




imco

IMCO ALLOYS Pvt. Ltd.



NANO CRYSTALLINE AMORPHOUS TECHNOLOGY (N-CAT)

REVOLUTION IN WELDING TECHNOLOGY

Technical collaboration with 
IMCO Alloys Corporation, Houston -USA

IMCO GROUP

The IMCO group is India's powerhouse of engineering solutions, which through its subsidiaries provides single - point responsibility for engineering, component supply, construction and commissioning.

Combined, our companies offer a total and integrated engineering solution to serve various high profile sectors, including the mining and mineral, petrochemical, sugar and marine sectors as well as general industry.

Our strategic intention:

“To build an industrial engineering group of significant operational scale, that benefits from the upsurge in planned growth of Cement, Sugar, Power and Steel industry spend in India in the near future”.

N-CAT TECHNOLOGY

Nano Crystalline Amorphous Technology is the latest technology in welding, a state of art rapid quench flow is establish with kinetic technique a very high kinetic energy is showered, creating the matter to break into multiple atoms. Thus creating micro particles of 1-3 microns. These are further blended to form electrodes with horizontal casting process.

The following are the process involved in manufacturing Nano Crystalline Amorphous Powders.

- A) Rapid quenching
- B) Blending
- C) Cryogenic Treatment
- D) Nano Vacuum infiltration
- E) Horizontal Castings
- F) Flux Coating and rod manufacturing



Nano Crystalline Amorphous Powders3

SR.	PRODUCT NAME	SIZE	APPLICATIONS
1	Zuper Chamfer Rod	4mm	Removal of metal, weldment (V) preparation, Gouging of all types of steels, cast iron
2	Zuper Cut Rod	4mm	Gouging cutting of any metals like stainless steel cast iron, steel.
3	Zuper MS	mm	Light & Medium Structure, Frames, Bodies.
4	Zuper HT	4mm	Heavy equipment, structure, truck Chassis, frames.
5	Zuper 0660	mm	Zuper 0660 is particularly suited for joining heavy structure crack, to truck chassis, & heavy machineries.
6	Zuper 0680	4mm	Joining Dissimilar steel, Drawing heads, tractions wheel, dies & moulds, Gears & pinion.
7	Zuper 0222	mm	Maintenance welding of special nickel composition steels Furnance parts, high temperature vessel.
8	Zuper 09	mm	Chemical Plant equipment, Mixers, valves, Heat exchangers, Screw, Worms.
9	Zuper 16	mm	Mixers, Tanks, Pumps, Chemical Tanks, Hydraulic & Steam turbine blades.
10	Zuper 04	mm	Chemical Plant Equipment, equipment for food processing.
11	Zuper 027	3.15mm	All types of cast iron, Base, layer casting defect, cast iron body.
12	Zuper 2024	3.15mm	Pump Bodies, Gears & Pullies, engine block, valves, pump housing, CI
13	Zuper 650	4mm	High abrasion protective coatings on crushers hammers, crusher Bars, anvil segments, leveller & cutter, Crusher jaws drive sprockets, rolling mill guide.
14	Zuper 6060	mm	Crusher Hammers, Conveyers, Scrapers, cutters, Id fan.
15	Zuper 20B	4mm	Gears, Sprockets, wobblers, gear teeth, Pinions.
16	Zuper 055	mm	Zuper 055 is best suited for pump housing, crane wheels.