OUR HISTORY

Chembase History

Four decades of building better roads

It costs you nothing to find out how much you can save.

OUR PURPOSE

Our history is a proud one.

On the 24th April 1986, Chembase Pty Ltd Formerly known as DASONA Pty Ltd was established.

Chembase Formerly

- DASONA Pty Ltd.
- Established in 1986 and later changed its name to Chembase Pty Ltd in 1987.

Research & Development

- R&D was established in 1977
- Within 5 years, developed Chembase Treatment System AKA **[CTS]**

NSW Government Australia

- Chembase conducted road trials for NSW Government from 1987-1992
- From 1987 to 2026, all road trial having No maintenance or Potholes.to date.

Our history in four dates

Chembase Research & Development began in 1977. Within five years it had developed the Chembase Treatment System, a solution well ahead of its time.

1977

Research & Development founded

1982

First products and first trial

1987–1992

NSW Government road base trials

2026

NTRO certificate and official launch

TERMS

Names you will see

Chembase

Also known as Chembase International and Chembase International Group.

CTS

The Chembase Treatment System: the products that treat the soil.

Base layers

The three layers CTS treats beneath the road surface: road-base, sub-base and sub-grade.

TIMELINE

Four decades at a glance

1977

Chembase Research & Development is founded by Michael Megas and G. Foster.

1982

The first CTS products are developed and tested at Parintins Airport, Brazil.

1982–1986

Further research and testing in Australia and at a laboratory in Alberta, Canada.

1986–1987

Registered as DASONA Pty Ltd in 1986 and renamed Chembase Pty Ltd in 1987.

1987–1992

Road base trials for NSW Local and State Government. The technology is approved.

2002

The business is acquired by Louis Allen.

2018

Chembase is re-established, with research alongside universities and specialists.

May 2025

Construction Sciences testing records a **CBR increase of 5,233%.**

Sep 2026

NTRO issues full Certificate **No. 26/1509** on 16 September 2026

Oct 2026

Official launch.

Parintins Airport, Brazil

Parintins Airport, Brazil

1 Preliminary trials

Run by the Department of Aeronautics at Campo de Marte Airport with the Aeronautics Ministry's research and development centre.

2 Independent testing and approval

The SENDA agency, appointed to the project, tested the Chembase products with organic additives DS-328. Approval for the airport trial followed.

3 The result

Trial documentation confirmed that the airstrip's compaction strength and California Bearing Ratio (CBR) increased and stabilised.

NSW ROAD BASE TRIALS · 1987–1992

Approved on the strength of the results

39+

years without rebuilding, based on the trials for NSW Local and State Government. Records show no maintenance on the base layer after more than **39 years+**.

Introduced in 1987

To local councils, the RTA and road authorities across NSW.

Longer service life

Treated roads resist potholes because the base layer is water-resistant.

Minimal maintenance

Maintenance costs are reduced to a minimum.

Refer to: Case Studies › Old Case Studies › Chembase Road Base Treatment

The NSW road base trials

Introduced in 1987

Chembase presented its technology to local councils, the Roads and Traffic Authority (RTA) and road authorities across NSW.

Tested and approved

A series of road base trials followed for NSW Local and State Government. The technology was approved on the strength of the test results.

Still performing

The treated base layer is water-resistant, so the roads have lasted longer and resisted potholes. Government records report no maintenance work on the base layer, more than 30 years on.

Read more: Case Studies › Old Case Studies › Chembase Road Base Treatment

What CTS-treated roads show

65%+

saving in construction costs

75%+

saving in maintenance costs

Fewer resources

Less reliance on complex machinery, specialised operators and aggregate.

Faster to build

A quicker building process than older construction techniques.

Works with almost any soil

CTS treats the soil already on site.

Water-resistant

The treated area is long lasting, with little to no maintenance.

Environmentally friendly and non-toxic

See the University of Sydney and UNSW reports.

ROAD COVERAGE

How much road is 8,000 m²?

Our figures use one standard unit: 8,000 square metres of road built for standard traffic loading. That is one kilometre of two-lane road.

Built the conventional way, a road base takes hundreds of truckloads of soil carted away, hundreds more of imported gravel and rock, and heavy machinery to compact it.

CTS treats the soil that is already there.

1 km

long

8 m

wide, one lane each way

200 mm

deep

= 8,000 m² of road

ROAD COVERAGE

Hundreds of trucks for every kilometre

8,000 m²

A standard-traffic road: 1 km long, 8 m wide (one lane each way), 200 mm deep.

Building the road base conventionally takes hundreds of trucks carting soil away, hundreds more bringing in gravel and rock, and heavy machinery to compact it.

Truck capacity

Type of truck	Length (m)	Tonnage (t)
Large truck	3.5–4	5
10-tonne crane truck, tilt	5.0–8.0	5–15
10-tonne crane truck, thermal	5.0–8.0	5–15
20-tonne isothermal semitrailer	13.6	20–25

STRENGTH RESULTS

Turning existing soil into superior road base

WORLD STANDARD

16 / 22

CBR required for average and heavy-traffic roads

MIDDLE DURAL

1,150%

CBR increase, from 8 to 100

CONSTRUCTION SCIENCES · MAY 2025

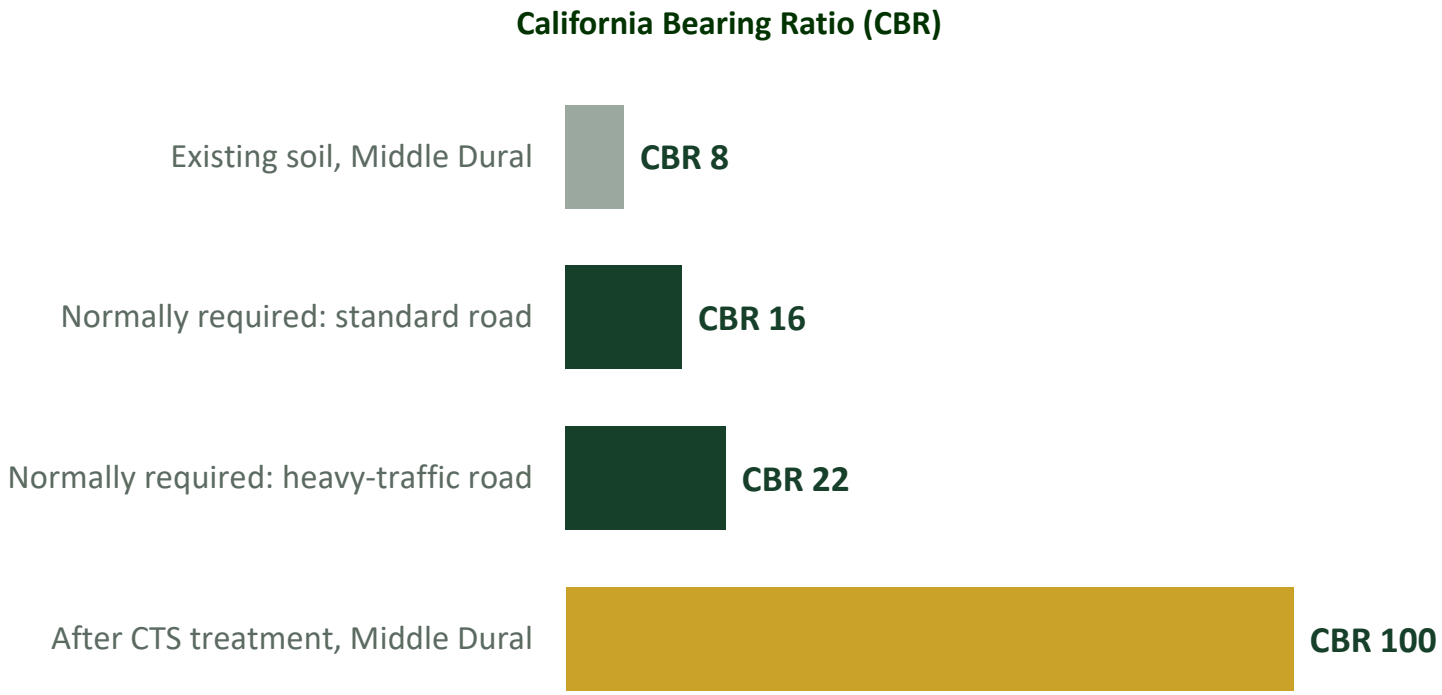
5,233%

CBR increase in new test results

Refer to: Douglas Partners Report on the website · Case Studies › New Case Studies (Middle Dural)

CBR RESULTS

Stronger ground, measured



CBR measures how much load the ground can carry. The higher the number, the stronger the base. Middle Dural source: Douglas Partners report (Case Studies › New Case Studies).

+1,150%

Middle Dural: from CBR 8 to CBR 100

LATEST RESULT

5,233%

CBR increase recorded in testing by Construction Sciences, May 2025.

15 SEPTEMBER 2026

Certified by NTRO: Certificate No. 26/1509

Three benefits confirmed, compared with hydrated lime alone.

Improved resistance to water penetration

Strength improvements

Reduced shrink/swell behaviour

Scope: minor and local volume roads, Australia and New Zealand.

REPORTS

Read the evidence

University reports

University of Sydney and UNSW reports.

University Reports

Old case studies

Chembase Road Base Treatment: the NSW trials, 1987–1992.

Case Studies › Old Case Studies

New case studies

Middle Dural: Douglas Partners report.

Case Studies › New Case Studies

More benefits

CTS Products: Additional Benefits.

CTS Products

All available at www.chembase.com.au

INDEPENDENT TESTING

Technical partners and consultants

Chembase has engaged respected independent consultants for testing and technical reporting.

Partner	Contribution
University of Sydney	Professor David Airey
UNSW	Professor Adrian Russell
Douglas Partners	Geotechnics, environment, groundwater and testing
Construction Sciences	Engineering, architecture and materials science
ATPAVE Engineering Pty Ltd	Pavement engineering and project management

GOVERNANCE

Our policies

Clear standards for how we work with our people, partners and communities.

Governance & conduct

- Integrity
- Leadership
- Communication

People and rights

- Human Rights and Position Statements
- Workplace Discrimination

Health and safety

- Work Health and Safety
- Injury Management

Four decades of building better roads

It costs you nothing to find out how much you can save.

Talk to our team about your next road project

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