

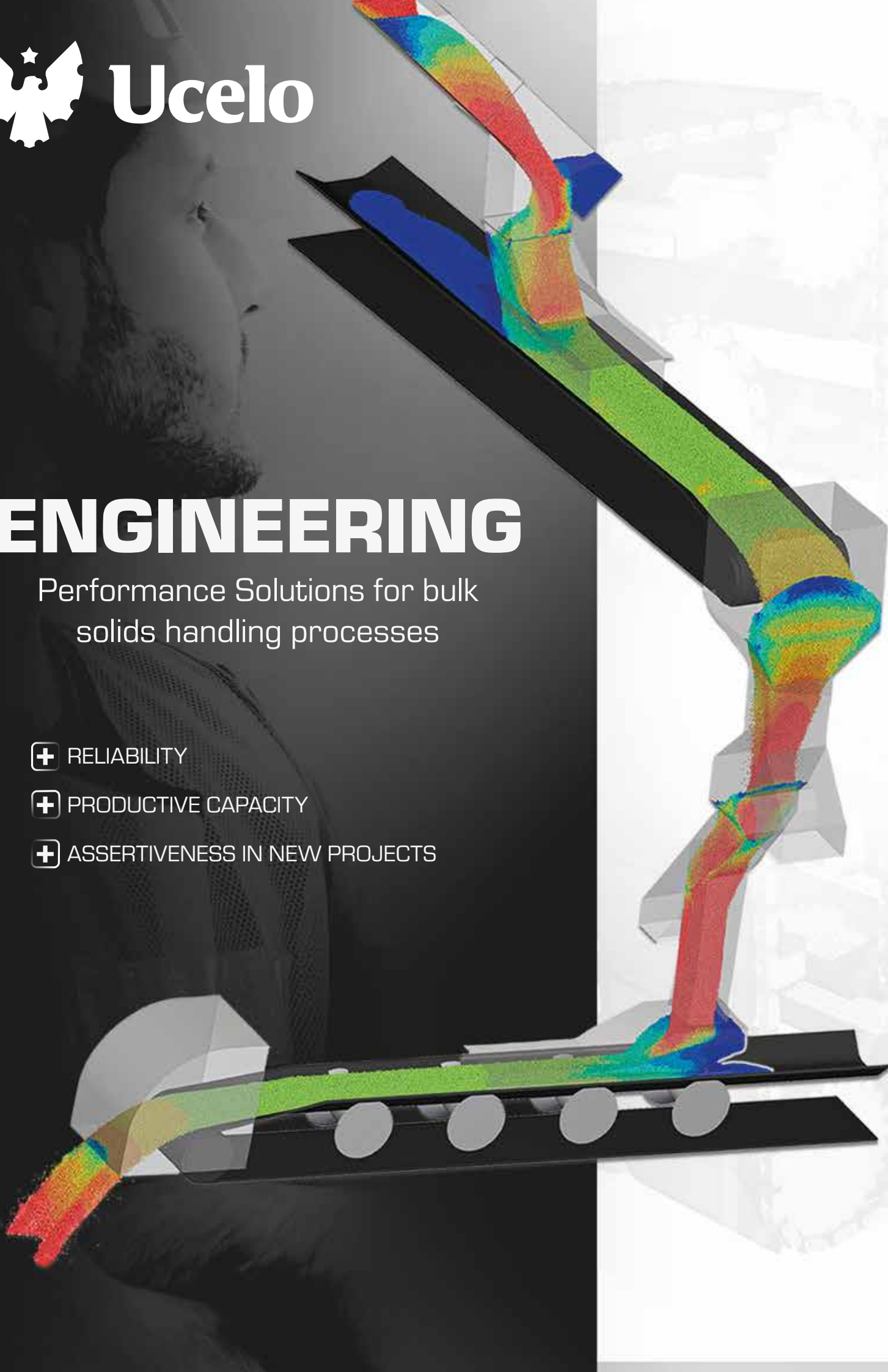


Ucelo

ENGINEERING

Performance Solutions for bulk
solids handling processes

- ⊕ RELIABILITY
- ⊕ PRODUCTIVE CAPACITY
- ⊕ ASSERTIVENESS IN NEW PROJECTS



HOW DOES UCELO ENGINEERING WORK?

Ucelo Engineering stands on three foundational pillars: **PROJECTS, CAPACITY, and RELIABILITY**. For over 15 years, our expertise in bulk solids handling has shaped this framework.

Our primary objective is to elevate our customers' **OUTCOMES**, achieved through the proprietary **Ucelo Methodology**. This approach, meticulously crafted by our engineering team and validated by over 500 satisfied customers, revolves around employing simulation software.

This enables us to analyze and enhance new projects, avert potential failures, boost productivity, ensure operational reliability, minimize component downtime, and extend component life.



WHAT METHODOLOGY IS EMPLOYED?

The Ucelo Methodology leverages a range of simulation tools to meticulously **analyze the dynamics of bulk solid materials**. Drawing on our extensive expertise, we simulate the intricate behavior of granular flows, varying in shapes and sizes, within equipment such as bucket elevators, screw conveyors, belt conveyors, mills, and other material handling systems.

Pioneering the use of these tools in Brazil, we excel in scrutinizing the movement of bulk materials, even down to particle sizes as small as 10 mm. Our **objective is to eradicate trial and error in the field**, employing mathematical models to predict the behavior of particulate materials. This virtual replication encompasses a diverse array of combinations, ultimately minimizing errors during the equipment's operational deployment.



WHAT RESULTS HAVE BEEN OBTAINED?

Based on the more than **500 clients** we have served in Simulation Engineering projects, we have been able to provide various results, depending on the request, such as:

- Increasing the rated capacity of a conveyor or set of conveyors;
- Extending the lifespan of conveyor components such as buckets, belts, and liners;
- Reducing particulate matter in suspension;
- Reduce equipment downtime;
- Eliminate load recirculation in bucket elevators;
- Map wear points on linings and transfers;
- Measure levels and impact points inside conveyors.



CLICK AND CHECK OUT
OUR CASE STUDIES

CONSULTANCY ENGINEERING UCELO

RECEIVE THE
PROJECT
OR
INSPECT THE
EQUIPMENT
IN THE FIELD



PROJECT
"AS BUILT"
2D



MODELING
ON CAD 3D
SOFTWARE



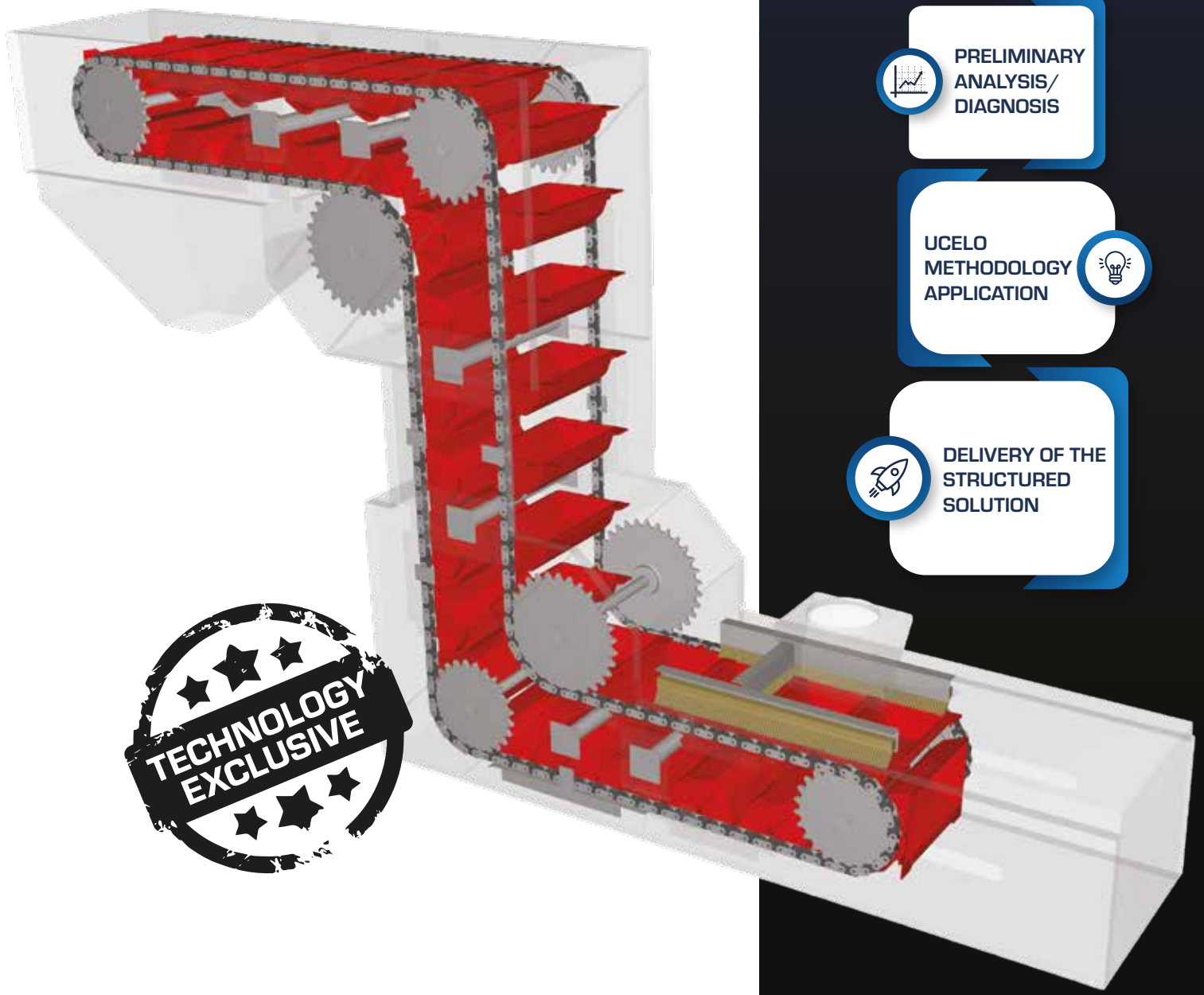
PRELIMINARY
ANALYSIS/
DIAGNOSIS



UCELO
METHODOLOGY
APPLICATION



DELIVERY OF THE
STRUCTURED
SOLUTION

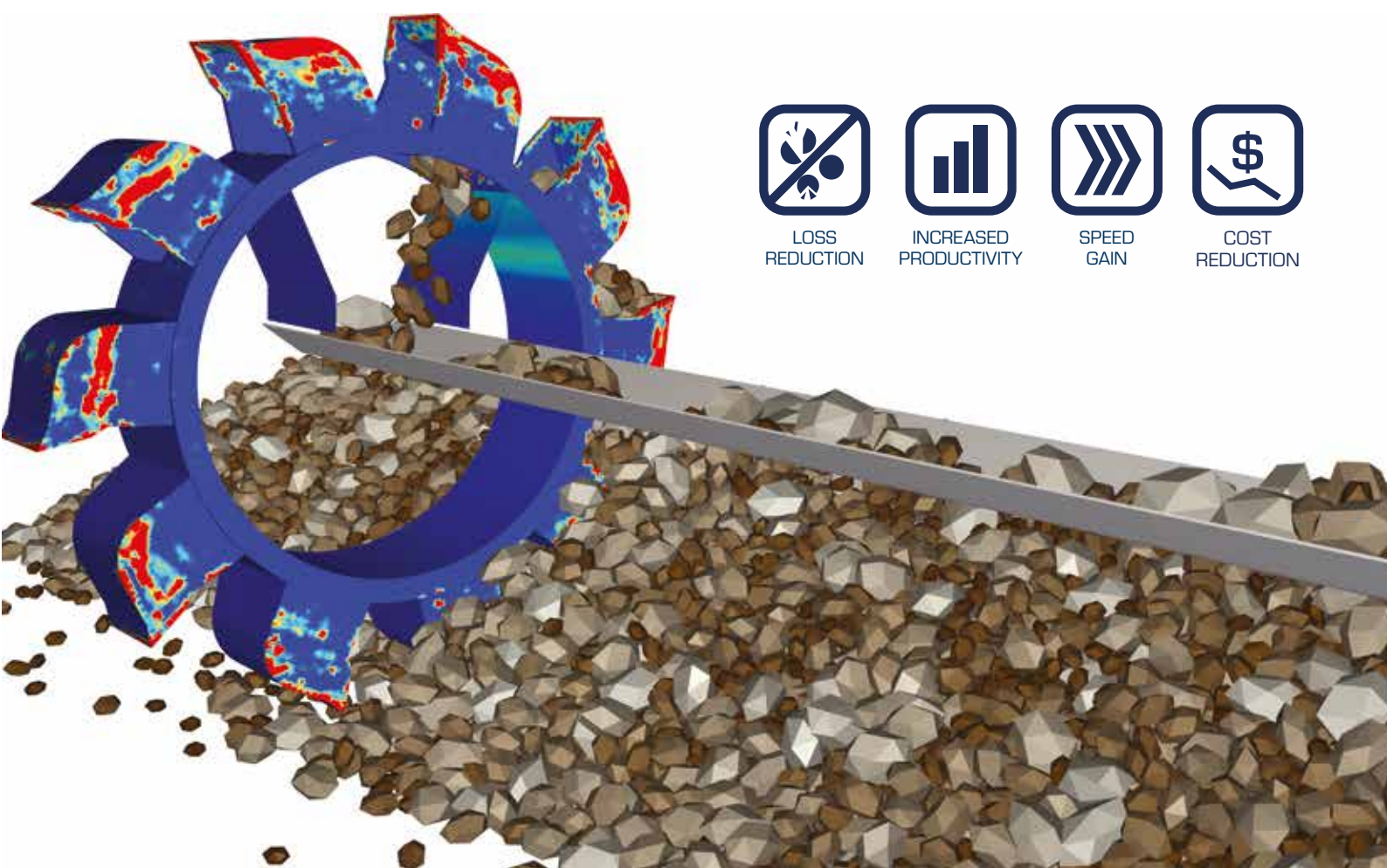


CUSTOMIZED PROJECTS TO INCREASE YOUR RESULTS

CONTACT OUR **ENGINEERING DEPARTMENT** TO REQUEST A QUOTE

Ucelo do Brasil has a qualified Technical Team to dimension your equipment, understand your needs, and recommend the best utilization of your structure!

*It's not just what we do,
it's what we make possible.*



LOSS
REDUCTION



INCREASED
PRODUCTIVITY



SPEED
GAIN



COST
REDUCTION

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