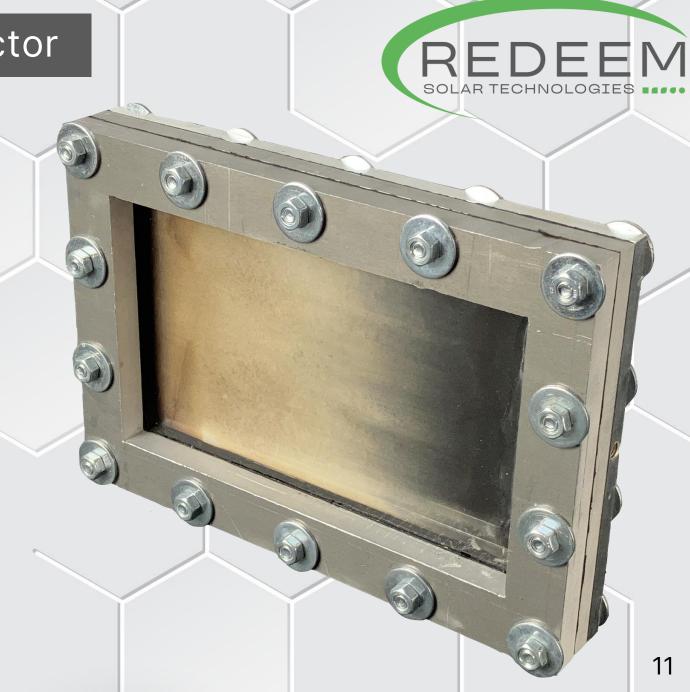
Redeem Parallel Channel Reactor

The Redeem Parallel Channel Flow Reactor is designed to handle high-volume, continuous processing with exceptional efficiency. This advanced reactor system efficiently scales up your chemical reactions without compromising on the quality or consistency of the final product. The inclusion of multiple channels allows for boosting throughput and reducing reaction time. Ideal for industries requiring large-scale chemical synthesis, such as pharmaceuticals, petrochemicals, and bulk chemicals, our reactor ensures uniform heat and mass transfer, leading to improved yield and lower operating costs.



Redeem Powder-Packed Reactor

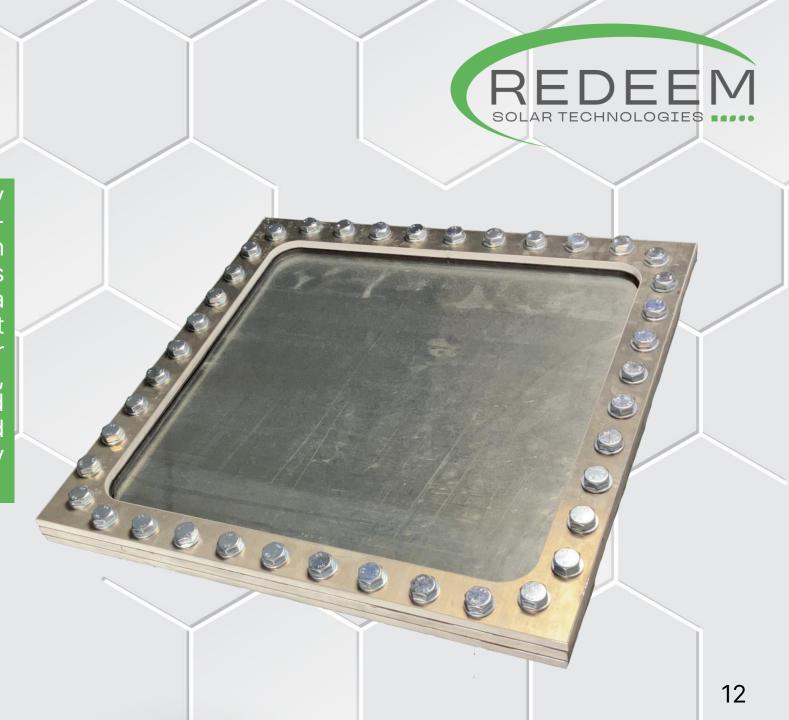
The Redeem Powder-Packed Flow Reactor is engineered to ensure uniform flow velocity and residence time. This advanced reactor is packed with a specialized powder catalyst, optimizing every aspect of your chemical reactions by maintaining even conditions throughout the process. The result is unparalleled consistency in product quality and significantly enhanced reaction efficiency. Featuring a design that minimizes pressure drop, our reactor operates with exceptional energy efficiency, reducing your operational costs and environmental impact.





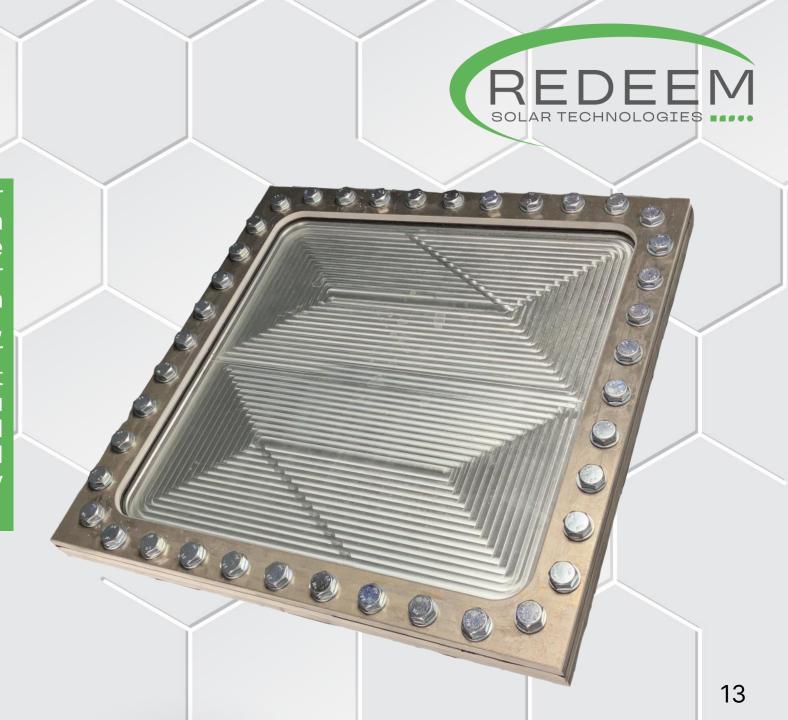
Redeem Maxi Reactor

The Redeem Maxi Flow Reactor is expertly engineered to feature a high area-to-volume ratio for superior performance in high-throughput applications. This innovative design maximizes surface area exposure, dramatically enhancing heat transfer rates, which are crucial for efficient chemical synthesis. As a result, you experience faster reactions, improved yields, and a higher quality of end products, all while maintaining energy efficiency and reducing waste.



Redeem O-Maxi Reactor

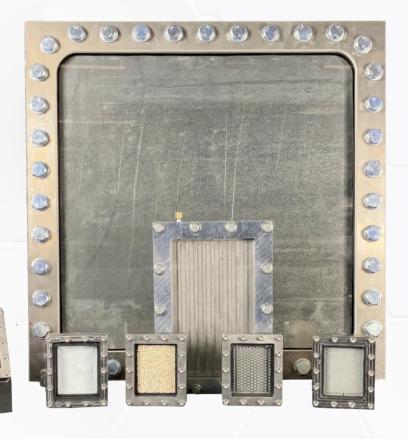
Redeem O-Maxi Flow Reactor The combines the advantage of the Redeem Maxi Reactor with high pressure tolerance for reactions that require operation under elevated pressures. This innovative design maximizes surface area exposure, dramatically enhancing heat transfer rates, which are crucial for efficient chemical synthesis. As a result, you experience faster reactions, improved yields, and a higher quality of end products, all while maintaining energy efficiency and reducing waste.





Contact Us













@redeem-solar-technologies/



