

ZUPER BLOCK[®]

SUGAR

Zuper Block is an extremely strong abrasion resistant composite consisting of complex carbides in a metallic matrix. This is metallurgically bonded to a mild steel backing plate. The carbides have a minimum hardness of 770 Hv and contain carbides up to 1500Hv.



Various types of Zuper Blocks

Sand (silica) and other abrasive material harvested with sugar cane can cause severe wear on shredder/fibrizor hammers. Replacing these parts with Zuper Blocks can substantially reduce wear, giving considerable savings in down time and lost production.

Repeated welding leads to huge stresses and heataffected zone. Zuper block is the most cost effective sugar mill shredder tip available which is fitted to the hammer shanks with a single bolt. These tips can easily be replaced and all four sides can be used giving a longer life to the hammer body and reducing power consumption.

This is the worlds most cost effective and time saving method compared to any hardfacing welding.



ZUPERBLOCK - SIZE

Product	Size	Thk	Width	WT.
Zuper 9090M	90x90	52mm	90mm	3.00
Zuper 9090F	90x90	45mm	90mm	2.80
Zuper 8080F	80x80	45mm	80mm	2.30
Zuper 8056	80x56	45mm	56mm	1.60
Zuper 9050M	90x50	52mm	50mm	1.70
Zuper 9050F	90x50	45mm	50mm	1.70
Zuper 6060	60x60	45mm	60mm	1.30



PROPERTIES

- Bond Shear Strength : 300M Pa
- Carbides volume fraction : 52-60%
- Hardness : 675 Hv minimum. Eutectic carbide is typically 1200 Hv.



NOTE

- Torque applied on bolt 250 Lbs / ft.
- Gap adjustments between anvil Plates and hammer top & bottom to be maintained periodically.
- Foreign material like bars, links, chain to be avoided
- All four sides are to be used as per instruction.
- Consult IMCO engineers for proper selection of Zuper Block for your Hammer bodies.

ZUPER TIP[®]

SUGAR

Zuper Tip, the most cost effective sugar mill Knife chopper cutter, leveller & mincer attachments are available in various sizes with Double "V" Edge & Flat Edge welded to the knife body shanks with special grade welding, adding extra strength. This is the most cost effective and time saving method of knife body protection than hard facing.

Our strict quality system ensures that all tips are of the same size & weight. This facilitates easydynamic balancing and tip clearance setting.



SIZE CHART

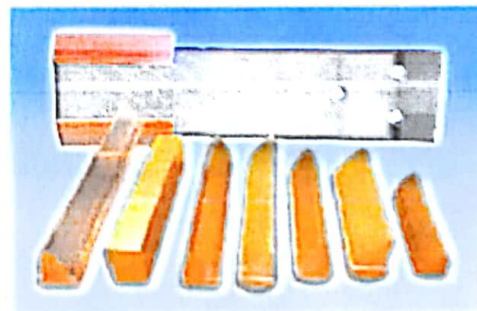
"V" EDGE

Part No	A	B	C	D	E	Wt.
Zuper-2512	28	12	12	32	304.8	2.60
Zuper-2508	28	12	12	32	304.8	2.60
Zuper-2208	28	12	12	22	203.2	1.35
Zuper-1908	28	12	12	19	203.2	1.10
Zuper-2506	28	12	12	25	152.4	1.00
Zuper-2206	28	12	12	22	152.4	0.90
Zuper-1906	28	12	12	19	152.4	0.80



ADVANTAGES

- Cost effective compared to Hardfacing.
- Superior edge retention and sharpness.
- Gives increased cutting efficiency / self sharpening.
- Easy to maintain and replace.
- Increased savings in labour cost.
- Better cane preparation & increase preparatory Index.
- No down time losses.



Various Designs of Zuper Tip



ZUPER WELDING PROCEDURE

- 45° Double "V" Preparation on Knife Body & Knife Tip
- Place the Tip at right angle and tac weld with 7018 (Low Hydrogen) welding rod.
- Complete welding with 7018 (Low Hydrogen) Using staggered techniques.
- Sharp corners to be rounded



Static Collar / Straight / Round Flanges
which can be formed out of Sintered Carbide Tech.

SINTERED CARBIDE TECHNOLOGY

Zuper Plate are extremely strong abrasion resistant complex carbides vacuumised to a mild steel backup plates or any other suitable metal plates as per requirements. These tiles / plates are specially reinforced with special steel mesh, which have very high tensile strength and low risk failures. This outstanding cost affective process helps to form any shape, size and orientation. The overlay has a hardness of 650 BHN min i.e. 61-62 Hrc.

ZUPER ANVIL SEGMENTS
SUGAR



ZUPER ANVIL SEGMENTS FOR POCKETED/SERRATED ANVIL PLATES

New generation readymade Replaceable Carbide Blocks & Knife Tip of high chromium molybedum Carbides having excellent abbbressive & impact resistance of hardness 63 HRC, can be easily placed on pocketed / serrated Anvil plate & welded as per drawing. These 15 mm to 20 mm Carbides give excellent abrasion resistance properties & the volume cost of Carbides is more than 75% compared to 30% of welding (hard facing). These have approximately 3 times more life compared to welding & these segments can be easily replaced on wornout areas only.

ADVANTAGES

- Cost effective compared to hard facing
- Superior edge retention
- Gives increased crushing efficiency.
- Easy to maintain and replaceable.
- Saving in labour cost.
- Better cane preparation and increased preparatory index.
- No down time losses.



ZUPER BLADE

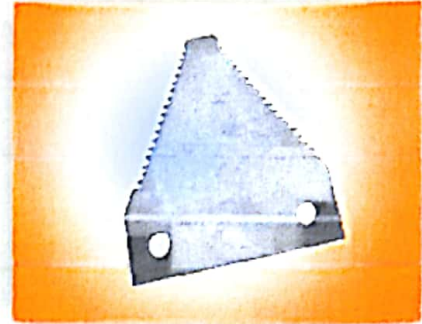
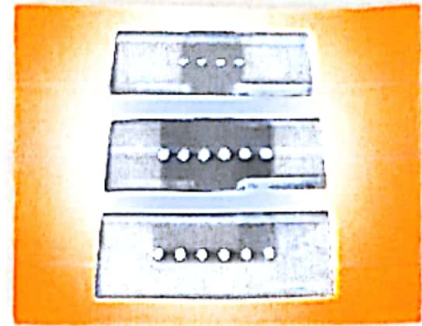
SUGAR

Zuper Blade, the most cost effective sugar harvester, base cutter blade attachments are available in various sizes with single Edge & Flat Edge duly bolted to the body shanks of base cutter. These extra strong, high tensile, hardened and tempered steel duly case carburized in a special vacuum furnace are used for heavy cutting edges having hardness of 36 - 45HRc. This is the most cost effective and time saving method compared to the older conventional cutters.

Our strict quality system ensures that all blades are of the same size & weight. This facilitates easy dynamic balancing and tip clearance setting.

ADVANTAGES:

- Cost effective compared to conventional edge.
- Superior edge retention and sharpness.
- Gives increase cutting efficiency / self sharpening.
- Easy to maintain and replace.
- Saving in labour cost.
- Reduced downtime losses.



IMCO at work

Corporate culture

- Service of the commitments.
- Analysis of the wear behavior and suitable recommendations.
- Range of suitable materials for diverse wear conditions.

Industrial skills.

- Network of skilled and loyal sub contractors.
- Interface management.
- Detailed study achievement.
- Efficient & Timely Logistic.

Talk to us about your wear problems, we are interested in offering cost effective modifications of standard materials for specific applications and will be pleased to be your partner for the development of new products.

Service

Our highly professional Team of Engineers are exclusively dedicated to the work round the clock. IMCO has skilled team which is comprised of metallurgical and materials engineering experts, sales staff, application engineers and a complete engineering and production staff. We readily perform the following tasks :

- Analyse and engineer solutions for specific wear problems and help customers understand how wear reduction can improve their productivity and profits.
- Clad and finish parts provided by customers or fully fabricate and finish complete parts.
- Inspect & refurbish used parts.
- Provide field support for installation & wear monitoring.
- Offer a high degree of technical support and develop new wear solutions.
- We offer complete wear solution services, including on-site wear diagnostics, tailored solution engineering and installation and wear monitoring support for many customers, stock finished inventory of standard products and deliver parts worldwide.
- Our engineers, technologists and production team routinely develop custom solutions to unique wear problems and provide high quality products and services to every customer. Our wear expertise and comprehensive production capabilities enable our diverse customer base to improve their productivity, profitability, quality and competitiveness.
- We at IMCO offer full-service solutions to our customers including: Wear Assessment Solution, Design & Engineering, Cladding, Fabrication & applications Installation, Support Ongoing Wear Monitoring & Consultation.

ISO - QUALITY



IMCO is completely committed to manufacture highest quality products. Quality assurance and control procedures are instigated at the earliest opportunity, from initial design reviews with the customer, to ensuring their specific requirements are met and enable advance planning of quality control.