



P-4 Carbon Capture Pilot

The P-4 is a **one-of-a-kind carbon capture test bench** that **expands knowledge of adsorption mechanisms** and enables us **to optimize adsorption processes to your needs**.

It is equipped with a complete set of system controls, automation and measuring devices. The P-4 versatility allows you **to test multiple operating conditions and adsorption bed designs**.

Native in temperature-Swing Adsorption (TSA), the P-4 is **upgradable to Vacuum-Swing Adsorption (VSA)**.



Capture capacity
4 tons of CO₂/year

Key Data

Process compatibility	TSA	VSA	VTSA
Gas customisation	CO ₂	O ₂	Custom
CO ₂ concentration range	Up to 10% _{vol} in flue gas		
Gas velocity	Up to 5 m/s		
Gas mass flow rate	Up to 400 kg/h		
Adsorbent columns dimension	3 columns (15 cm dia. / 1 m length)		
Gas temperature range	10 - 150°C		
Humidity	Dry air	Wet gas	



Where Real Tests Meet Digital Genius !

Our **built-in digital twin** allows you to **bridge the gap between experiments and simulations** for unmatched scale up performance.

P-4 capture pilot main capabilities



Flue gas customization



Adaptation of the filters and process to your needs



Temperature, flow rate and humidity control



100% representative flow rates



Sequences automation

Put PuRE Carbon Capture technology to the test under **your operating conditions**.

Conduct adsorption testing on **your own process**.

Discover the team behind PuRE Carbon Capture technology.

Connect with us **now**.

Contact us for more information



contact@pureco2capture.com



<https://pureco2capture.com>



<https://www.linkedin.com/company/purecarboncapture>



[@purecarboncapture](https://www.youtube.com/@purecarboncapture)



Reduce your carbon **footprint.**

Be part of the
decarbonization
of our industries.