

AGNI420

Chemical Mortar

Indo Construction Fastening Systems

Indo Construction Fastening Systems (ICFS) is a 45+ years company, having expertise and operations in the following three verticals:

- ICFS Anchor Fastening Systems
- Construction Services
- ICFS Anchor Designer

We have chemical and mechanical anchors usable for installing furniture, fixtures & structures at site. Based on the design load parameters, we even suggest correct type of chemical, diameter of anchor bolts, embedment depth and chemical consumption per hole.

ICFS - Leading manufacturer and anchor solutions provider in India offers a complete range of high-quality anchors, including:

- Chemical anchor studs (Anchor Stud diameter 8 mm and length up to one meter (1000mm) can be manufactured on specific request
- Nylon anchors
- Mechanical anchors like through bolt anchors We can help you find the right anchor for your specific needs and ensure a secure and reliable fastening.

Our story

«From an automotive workshop employing just 2 in 1978 to what we are today-a well-known, successful, respectable, leading business house in India.

It was indeed a long journey. A journey full of challenges, hardships, bottlenecks. But we came out intact and grew many folds - vertical and horizontal.

The best assets of ours, I think are our reputation for honesty, fair dealing, timely delivery and quality.

As I look back there are two main factors which made Indo Spark blossom. First is the wisdom and honesty of our chairperson Mr. Tilakchand Ingale along with his trust in the employees and second is the wholehearted, sincere, hard work put up by our employees – young and old including technicians and workmen.

One thing is certain

We have never stopped growing.

Sandeep Ingale, CEO Indo Spark Group

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Description

The AGNI420 is a high performance rapid curing two-component. Chemical injection anchoring system based on high reactivity unsaturated Polyester resin. The co-axial format comprises of a resin and hardening agent in separated internal compartments that are mixed to the correct triggered using the required manual dispenser.

The resin is available in grey colour. All features combined make Polyester anchoring resin a versatile and cost effective anchoring system.

Features & benefits

- Suitable for medium loads for non-critical applications.
- Fast working times for early loading in time sensitive applications.
- Use in outdoor environments and fixing holes.
- Extremely versatile in masonry, hollow, aerated concrete.
- Crack and gap filling repairs in concrete vertical or horizontal.
- 10:1 resin available in a variety of cartridge types.

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Variant Available in co-oxial 10:1 ratio cartridges

Material Polyester

| | Gel Time |
|---------|-----------------|
| ≥ 0 °C | 45 min |
| ≥ +5 °C | 25 min |
| ≥+10 °C | 15 min |
| ≥+20 °C | 6 min |
| ≥+30 °C | 4 min |
| ≥+35 °C | 2 min |
| ≥+40 °C | 1,5 min |

Typical

| Product Code | Content (ml) | Colour when mixed | Package content | | |
|--------------|--------------|-------------------|-----------------|--|--|
| AGNI420 | 420 | Grey | 6 | | |







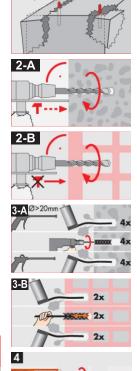
ICFS Chemical Production Unit

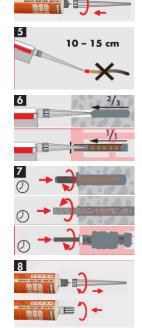












Anchorage in concrete with Rebar AGNI 420

High bond Reinforcing Bars FYK = 500N/mm²

| Rebar Diameter | Drill Hole Diameter | | | | | | | | | | | | | Steel failure | | |
|-------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------------------|------|--------------|
| (mm) | (mm) | | | | | | | (k | N) | | | | | | | load (kN) |
| 8 | 8-12 | 4.3 | 5.6 | 6.1 | 7.1 | 8.1 | 9.2 | 10.5 | 12.1 | 13.9 | 15.8 | | | | | 21.9 |
| 10 | 12-14 | 5.1 | 6.9 | 7.1 | 8.2 | 9.3 | 10.7 | 12.4 | 14.2 | 16.4 | 18.8 | 20.2 | 22.8 | | | 34.1 |
| 12 | 14-16 | 6.3 | 7.2 | 9.6 | 10.1 | 11.1 | 12.2 | 13.3 | 14.8 | 17.2 | 19.7 | 21.5 | 24.7 | 27.2 | 29.8 | 49.2 |
| Depth | (mm) | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 200 | 240 | 280 | 320 | |
| 16 | 18-20 | 10.6 | 12.9 | 14.2 | 17.4 | 20.1 | 24.5 | 26.9 | 29.6 | 32.6 | 35.9 | | | | | 87.4 |
| 20 | 25 | 11.4 | 13.5 | 15.9 | 18.7 | 22.1 | 26.5 | 29.1 | 31.9 | 35.2 | 38.8 | 42.7 | | | | 136.6 |
| | | | | 17.5 | 20.5 | 24.2 | 28.5 | 33.6 | 40.3 | 48.3 | 58.1 | 69.6 | 83.6 | | | 196.5 |
| Depth | (mm) | 80 | 100 | 120 | 140 | 160 | 200 | 240 | 280 | 300 | 320 | 400 | 480 | 540 | | |

High bond Reinforcing Bars $FYK = 500N/mm^2$

| Rebar Diameter (mm) | Drill Hole Diameter | | | | | Recommended Resistance (N _{rd}) | | | | | | | | | |
|---------------------------|------------------------|-----|-----|------|------|---|------|------|------|------|------|------|------|-----|--|
| | (mm) | | | | | | | (k | N) | | | | | | |
| 8 | 8-12 | 1.1 | 3.2 | | | | | | | | | | | | |
| 10 | 12-14 | 2.7 | 3.8 | 4.8 | 5.7 | 6.8 | 7.7 | 8.9 | | | | | | | |
| 12 | 14-16 | 3.1 | 4.1 | 5.1 | 5.9 | 7.1 | 8.2 | 9.1 | | | | | | | |
| Depth | (mm) | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 200 | 240 | 280 | |
| 16 | 18-20 | 5.8 | 7.2 | 9.1 | 10.9 | 13.1 | 15.7 | 18.8 | 20.9 | 22.8 | 27.3 | | | | |
| 20 | 25 | 6.5 | 8.2 | 10.3 | 11.5 | 14.4 | 16.2 | 19.4 | 21.7 | 23.5 | 28.4 | 32.8 | | | |
| 25 | 30 | | | 11.1 | 12.2 | 15.3 | 17.1 | 20.6 | 22.8 | 25.1 | 30.2 | 34.4 | 41.2 | | |
| Depth | (mm) | 80 | 100 | 120 | 140 | 160 | 200 | 240 | 280 | 300 | 320 | 400 | 480 | 540 | |

Anchorage in concrete with Threaded rod 5.8 grade AGNI420

5.8 Grade Studing

| Rebar Diameter | Drill Hole Diameter | Design Resistance (N _{rd}) | | | | | | | | | | | | | Steel failure | |
|-------------------|------------------------|--------------------------------------|------|------|------|------|------|------|------|------|------|------|-----|-----|------------------|--------------|
| (mm) | (mm) | | | | | | | (kN) | | | | | | | | load (kN) |
| 8 | 10 | 5.3 | 6.1 | 7.3 | 8.7 | | | | | | | | | | | |
| 10 | 12 | | 6.9 | 9.1 | 11.5 | | | | | | | | | | | 20.1 |
| 12 | 14 | | 7.2 | 9.6 | 12.1 | 15.6 | 19.5 | | | | | | | | | 29.2 |
| Depth | (mm) | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 200 | 240 | 280 | | |
| 16 | 18 | 9.6 | 12.9 | 17.2 | 21.5 | 26.8 | 29.8 | | | | | | | | | 54.4 |
| 20 | 24 | | 16.7 | 20.9 | 24.1 | 27.1 | 31.1 | 35.7 | 41.3 | | | | | | | 84.9 |
| 24 | 28 | | 19.8 | 23.7 | 28.8 | 30.9 | 34.5 | 39.5 | 45.4 | 51.1 | 56.8 | 62.5 | | | | 122.4 |
| Depth | (mm) | 80 | 100 | 120 | 140 | 160 | 200 | 240 | 280 | 300 | 320 | 400 | 480 | 540 | | |

5.8 Grade steel Studying

| Rebar Diameter | Drill Hole Diameter | | | | | Recom | nended R | esistance | (N _{rd}) | | | | | |
|-------------------|------------------------|-----|------|------|------|-------|----------|-----------|--------------------|------|------|------|-----|-----|
| (mm) | (mm) | | (kN) | | | | | | | | | | | |
| 8 | 10 | 3.5 | 4.4 | | | | | | | | | | | |
| 10 | 12 | 4.1 | 5.8 | 6.6 | 7.3 | | | | | | | | | |
| 12 | 14 | 4.8 | 6.4 | 7.28 | 8.01 | 8.9 | | | | | | | | |
| Depth | (mm) | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 200 | 240 | 280 |
| 16 | 18 | 6.9 | 9.2 | 12.3 | | | | | | | | | | |
| 20 | 24 | 7.8 | 10.1 | 13.1 | 15.3 | 18.1 | 21.7 | 26.4 | | | | | | |
| 24 | 28 | | 11.3 | 14.2 | 16.6 | 19.6 | 23.1 | 27.7 | 33.2 | 39.9 | 47.8 | 57.4 | | |
| Depth | (mm) | 80 | 100 | 120 | 140 | 160 | 200 | 240 | 280 | 300 | 320 | 400 | 480 | 540 |



A brand of Indo Spark Group Since 1978

CHANNEL PARTNER



INDO SPARK CONSTRUCTION SERVICES

CORPORATE OFFICE

198, E Ward, Tararani Chowk, Near Geeta Mandir, Kolhapur - 416 003 (Mah.India) Toll Free: 1800 123 500 023 E-mail: mail@indospark.com

BRANCHES

Mumbai Pune















www.indospark.com