

CARBON CAPTURE, UTILIZATION & STORAGE



2JCP

POWERING
A BETTER WORLD



FULL LIFECYCLE SCOPE

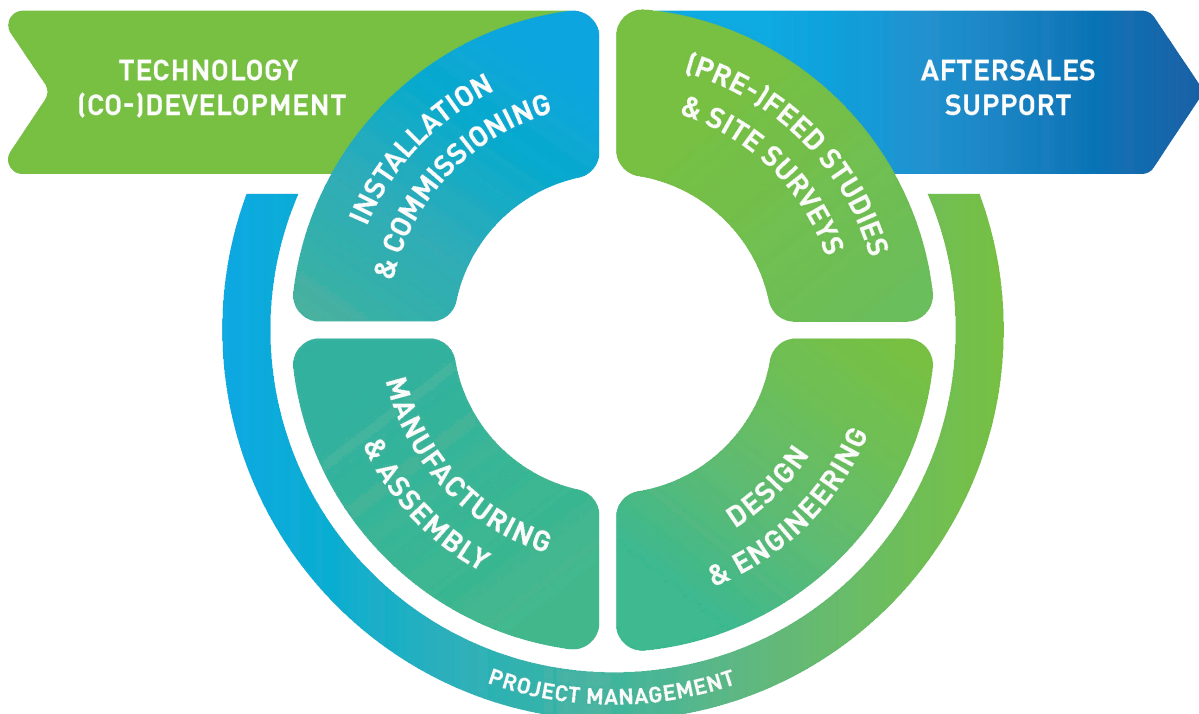
We offer a wide range of services, from turnkey delivery of smaller-scale projects to manufacture of individual components for large-scale carbon capture plants

At 2JCP, we are proud to actively support the rapidly growing Carbon Capture, Utilization, and Storage (CCUS) business, recognizing its crucial role in meeting global net zero targets. With our broad portfolio of innovative solutions, we empower leading technologists to bring their cutting-edge CCUS technologies to market.

Our services cover a wide range of customer needs, from the end-to-end turnkey delivery of small-scale carbon capture plants to the system packaging of advanced modular CCUS solutions. We also manufacture individual components such as piping and ducting systems, pressure vessels, and storage tanks. This flexibility allows us to cater to various project requirements while maintaining the highest industry standards.

Our highly skilled engineering teams, equipped with the necessary qualifications and extensive experience in the carbon capture field, design equipment that adheres to a broad range of design codes and norms. Meanwhile, our manufacturing teams ensure that all equipment meets the most stringent quality standards to guarantee reliability and performance.

In addition to design and manufacturing, our global installation teams provide expert support for the installation and commissioning of CCUS equipment, ensuring smooth and efficient execution anywhere in the world. At 2JCP, we are dedicated to playing a key role in the green energy transition, helping the world move closer to achieving net zero goals through excellence in carbon capture technology.



OUR EXPERTISE

+ Modular Solutions

We support global technologists by helping them turn their unique technologies into real projects. Our expertise lies in the design and turnkey delivery of small-scale modularized plants that capture and re-use exhaust gases through distinctive production processes. Thanks to our long-term experience in modularized equipment across various energy sectors we can ensure the designed solution meets the highest customer standards.



+ System Packaging

Our packaging expertise allows us to fully integrate the electromechanical equipment into a functional product for rapid installation on site. We primarily focus on small and mid-scale modularized carbon capture systems that typically involve structural frames or prefabricated containers, various mechanical equipment including pressure vessels and heat exchangers as well as insulation, sensitive controls equipment and complex electrical systems.



+ Noise Control Systems

We provide a broad range of standard and bespoke noise control products to help reduce site noise emissions. Our acoustic enclosure and barrier solutions are effective at reducing the noise impact of equipment such as pumps, fans and other rotary emitters. Our experience extends to the supply of custom silencers to treat in-duct noise, whether generated by rotary equipment or flow-induced noise. We can deal with extreme flows, pressures and temperatures, across the full range of frequencies.



+ Ducting Systems

We have vast experience in designing complex flue gas systems, dealing with noise, in addition to hot and corrosive gases - often in large volumes. We can adapt our designs to meet the specific needs of our clients, often involving extensive and tortuous routing. We can provide flue gas systems of over 10m in cross-section, assembled in modular form for rapid assembly at site, and respecting transportation/logistic limits between shop and site.



+ Heat Exchangers

Shell & Tube heat exchangers are a key part of the process, with heating and cooling being required at various stages of the Carbon Capture treatment process. Our engineers are highly experienced at undertaking thermal and mechanical design, with our solutions typically being bespoke in nature to meet our clients' demands. Our manufacturing process has been developed over many years to meet the rigorous quality demands associated with extreme temperatures, pressures and often highly corrosive fluids. We work to US, EU and UK standards using a combination of internal and best in class analysis software.



+ Process & Storage Tanks

We design and manufacture both atmospheric and high-pressure solutions to deal with un-treated and treated fluids, in addition to the fluids required as part of the treatment process. We provide solutions of temperature control for a wide range of stored fluids. To complement our range of products in this sector, we can deal with extreme pressures and temperatures for a broad range of fluids, often corrosive in nature. We work to US, EU and UK standards using a combination of internal and best in class analysis software.



+ Piping Systems & Skids

To complement our other pressure and non-pressure systems, we provide small and large diameter piping for a wide range of CCUS auxiliary sub-systems. We can accommodate high-stress, high & low-temperature and high-pressure applications, including insulation for acoustic and thermal protection.



+ Pressure Vessels

We offer a broad range of pressurized vessels for use in the CCUS sector. Ranging from simple process vessels to complex high-pressure separation systems, our designs meet the bespoke needs of our clients. We can deal with most carbon, stainless and Duplex/Super Duplex steels, with in-house non-destructive testing capability.



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