CISCHEM

Smart Protection

FIRE & CORROSION PROTECTION

Coating Solutions for Protecting Steel Structure

PROTECTING WITH QUALITY-SECURING WITH SAFETY

CISCHEM SOLUTIONS LLP, one of the largest and fastest growing companies in the field of Specialized Fire Protection Systems for Steel Structures & Ducts/ Effective Passive Fire Protection other construction materials for the HVAC and Construction Industries.

Welcome to our company, where our primary objective is to deliver exceptional corrosion and fire protection services. We take immense pride in our commitment to ensuring the safety and security of your assets, personnel, and the environment.

Our team of highly skilled and experienced professionals is dedicated to providing top-notch solutions tailored to your specific needs. With cutting-edge technology and industry best practices, we offer a comprehensive range of services to mitigate the risks associated with corrosion and fire hazards.

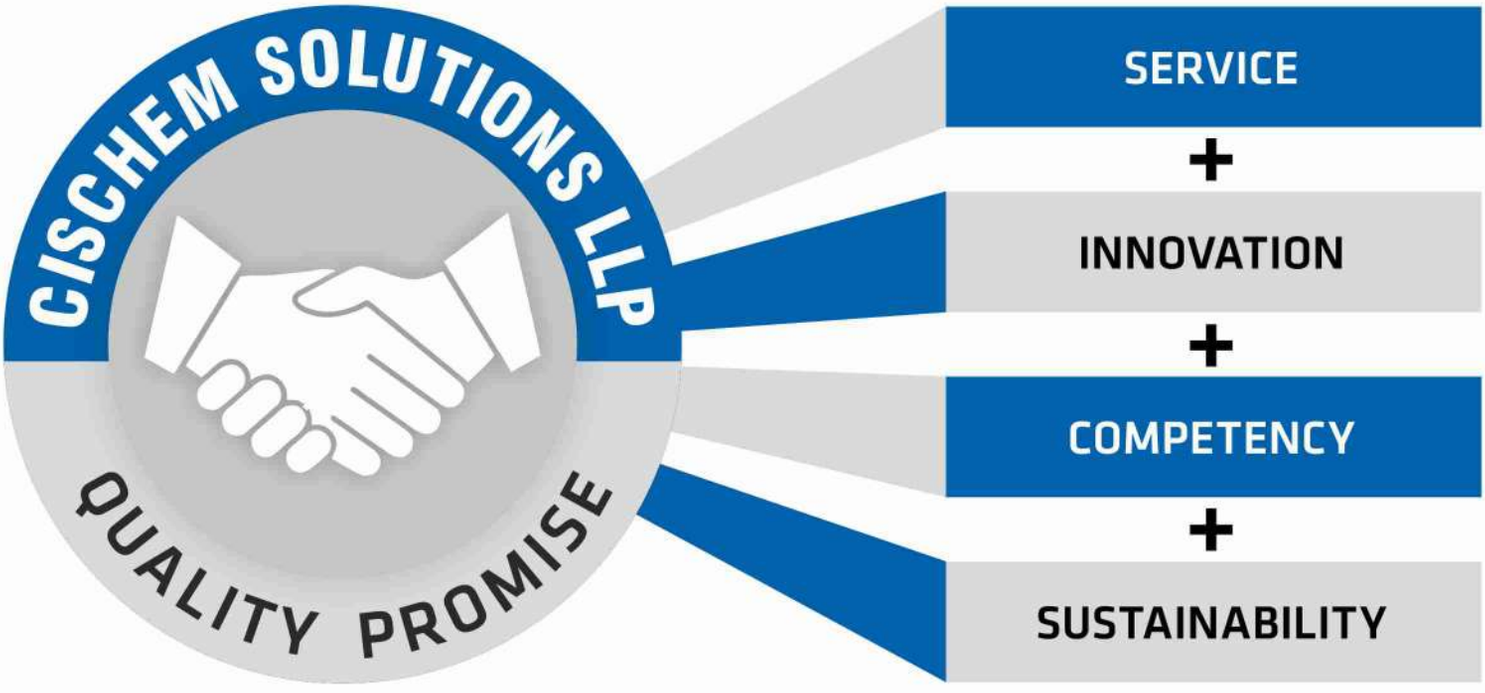
When you choose us, you can rest assured that your projects are in safe hands. We meticulously assess your requirements and develop customized protection plans that adhere to the highest quality standards. Our stringent quality control measures ensure that our solutions are robust and long-lasting.

Moreover, we prioritize customer satisfaction, and that reflects in our customer-centric approach. Our responsive and proactive customer support team is always available to address your queries and concerns promptly.

At our company, safety is not just a priority it's a core value. We continually invest in research and development to stay ahead of the curve and provide innovative solutions that meet industry regulations and compliance.

We are proud to have 10 Years experience with the eminent clientele & Efficient & Effective solutions for projects. An ISO 9001:2015 & 14001:2015 company, With the HQ in New Delhi and branch office at Canada with dedicated team of young professionals to support the trade and our valuable customers. We have our network presence in PAN India to provide the best services and support to our esteemed customers.

Thank you for considering us as your corrosion and fire protection partner. We are dedicated to serving you with excellence, reliability, and integrity, safeguarding what matters most to you.



WHY DO WE NEED FIRE PROTECTION ON STEEL STRUCTURES

- Heating steel reduces load bearing capacity.
- At 538°C (1000°F), steel loses around 50% of its load bearing capacity.
- Heated steel's load is transferred to other elements in the structure.
- Torsional, compression, and tension loads become too much for heated steel to handle.
- Thermal expansion during heating adds stress to steel and connection joints.
- Excessive shear on bolts due to expansion can lead to bolt failure.
- Failed bolts increase load on other structural elements or lower floors.
- Collapse of upper floors increases load on subsequent levels, causing potential collapse.

MISCONCEPTIONS

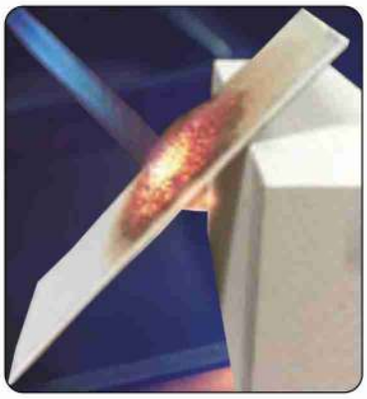
- Steel does not burn in case of fire. Structural steel melts at 1,500 deg C.
- Often there is a misconception that structural steel would fail when it reaches its melting point.
- It is very rare that fires would be able to reach those temperatures especially in cellulosic fires (unless steel was under direct flame exposure in very specific cases).
- Heating causes structural steel to loosen its load bearing capacity and will cause steel to expand.
- These effects play a significant role in the failure of structural steel buildings when exposed to fire.
- Often the word “fireproofing” is mentioned as a commercial term for providing structural steel with an hourly rating of fire resistance.
- This term is scientifically not accurate, as there is nothing fireproof.
- Products under fireproofing category will provide steel with a level of fire resistance to failure to allow safe evacuation, and fire suppression activities.

WHAT CISCHEM OFFERS

- CISCHEM offers Intumescent Coatings designed to protect steel from reaching structural failure temperatures during fires.
- The coatings ensure that protected steel maintains structural stability for up to 120 minutes, providing emergency services with time to evacuate individuals and extinguish the fire.
- Additionally, these coatings provide protection against corrosion caused by various weather and ambient conditions.

HOW CISCHEM FIRE PROTECTION SYSTEM WORKS OVER THE STEEL STRUCTURE

- CISCHEM offers a fire-retardant intumescent coating that expands when exposed to heat, increasing its thickness up to twenty times.
- This expansion forms an insulating char layer, effectively protecting the steel from the effects of fire.
- The intumescent coating reacts at high temperatures, typically starting at 200°C or above.
- Intense heat is required to initiate the reaction, ensuring the coating's effectiveness.
- By applying the intumescent coating, structural steel can be protected or its failure delayed.
- The coating acts as insulation, preventing the steel from reaching critical temperatures that could lead to structural failure.

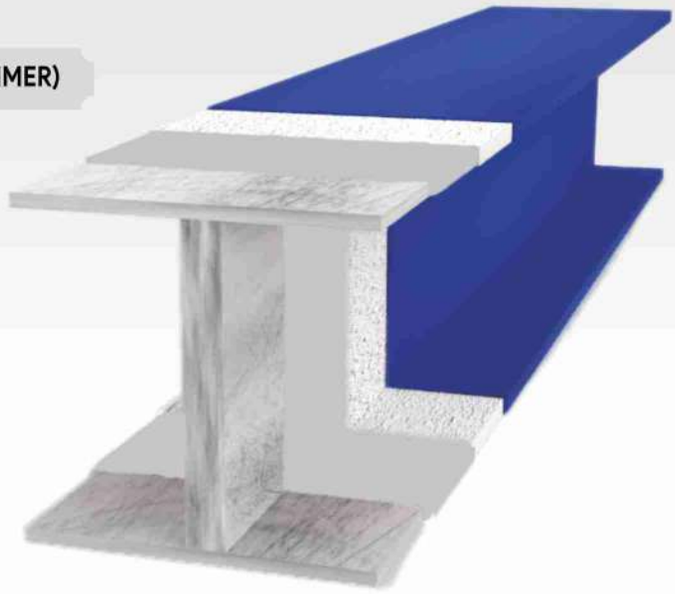



CISCHEM PROVIDES PREMIUM COATING SYSTEMS THAT OFFER PASSIVE FIRE PROTECTION, CORROSION PROTECTION AND AN AESTHETICALLY APPEALING DECORATIVE FINISH FOR STRUCTURAL STEEL.

CISBOND PR-802 (TWO COMPONENT ZINC PHOSPHATE EPOXY PRIMER)

CISBOND FR-802 (FIRE RESISTIVE COATING)

CISBOND TS-802 (TOP COAT)



ACCREDITED AS PER BS-476 & ASTM STANDARDS

SURFACE	PREPARATION GUIDE	SYSTEM		DFT	FIRE RESISTANCE CLASS	CORROSION PROTECTION
STEEL	Abrasive Blast Clean	PRIMER	CISBOND-PR 802 Zinc Phosphate Epoxy Primer	70-90 µm		Excellent
		BASECOAT	CISBOND-FR 802 Waterborne Fire-Retardant Intumescent Coating	-	30-120 Mins	
		TOP COAT	CISBOND-TS 802 Polyurethane Based Top Coat	70-90 µm		

The thickness of intumescent coating CISBOND FR 802 for a specific fire resistance period in a cellulosic fire is connected to the Hp/A ratio of the steel section. Hp/A is the ratio of heated perimeter to steel's cross-sectional area exposed to fire. Check CISBOND FR 802 datasheets for film recommendations and contact CISCHEM SOLUTIONS representative for more info.

Water-based anticorrosive primers and topcoats are also available which offer environmentally friendly options for coatings. They emit fewer volatile organic compounds (VOCs), contributing to indoor air quality and supporting green building initiatives. These coatings also reduce hazardous material exposure during application and disposal, aligning with eco-conscious practices for a sustainable environment.
Top coat is available as per the RAL Shade.

CORROSION PROTECTIVE COATINGS FOR STEEL STRUCTURES

Insufficient corrosion protection of steel structures can have serious consequences. Lack of protection frequently leads to structural problems quite apart from the visual appearance of the structure. Appropriate protective coatings and sensible maintenance intervals ensure long-term protection of steel structures and can avoid cost-intensive total refurbishment or even decommissioning. CISCHEM convinces with efficient product systems, high reliability, years of experience and excellent technical service. Our specialists assist you - whether you are an architect, a planner, a fabricator, steel constructor or responsible for creating tendering documents – when you need an individual corrosion protection solution. We accompany your project from object analysis to the selection of the right coating system up to the final project conclusion.

AREA OF USES

TRAFFIC CONSTRUCTION

- Motorway Bridge / Road Bridge
- Railway Bridge
- Suspension Bridge
- Walkway

STEEL STRUCTURES

- Port Facilities
- Centres For Culture And Events
- Airports
- Railway Stations

HYDRAULIC STEEL STRUCTURES

- Waterways
- Port Facilities
- Flood Protection
- Steel Sheet Piles

TANK PROTECTION

- Tanks
- Silos and Vessels
- Pipe Works
- Secondary Containment

POWER SUPPLY

- Power Stations
- Pipelines
- Wind Energy
- Mast Coatings

CHEMISTRY AND INDUSTRY

- Mineral Oil Industry
- Plants In Atmospheric
- Conditions
- Refineries

SYSTEMS USING SOLVENT BASED CORROSION PROTECTION

SURFACE	PREPARATION GUIDE	SYSTEM		DFT	CORROSION PROTECTION
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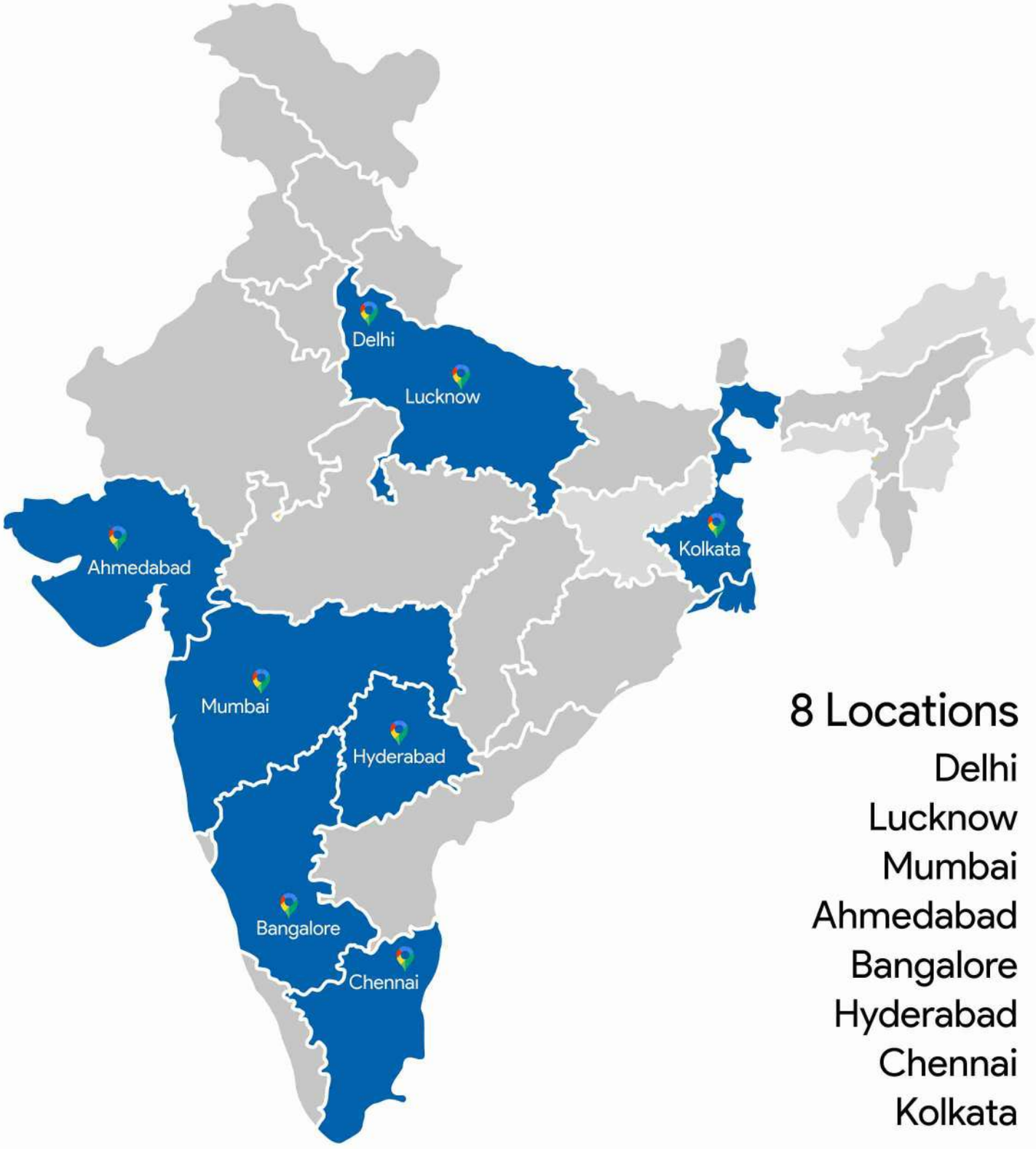
		TOP COAT	CISBOND TS 802 Polyurethane Based Top Coat	70-90 µm	

OUR PRESENCE



8 Locations

Delhi
Lucknow
Mumbai
Ahmedabad
Bangalore
Hyderabad
Chennai
Kolkata

"Our expansive nationwide presence not only bestows us with a plethora of advantages, but also provides a distinct platform from which we extend our services and projects throughout every corner of India. The magnitude and expanse of our operations significantly amplify our capability to compete with utmost efficiency. Our various divisions complement each other by fostering product synergies and exchanging expertise. Coupled with the breadth of our offerings, our extensive national footprint empowers us with unparalleled capacity to fulfill the precise needs of our valued customers."

PROJECT REFERENCES

आई टी पी ओ ITPO

INDORAMA

L&T Shipbuilding

भारत निर्वाचन आयोग ELECTION COMMISSION OF INDIA

इंडियनऑयल IndianOil

STTelemedia Global Data Centres

HCL

Google

HONDA

DELHI METRO

BURGER KING

McCain

accord Superspeciality Hospital

अखिल भारतीय आयुर्विज्ञान संस्थान ALL INDIA INSTITUTE OF MEDICAL SCIENCES

ALL INDIA INSTITUTE OF MEDICAL SCIENCES BILASPUR

ALL INDIA INSTITUTE OF MEDICAL SCIENCES शरीरमाद्यं खलु धर्मसाधनम्

COLUMBIA ASIA HOSPITALS

AMRITA HOSPITAL FARIDABAD

National Cancer Institute

AIRPORTS AUTHORITY OF INDIA Surat Airport

New Goa INTERNATIONAL AIRPORT MOPA GMR AERO ENTERPRISE

DELHI INDIRA GANDHI INTERNATIONAL AIRPORT

BENNETT UNIVERSITY TIMES OF INDIA GROUP

ashoka UNIVERSITY

IISER BERHAMPUR

SHARDA UNIVERSITY

Radisson BLU

COURTYARD BY MARRIOTT

HYATT REGENCY

JW MARRIOTT

DLF

PURI

MACONNS group

MAX

एन बी सी सी NBCC A Navratna CPSE

OBEROI REALTY

Prestige GROUP Add Prestige to your life

SVH LEGACY OF TRUST

UNISON Vision to reality

THE GRAND VENICE A dream destination

the centrum LUCKNOW

VEGAS Celebrate Life!

WORLDMARK THE NEW GLOBAL ADDRESS

& many more...

DRAWING UPON EXTENSIVE EXPERIENCE IN PASSIVE FIRE PROTECTION, CISCHEM SOLUTIONS SPECIALIZES IN PERSONALIZED SOLUTIONS. CISBOND, OUR BRAND, DELIVERS INNOVATIVE INTUMESCENT COATINGS FOR SAFEGUARDING STEEL, CONCRETE, WOOD, AND CABLES. OUR TRACK RECORD SHOWCASES NUMEROUS PROJECTS BENEFITING FROM CISCHEM SOLUTIONS' DEPENDABLE PROTECTION. RIGOROUS TESTING AND APPROVALS GUARANTEE THOROUGH FIRE DEFENSE MEETING PRECISE CRITERIA.

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ISO : 9001:2015, 14001:2015 Company

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