

GARNET CASE STUDY

ZAMAC SURFACE PROTECTION PTY LTD
NEW SOUTH WALES, AUSTRALIA

PROJECT BACKGROUND

ZaMac Surface Protection offers sandblasting services, protective coatings, floor surface preparation and on-site solutions. To improve blasting efficiency, BlastOne suggested GMA Garnet.

Together, ZaMac and BlastOne conducted several trials comparing GMA NewSteel Garnet and imported garnet. Factors included abrasive consumption rate, blasting speed and cost of blasting. A lightly rusted, road plate steel was used as the test surface to blast.



Achieve specified surface cleanliness and roughness standards



Generate considerable savings in production costs



Increase production capacity



Minimize dust levels on worksite



WHY ZAMAC CHOSE GMA GARNET

As the trusted global leader in industrial garnet, GMA Garnet Group has been providing the highest quality garnet abrasive to the waterjet cutting and protective coating industries for over 35 years.

GMA NewSteel Garnet is a high performance blasting abrasive, that delivers the most efficient and cost effective surface preparation on new steel surfaces, light rust or thin coatings.

Ideally suited for surface preparation in the fabrication industry, GMA NewSteel Garnet has many unique and money saving advantages. From superior cleaning rate to low consumption rates, SA3 White Metal is effortlessly achieved.

RESULTS

Comparing GMA NewSteel Garnet to Staurolite, we had the following results:

TEST RESULTS

Abrasive	Blast Area	Blast Time	Abrasive Consumption	Blasting Speed
Staurolite	.55 m ²	96 s	.375 t/hr	20.6 m ² /hr
GMA NewSteel	1.26 m ²	185 s	.194 t/hr	24.6 m ² /hr

(Equipment used: 600lb Clemco Pressure Release Blast Pot, 390cfm Diesel Compressor, No. 6 Blast Nozzle at 105psi at the nozzle)

Using the True Cost Abrasive Blasting Formula, we calculated the amount of abrasive used per square metre by each nozzle.

CONSUMPTION RATES

Nozzle	Consumption Rate	Abrasive Purchase Cost Delivered	Abrasive Disposal Cost	Labor and Equipment Cost	Production Rate	Blasting Costs
Staurolite	.375 t/hr	\$650/t	\$100/t	\$150/hr	20.62 m ² /hr	\$20.91 per m ²
GMA NewSteel	.198 t/hr	\$900/t	\$100/t	\$150/hr	24.54 m ² /hr	\$14.18 per m ²

CONCLUSION

Our results show that GMA NewSteel Garnet is more productive than Staurolite Garnet. There is a 48.2% reduction in abrasive consumption and 19.4% increase in blasting speed. Overall costs were reduced by 32.18%.

