

LASER SHIELD

1. For which laser power does Laser Shield work?

Laser Shield has been successfully tested up to 100 kW.

2. For which laser types does Laser Shield work?

Laser Shield is specifically engineered for fiber laser cutting machines; however, it is also compatible with CO₂ lasers.

3. For which plate thickness does Laser Shield work?

It has been successfully tested on plates up to 150 mm thick.

4. Which type of slats materials can Laser Shield protect?

It works with all types of slats like mild steel, copper, aluminum, etc.

5. Is Laser Shield efficient with all types of plate materials?

Laser Shield is effective on all types of slats, including mild steel, copper, aluminum, and more.

6. How often do I have to apply Laser Shield on my laser cutting machine slats?

Application frequency depends on machine usage:

- Every 2 – 6 days for 3 shifts/day
- Every 7 – 9 days for 2 shifts/day
- Every 12 – 18 days for 1 shift/day

In heavy-duty conditions (e.g., laser power \geq 50 kW or material thickness \geq 50 mm), more frequent application may be required.

Note: as Laser Shield is biodegradable, its effectiveness gradually decreases after 28 days.

7. After applying Laser Shield, how long do I have to wait before cutting?

Cutting can begin immediately after application.

Alternatively, the product can be applied up to 3 days before cutting (e.g., applied Friday evening, cutting starts Monday morning).

8. Can I apply Laser Shield on dirty slats?

No. The slats must be either new or thoroughly cleaned before application.

9. Should Laser Shield be used only on a new table, or can it also be used on a mechanically cleaned table?

For optimal results, apply on either new or properly cleaned tables. After the first application, only simple mechanical cleaning is needed before reapplying.

10. How should I clean the slats before reapplying Laser Shield?

Slag will detach easily. You can clean the slats using a steel brush, by vibration, or with a dedicated slat cleaning machine if available.

11. Can Laser Shield be applied with a brush or another tool?

No. Laser Shield must be applied using the Laser Shield GUN to ensure optimal performance and operator safety. Always follow the GUN's operation and safety manual.



FAQ

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12. Does Laser Shield interfere with post-cutting processes like plating, anodizing, or powder coating? Can it cause discoloration or defects?

No. When used as directed, Laser Shield leaves no residue and causes no side effects on metals. Protection comes from a heat-activated reaction that transforms the dry components into an invisible protective film.

13. Is personal protective equipment (PPE) required during application?

While Laser Shield is 100% natural and biodegradable, PPE is recommended to avoid contact with eyes or open wounds, as specified in the Product Data Sheet (PDS).

14. What is the shelf life of Laser Shield?

- Unopened: at least 2 years.
- Opened: use within 1 year.

15. Where should I store Laser Shield in my workshop?

Store in a clean, dry area protected from direct sunlight, dust, odors, insects, and rodents.

16. There are sediments at the bottom of the jerrycan, is it a problem?

No. As a 100% natural product, sediment is normal. Shake the jerrycan well before use to ensure a uniform mixture. Sediment does not affect performance.

17. Is Laser Shield flammable?

No, it is not flammable when applied to the slats. However, keep the jerrycan away from open flames.

18. Can Laser Shield be used on the laser cutting machine nozzle?

No. Laser Shield is specifically designed to protect the slats only.

19. Can Laser Shield also be used on plasma cutting machines?

No. A dedicated product for plasma applications is coming soon.

Note: Laser Shield is ideal for the entire residue discharge system beneath the table, where it performs exceptionally well. However, caution is advised on the cutting bed: applying it to the slats can make them slippery and potentially hazardous for operators walking on them.

20. Can Laser Shield also be used on oxyfuel cutting machines?

No. A specific product for this application is currently under development.

Again, Laser Shield is perfect for the residue discharge area under the table.

On the cutting bed, care must be taken as the slats may become slippery and pose a risk to operators.

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NITTY-GRITTY srl
via dei Marmorari, 36
41057 Spilamberto,
Modena - ITALY
+39 059 785210
info@nitty-gritty.it