

SEFPRO Care

Cast In Place (CIP)

Repair solution
for Glass Furnaces


Innovative cold repair solution

FOR GLASS FURNACES | SEFPROCARE | SEFPRO


CHALLENGES



HAVING OPTIONS TO KEEP FURNACE RUNNING
At the end of furnace lifetime during a cold stop



OPTIMIZE THE INVESTMENT COST
To extend the furnace lifetime



TO GET REFRACTORIES ON TIME
Because of current long lead time and Supply Chain issues

SOLUTIONS



SEFPRO 
SEFPRO – World leader in manufacturing Fused cast AZS blocks for glass industries
We understand the need of glass industries



SEFPRO launched
SEFPROCARE REPAIR MATERIALS
in 2017
for hot & cold repair solution for glass markets

CIP AZS

Best Solution for cold repair for all glass markets



Cast In Place (CIP) AZS

A self-flow concrete based on electro-fused AZS grains, especially formulated for cold repairs of tanks, superstructure, tuckstones



Electro-fused AZS grains inside



INSTALLATION METHODOLOGY

A quick way to repair the corroded part of the furnace

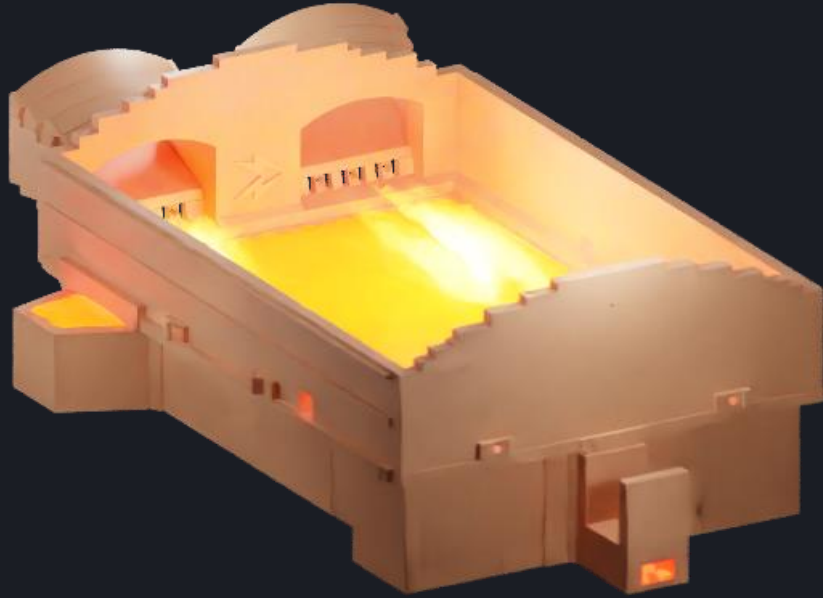


1. Prepare the furnace in front of corroded doors
2. Mix the AZS granules with water and binders
3. Fill the furnace with self-flow concrete and heat vibrating
4. Repair entire furnace at once for the best results. Repair done fast.

ADVANTAGES OF CIP AZS

- LESS MATERIAL
- SHUTDOWN TIME
- FLUIDITY
- STOCK AVAILABILITY
- CONTROLLED HEAT-UP
- TECHNICAL SUPPORT

Stock always available and can be quickly supplied.



HAVING OPTIONS TO KEEP FURNACE RUNNING

At the end of furnace lifetime
during a cold stop



OPTIMIZE THE INVESTMENT COST

To extend the furnace lifetime



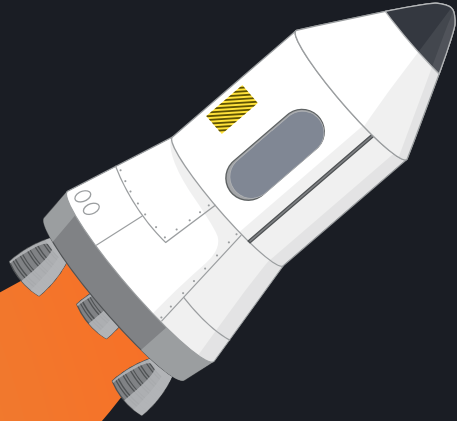
TO GET REFRACTORIES ON TIME

Because of current long lead time
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manufacturing Fused cast AZS
blocks for glass industries

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SEFPRO

launched



SEFPROCARE

REPAIR MATERIALS

in 2017

for hot & cold repair solution
for glass markets



HOT & COLD REPAIR SOLUTIONS FOR THE GLASS INDUSTRY



PRODUCTS



LOGISTICS



TECHNICAL SUPPORT

We have wide range of products and solutions to extend the life of the furnace,

AZS BASED



CAST IN PLACE



HOT OVERCOATING



HOT BOTTOM



CHIPS



PATCHING TILES

ALUMINA BASED



FUSED SILICA BASED



HOT OVERCOATING

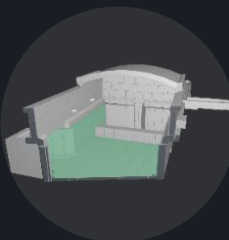


TILES



JOINT Z READY

ZIRCON BASED



CAST IN PLACE



HOT OVERCOATING



PATCHING TILES

CHROME BASED MATERIALS FOR

SEFPRO CARE ORGANISATION

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France



USA



India for Asia



Brazil



Mexico

Our mission is to supply glass makers with a **full range** of **shaped** and **unshaped specific solutions** dedicated to **hot & cold repairs operations** for all glass markets.

Stock



Mortars, concretes, bricks, blocks, chips and tiles, you can find the material you need in **our permanent stock of products**.



Best Solution for cold repair for all glass markets



CONTAINER



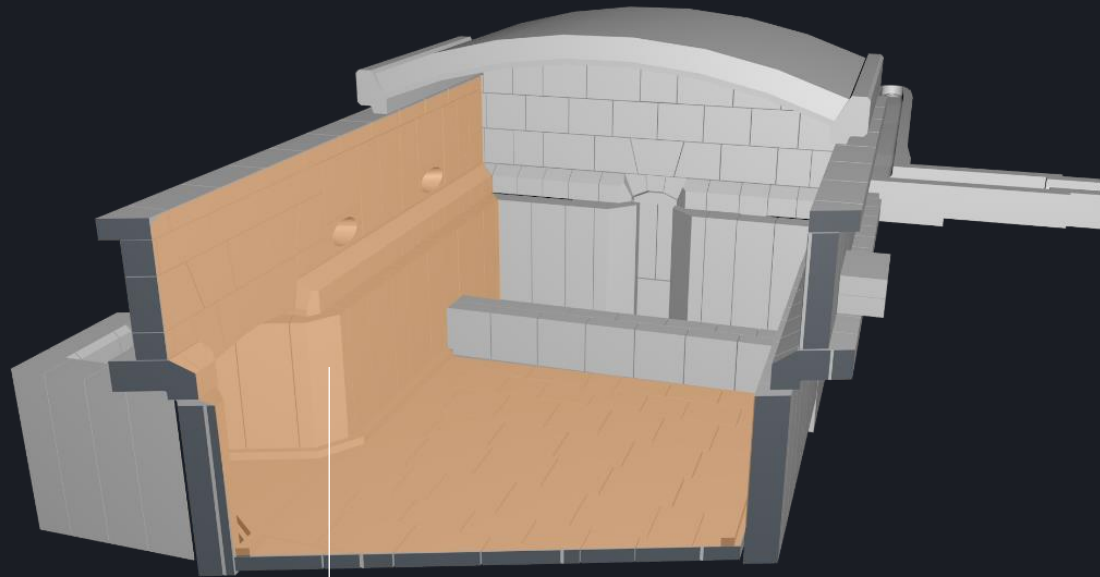
FLAT



SPECIALTY

Cast In Place (CIP) AZS

A self-flow concrete based on electro-fused AZS grains, especially formulated for cold repairs of tanks, superstructure, tuckstones



Electro-fused AZS grains inside



TO BE MIXED



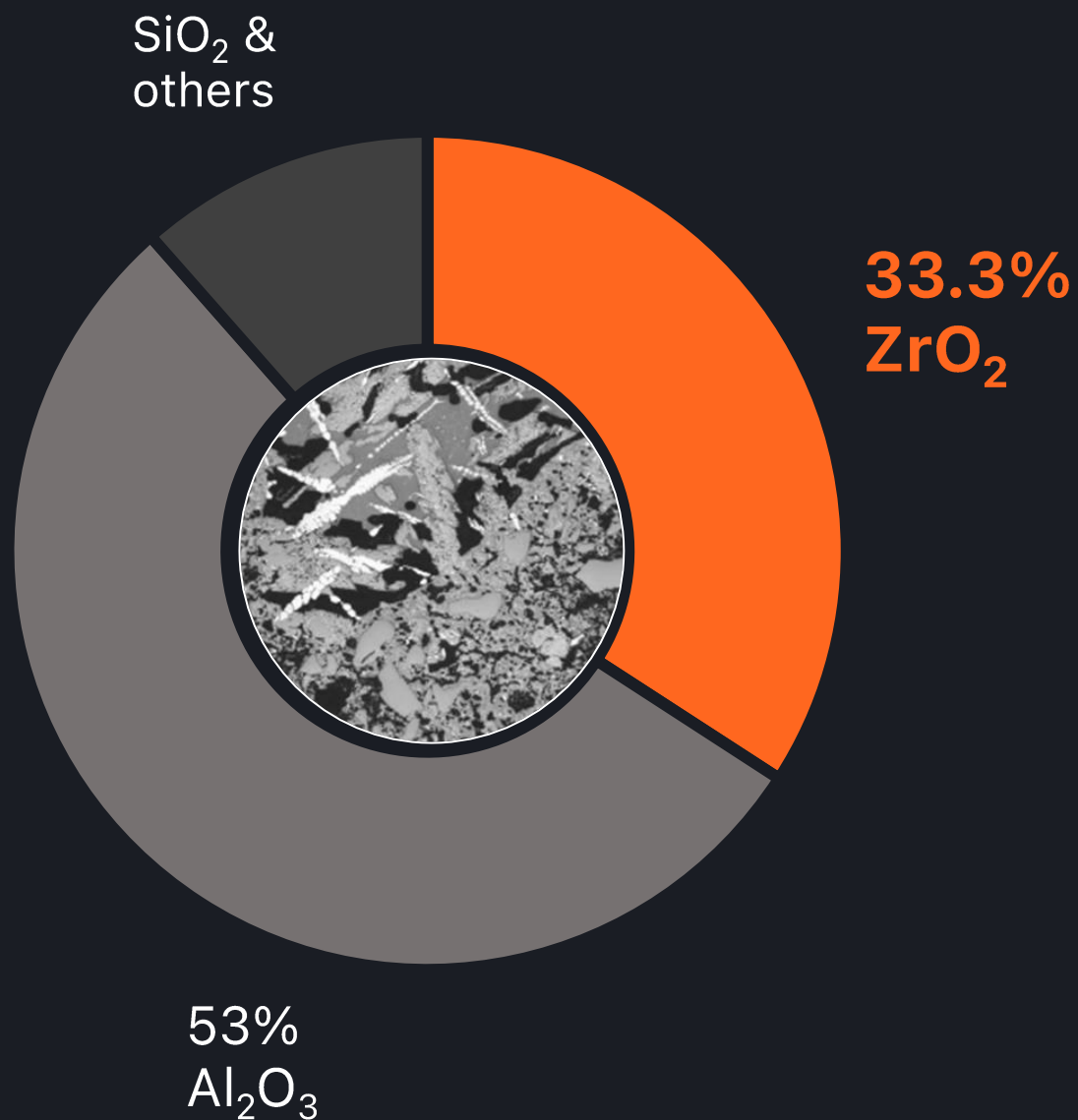
SELF FLOW



NO VIBRATION



CIP AZS - PROPERTIES



PHYSICAL PROPERTIES

Bulk density	Typical open porosity	Fired mechanical strength (1400°C)
3.2 t/m ³	17-19%	125 MPa

Main crystallographic phases:

- Corundum
- Monoclinic Zirconia





R&D DEVELOPMENT

Developed by our own

Research & Development

teams in SGR France & India





AZS ER 1681



CIP AZS

Dynamic corrosion test

The best corrosion resistance
provided by a AZS monolithic
solution for glass contact

Merry Go round test:

In Soda lime glass

1450 °C for 48 Hrs @ 6 RPM



INSTALLATION METHODOLOGY

A quick way to repair the corroded part of the furnace

1

Prepare the formwork in-front of corroded blocks

2

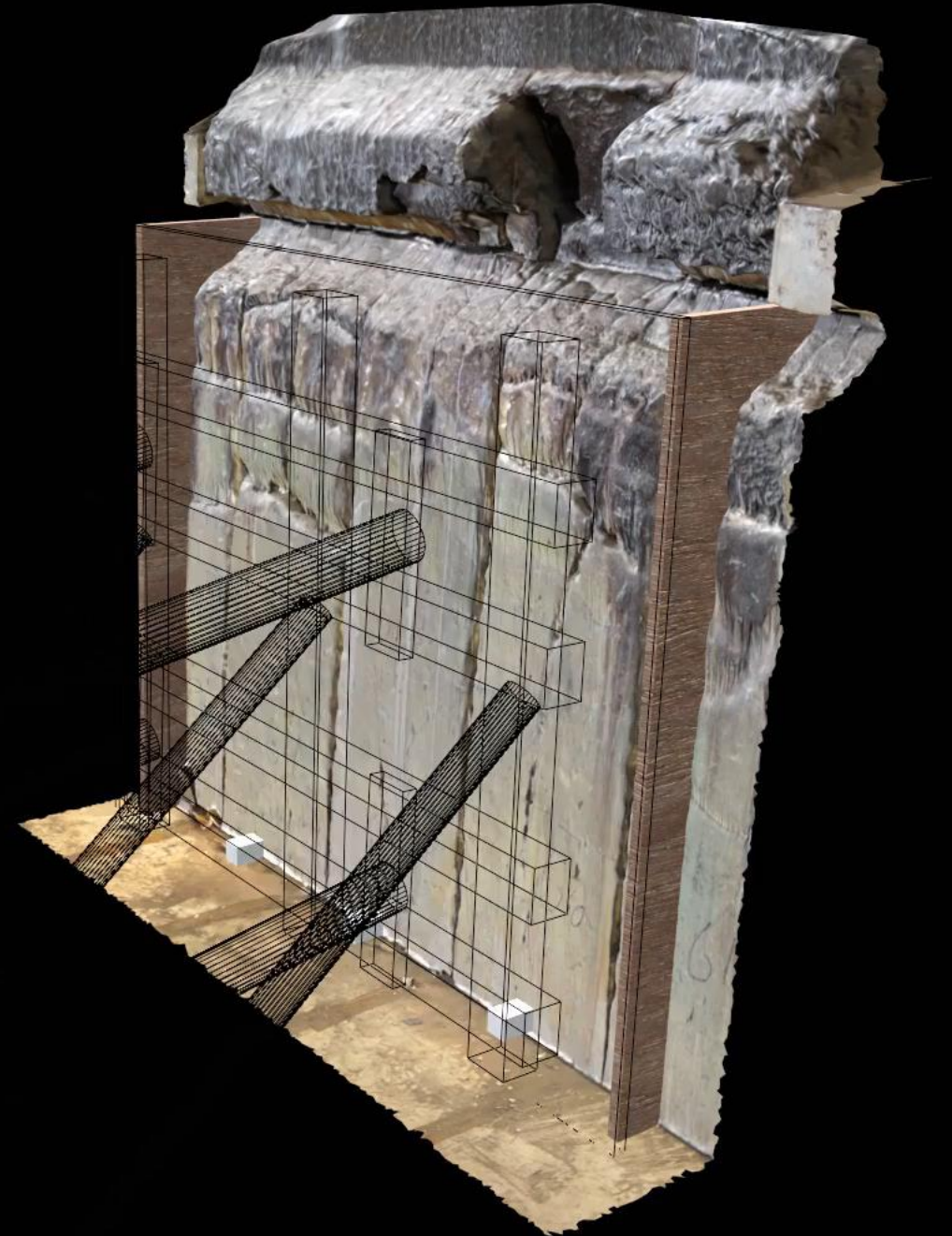
Mix the AZS premix with water and binders

3

Fill the form with self-flow concrete without vibrating

4

Repair even surprise areas like the tuckstone repair done here



ADVANTAGES OF CIP AZS

LESS MATERIAL

SHUTDOWN TIME

FLEXIBILITY

STOCK AVAILABILITY

CONTROLLED HEAT-UP

TECHNICAL SUPPORT

Stock always available and can be quickly supplied.

Repair CAST IN PLACE AZS

Pattern glass – tuckstones repair – July 2021



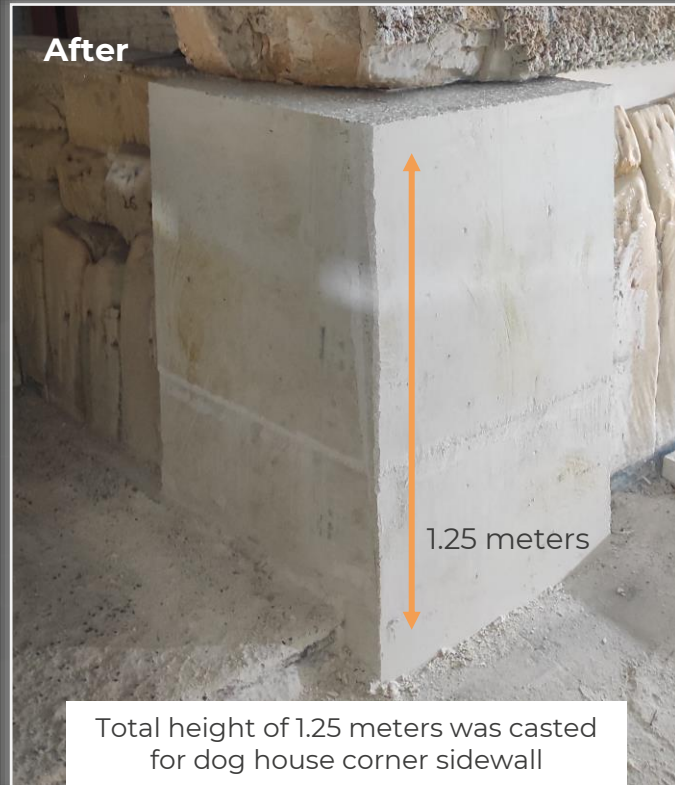
Total length of approximately ~6 meters
was casted for tuckstone below the ports



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Tuckstones cold repair
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Repair CAST IN PLACE AZS

Pattern glass – dog house corner block repair – July 2021



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Cold repair
Dog house corner sidewall casting
after overcoating with AZS tiles
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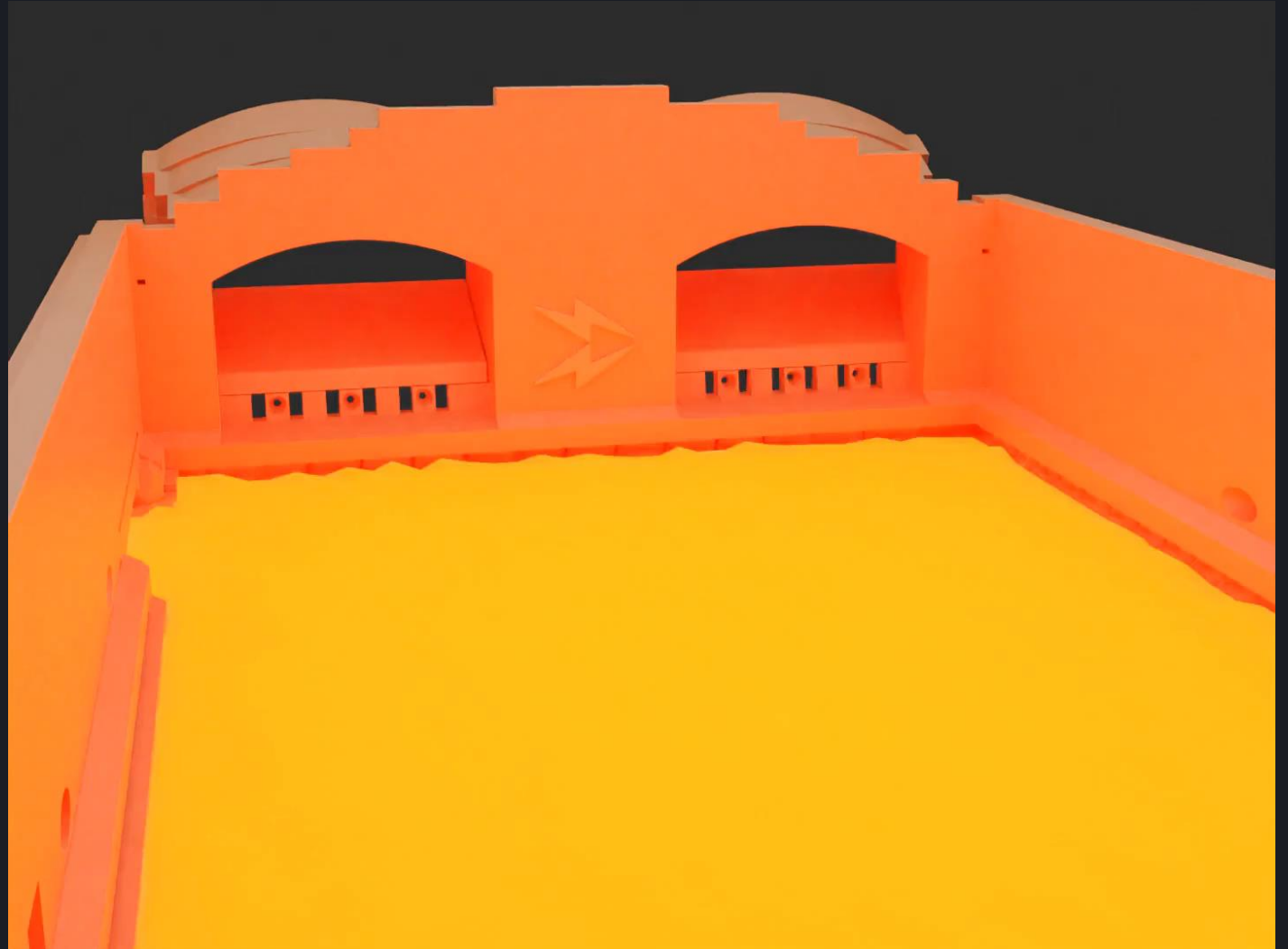
BREAKING

NEWS!!!



**HOT BOTTOM AZS
REPAIR MATERIAL**

**NOW AVAILABLE
IN INDIA**



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धन्यवाद

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Thank you

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Merci

धन्यवाद

ధన్యవాదగళు