

Why Carbotura Is Not a Project-Risk Investment

An EPC project is engineered for its site, built in the field, and nobody knows how it really performs until commercial operation. Carbotura's facilities are manufactured: identical modules built to one production specification, validated at the factory and insured as a known asset. The process risk that defines a project is retired before your capital meets the site.

Reliability

Failure modes are analyzed once at the specification level and every module inherits the work. One Authorized Systems Integrator (ASI) owns acceptance testing, spares and a single warranty.

Uptime

N+1 line capacity is installed in every building; if a line is down, the rest carry the building's named throughput. A major repair is a module swap from fleet spares, not a field rebuild.

Insurability

Frames and modules are insured as serialized manufactured assets with production and test records behind them. Performance risk sits with the ASI guarantee and warranty, not a construction wrap.

DIMENSION	TYPICAL EPC PROJECT	CARBOTURA DFM
Performance known	At commercial operation	At the factory, within 2.5% manufacturing tolerance; independent validation partner signs off
Adding capacity	Design and build a bigger plant	Add identical, validated modules — 400 TPD is four 100 TPD modules
Accountability	Contractor, subcontractors and vendors	One ASI with a single warranty and performance guarantee
Redundancy	Optional, at owner's cost	N+1 line capacity installed from day one
Major repair	Field diagnosis, custom parts, rebuild cycle	Swap a standard module from fleet spares
Insurance	Full wrap on an unproven plant: builder's risk, DSU, bonds, LDs	Serialized asset cover, moving to ASI guarantee and warranty
Timeline	Typically 42–78 months to commercial operation	12–24 months from permit issuance to commercial operation

What does acceptance testing cover, and who signs off?

Factory (FAT), site (SAT) and site-integration (SIT) testing, all run and certified by the ASI; an independent Authorized Validation Partner is present at FAT and SAT and signs off separately. A module must perform within 2.5% of specification to pass.

How are spares held, and how fast is a swap?

Spares are in the ASI's scope and one set serves the whole fleet, so a repair is a swap with no custom parts. N+1 line capacity carries named throughput while a module is out. Spares plan and target swap times are shared in diligence.

What does the ASI guarantee and warranty cover?

The ASI is the single party holding the performance guarantee, and the module comes with one warranty. If a module does not perform, you go to one party. Specific terms are shared under NDA in diligence.

How is frame and module insurance structured?

Serialized manufactured assets under property and equipment-breakdown cover, each with its production record and acceptance-test data. Current carrier terms and coverage limits are walked through one-on-one.