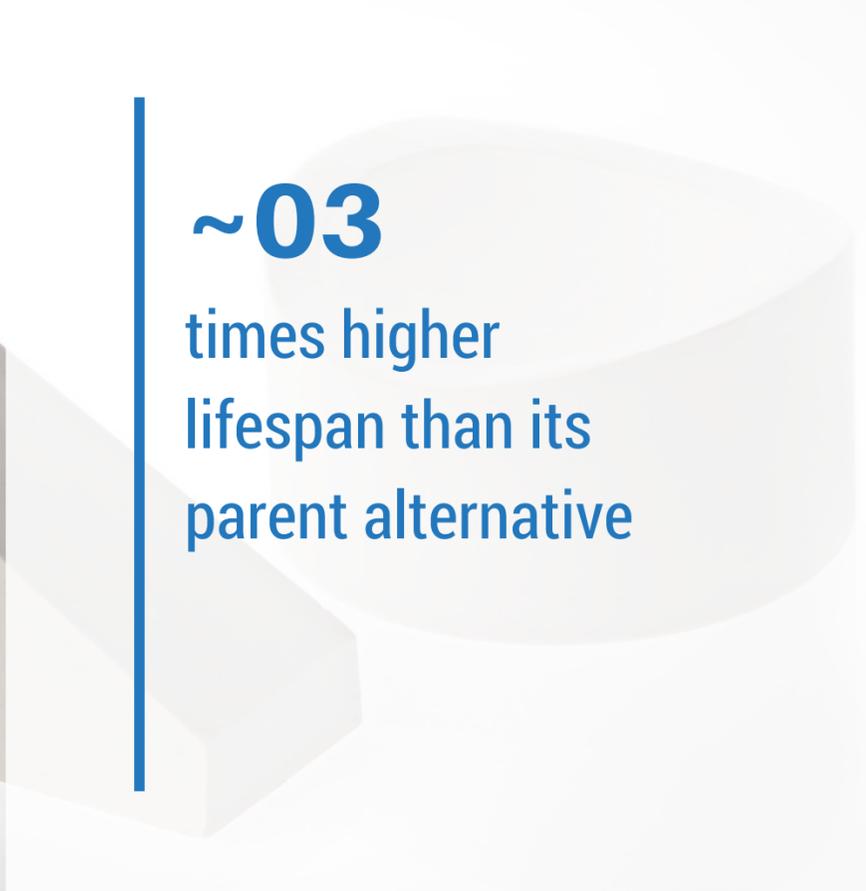
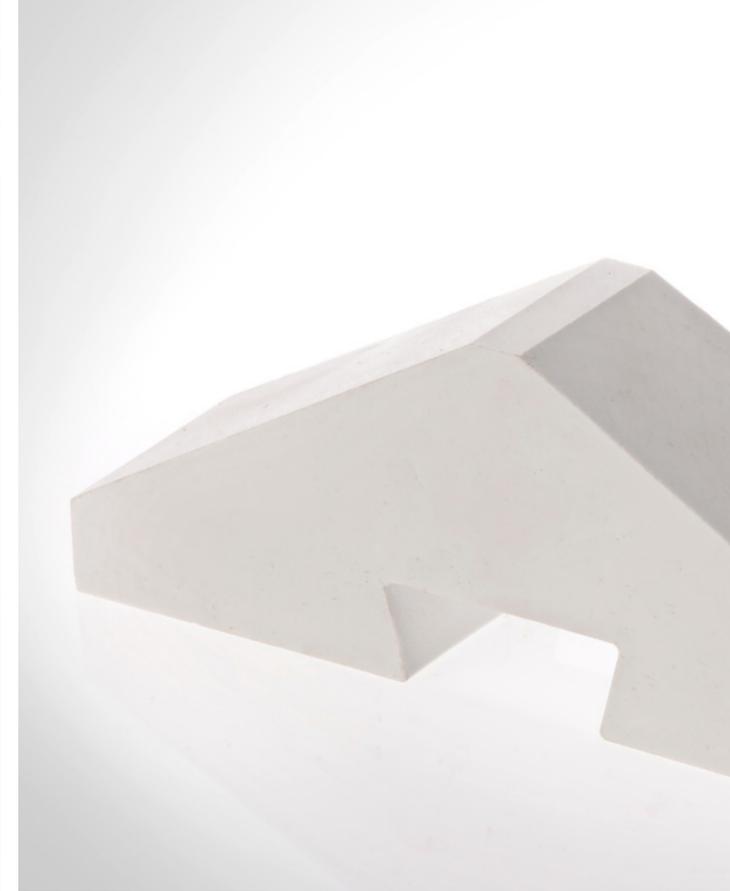
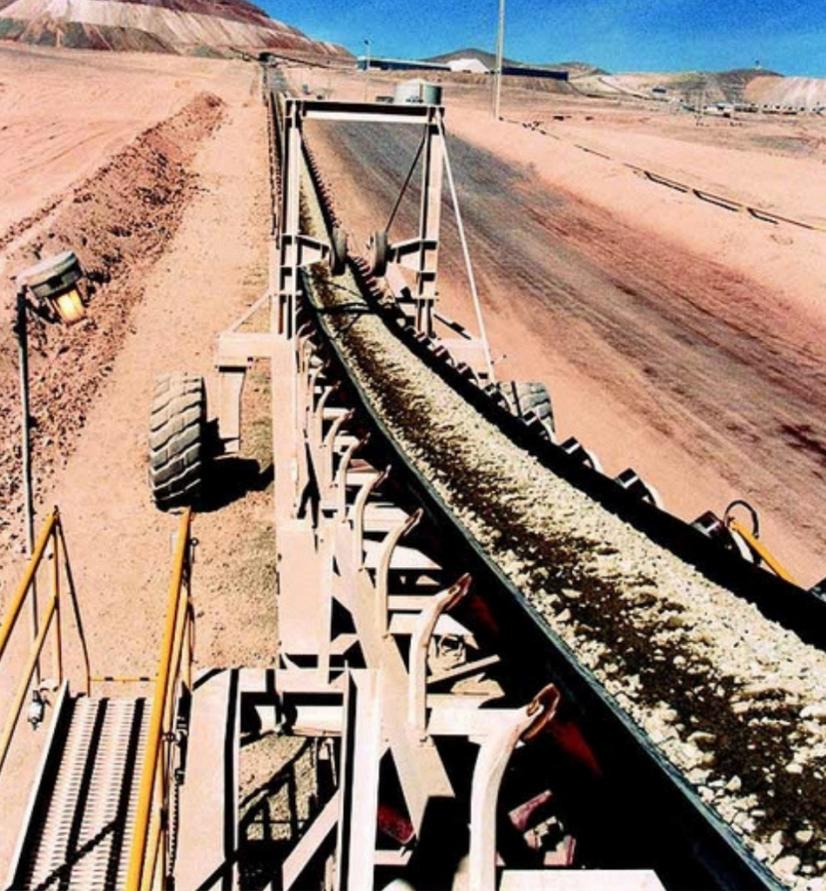


Septemebr
2012

Customer Story

New material development for
wear and corrosion





SITUATION

Copper is extracted from its ore through [heap leaching](#) process. Heap leaching is an industrial mining process which involves a series of chemical reactions to absorb target minerals and separate them from other earth materials. Cu-Ore (Cu₂S) of <11 mm particle size is spread with Conc. H₂SO₄ (88%) & pelletized to get a particle size of ~ 16 mm.

Transfer chutes are used to transfer these pellets from one equipment to other equipment. A transfer chute has conveyor belt surrounded by walls lined with anti-abrasive ceramic material. These Pellets undergo dynamic interaction with [ceramic lined walls](#) as they fall on the conveyor belt from top.

The life of the conventional tiles used in transfer chutes was only [15 days](#).

CHALLENGE

The leaching application has [twin abrasive effect](#) from the Conc. H₂SO₄ (88%) & the ore itself. The presence of acid demands for the ceramic lining material to provide [very high wear and corrosion resistance](#).

Since the ore falls from a certain height, [impact resistance](#) is also desirable.

SOLUTION

The existing [CUMITUFF 92](#) alumina tiles could be used for only wear and impact resistance. The new formulation [CUMITUFF 92 CSP](#) was developed for corrosion application along with wear & impact resistance. The CUMITUFF 92 CSP alumina tiles were installed and compared with the conventional tiles in the same transfer chutes under same application conditions.

RESULTS

The [life](#) of the [CUMITUFF 92 CSP](#) tiles comes to be [three times more](#) than that of conventional alumina tiles.

~03
times higher
lifespan than its
parent alternative

World's 2nd largest
metallized cylinder manufacturer

Solutions for more than
22 industries

International quality standards
ISO 9001
ISO 14001
OHSAS 18001

Selling in more than
43 countries

WHY CHOOSE US?

MAKING

We design, We produce, We service.
We are a one-stop solution provider.

MATERIALS

We customize material solutions for
your specific needs.

MATTER

We ensure highest standards of quality
& customer delight always.

CONTACT US

Address

Plot No. 47, 48
Sipcot Industrial Complex,
Hosur - 635126, Tamilnadu, India

Call US

+91-4344-304700, +91-4344-304745
+91-4344-304726, +91-4344-304714
+91-4344-304809 (Fax)

e-mail

customercareic@cumi.murugappa.com