



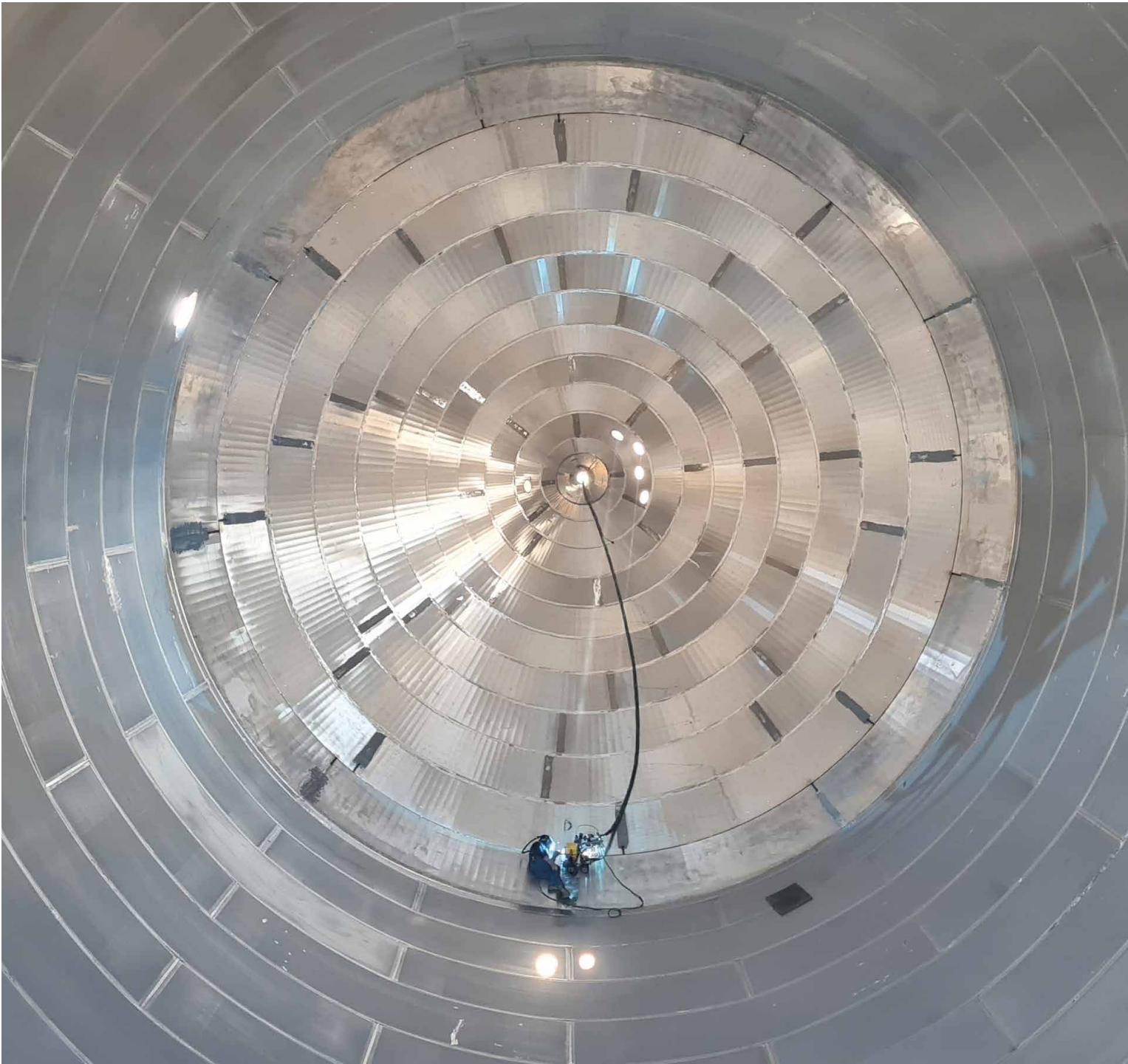
Carbon Capture & Utilisation (CCUS)

**Custom engineered, large scale,
site assembled columns, tanks and
vessels for carbon capture projects**

Code compliant engineering, fabrication and worldwide site assembly

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Introduction

Founded in 1945, Jansens & Dieperink specialises in the engineering, fabrication and site assembly of large scale process equipment. Our integrated project approach combines in house engineering, controlled prefabrication, quality assurance and worldwide site assembly for columns, tanks and vessels.



Our company is ISO-9001 and DIN EN ISO 3834-3 certified.



One integrated scope for engineering, fabrication, quality control, logistics and site assembly.

What we delivered

8.763

Installed base

64

Countries

7,000m³

Largest process equipment up to now

You can rely on our services from detailed design and material selection through fabrication, inspection, logistics, site assembly and final testing on site.

Successfully carried out all over the world



Engineering and production in our own factory

Our in house engineering converts process design data into mechanically robust, code compliant equipment. Design inputs can include pressure, temperature, fluid properties, corrosion allowance, material requirements, wind and seismic loads, nozzle loads, support conditions and the complete site assembly strategy.

Engineering

In house engineering

From mechanical design to site assembly, one integrated engineering and execution scope.



Detailed engineering is performed in house using dedicated calculation and design software. We can comply with all relevant project and local design codes and integrate material, welding, inspection and NDT requirements into the equipment design from the outset.

Production

Automated production

Automated forming and welding across our 13,500 m² fabrication facilities ensure repeatable geometry, controlled weld preparation and a high level of prefabrication before shipment to site.



The fabrication strategy is engineered together with transport and efficient assembly. Panel dimensions, weld seams, lifting points, temporary supports and site interfaces are defined before production starts, reducing site assembly time and improving dimensional control.

Nozzles, manways, supports and attachments are installed in the workshop wherever practical. Components are prepared for efficient containerized or project specific transport and final site welding, with material traceability maintained throughout fabrication



Our proprietary panel design removes conventional transport restrictions from final equipment dimensions. Large shells can therefore be engineered and assembled on site without a practical size limitation imposed by road or shipping geometry.

On site assembly

Custom made large scale columns, tanks and vessels assembled on site for every application

J&D executes site assembly with experienced supervisors, qualified welders and dedicated equipment. Assembly planning covers lifting, alignment, weld sequencing, dimensional control, quality documentation and coordination of the required inspection and NDT activities.



Site execution is managed under industrial HSE and quality procedures suitable for chemical, petrochemical and process plant environments. Material identification, weld traceability, inspection hold points, NDT and final testing can be incorporated in accordance with the applicable code and project specification.

State-of-the-art facility

Prefabricated in the Netherlands

On site assembly means economic transport of fabricated parts to any location



Precision prefabricated components arrive on site ready for efficient assembly. This reduces on site fitting, manpower and heavy-equipment requirements, while allowing welding, inspection and NDT activities to follow a controlled, pre-planned construction sequence.

Multiple international site projects can be executed simultaneously. Engineering, fabrication, logistics, quality documentation and site resources are coordinated centrally from the Netherlands to maintain continuity from workshop to mechanical completion.



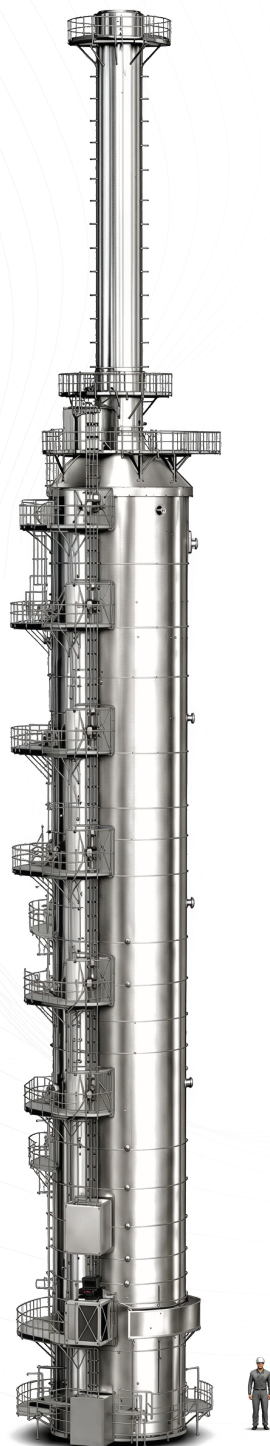
Schedule performance is managed through prefabrication, planned weld sequences and defined inspection stages. Required NDT, leak testing, pressure testing or other integrity checks are facilitated as specified by the applicable equipment code and project requirements.

Site Assembled Columns Without Size Limitations

Large Diameter Columns, Assembled On Site

Carbon capture absorbers and related process columns can require very large diameters due to high gas flow rates. J&D performs the complete mechanical engineering of the column, including the shell, supports, nozzles, structural interfaces and integration of the required column internals. The complete equipment is engineered in accordance with the applicable design codes, process conditions and project specifications, including all required materials, inspection and NDT requirements.

Beyond process columns, J&D also applies its panel design technology to large diameter process ducting, enabling efficient prefabrication, transport and on site assembly without conventional transport driven size limitations.



Custom Designed Absorber Columns Compatible with Any Separation Technology

Custom designed columns can accommodate internals and separation technology supplied by third party licensors. Mechanical interfaces can include packing or tray supports, distributors, collectors, internal beams, process nozzles, ducting, manways, platforms and external attachments.



Site Assembled Absorption Columns Without Size Limits

J&D panel technology divides the column into precision engineered sections for transport and efficient site assembly. Because final diameter and height are created at site, conventional transport geometry does not impose a practical size limitation. The same concept can be applied across relevant material specifications and design code requirements.

Turnkey Site Assembly and Quality Execution

Site execution combines controlled fit up, automated welding, dimensional verification and the specified inspection programme. J&D can facilitate all relevant NDT methods and final integrity testing required by the governing code, project specification and material system.



Pressure vessels

Custom made Pressure Vessels, Shopwelded or Site assembled

Pressure Vessels Without Transport Size Limitations

J&D designs and manufactures custom pressure vessels in aluminium, stainless steel, carbon steel and other project-specified materials. Vessels can be shopwelded or site assembled and engineered in accordance with all relevant pressure vessel codes, project specifications and local requirements.



Design

Code-Compliant Pressure Vessels Assembled on Site

Mechanical design, prefabrication, welding, site assembly, inspection and testing are developed as one controlled scope. The required material documentation, weld procedures, NDT programme and code defined acceptance criteria can be integrated into project execution.



Controlled Fabrication and Inspection

Automated manufacturing and panelised construction maximise workshop prefabrication while maintaining material traceability and repeatable weld preparation. Required visual examination, surface and volumetric NDT can be facilitated in accordance with the applicable code and inspection plan for our shop and site assembly activities

Complete Engineering Responsibility

Engineering can include shell and head calculations, nozzle reinforcement, local and external loads, supports, wind and seismic effects, material selection and corrosion allowance. Final site testing and mechanical completion are performed to the governing code and agreed project requirements.



Large Site Assembled Storage Tanks Worldwide

On Site Built Tanks Without Limits

J&D engineers and constructs large storage tanks in aluminium, stainless steel, duplex stainless steel and other project-specified materials. Tank geometry, material system, structural loads, process conditions and inspection requirements are developed to the relevant design code and project specification.



Innovative Panel Technology for Large Storage Tanks

J&D has developed a unique assembly procedure for large site-assembled tanks, combining precision-prefabricated panels with a highly efficient and controlled erection sequence. The methodology is engineered to accelerate on site assembly and welding while maintaining dimensional accuracy and consistent quality throughout construction. This enables large diameter tanks to be erected efficiently, regardless of conventional transport constraints.



Large Duplex Steel Tanks

For demanding corrosive service, duplex stainless steel combines high mechanical strength with strong corrosion resistance. Material handling, forming, welding, heat input, inspection and NDT are controlled to the specified material and project requirements.

High-Speed Assembly with Controlled Quality

Panel geometry and weld sequencing are engineered to minimise site fitting and accelerate assembly. During installation, dimensional control, weld traceability, required NDT and final leak or integrity testing are incorporated into the quality plan, supporting reliable mechanical completion.



Jansens & Dieperink



Engineered without limits. assembled on site.

Large scale cylindrical solutions, engineered and prefabricated in house, assembled worldwide.

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