

HOW DO YOU SELECT THE SUITABLE LAMINATED MATERIAL?



New to laminated shims? Or maybe just wondering which type would best meet your requirements?

There are two key issues to be born in mind:

First key issue:

MAXIMUM USE TEMPERATURE

It should be born in mind that the special binder film is extremely fine. After thermal treatment its thickness can be virtually discounted it is so thin. But above a certain temperature (see LAMECO⁽¹⁾ standard), the binder will be destroyed. However, its disappearance does not impact in any way the continued use of our shim. The part will continue to work until it is replaced during the maintenance disassembly.

Second key issue:

MECHANICAL STRESS

You must first know what pressures and stress will be exerted on the laminated material. If your parts are provided with fixation holes, the only pressure will be that exerted by the tightening of fixing screws. This is only a small pressure. In this case all THE EASY PEEL SHIM COMPANY laminated materials can be used without any limitations. For all other cases, please refer to us.

Conditions of use:

Once you have taken these two factors into account, you can choose which material best suits your requirements by considering the following points:

⁽¹⁾ THE EASY PEEL SHIM COMPANY is LAMECO's US sales office. All our shims are manufactured by



HOW DO YOU SELECT THE SUITABLE LAMINATED MATERIAL?

IF YOU NEED TO PEEL YOUR SHIMS EVEN MORE QUICKLY AND EASILY

All of our composite materials INTERCOMPOSITE®, DUOPEEL®, X.FIBER®, COBRA.X®, X.FIBER HIGH-DENSITY® and PEEKPEEL® can be peeled by fingers alone, no tools required.

The same can be said of all the metallic materials in the INSTANT-PEEL® range.

With any and all of these products peeled leaves stay flat without any distortion, and as a result they can be reused too!

LIGHTNESS REQUIREMENTS

- If weight reduction is your primary concern (for portability, or more useful carrying capacity, etc.) : INTERCOMPOSITE®, DUOPEEL®, X.FIBER®, COBRA.X®, X.FIBER HIGH-DENSITY® and PEEKPEEL® would be perfectly suited to your needs - see cards of these products. They are best recommended as they are the lightest of our products and have an excellent weight/mechanical characteristic ratio whenever minimum weight and outstanding performance are demanded together.
- INTERCOMPOSITE® and DUOPEEL® are not only very fast to use, but are the least expensive of all laminated materials.

REQUIREMENTS OF ADAPTATION TO CURVED SHAPES

If you want to wedge on curved shapes, INTERCOMPOSITE®, DUOPEEL®, PEEKPEEL® and, according to thicknesses, X.FIBER® or X.FIBER HIGH-DENSITY® can be quickly and easily adapted to most curves without any loss of utility or precision - see the cards of these products.

On the other hand, for metallic materials, we recommend you to make your selection from the range of laminated shims CURVPEEL®, an exclusive process where the required curve radius is incorporated into the shim during production.

THREE FINAL HINTS

- Steel is best avoided in assemblies presenting a corrosion risk.
- It is better to avoid aluminum, whenever productivity improvement is being sought. The peeling of aluminum is namely more delicate, therefore longer.
- Finally, it is not advised to use aluminum (or to a lesser extent stainless steel) where galvanic coupling also known as 'fretting' can take place.

Bearing in mind the temperature at which the shim will be performing, the physical stresses exerted, the presence of difficult curved mating surfaces, or the desirability to save weight in your final assembly should guide you to selecting the correct laminated shim for your precise application.

LIMITATIONS OF MIXED TECHNIQUE SHIMS (LAMINATIONS PLUS SOLID PARTS)

Once the material has been set out, avoid planning said "solid parts" [or "S.P." = solid stocks, unpeelable part] in strong thicknesses.

- Combining solid metal sections with the laminations actually results in lowered mechanical performance. For this reason when such mixed shims are desired the thickness of the solid metal part should be kept at an absolute minimum.
 - It should also be noted that such mixed shims are particularly difficult to manufacture and hence expensive.
- Consequently, a solid part should be used only in case of special technical constraint. This might occur, for example, when needing a threaded portion contained within the depth of the shim, or a countersink for screw-heads.



Sales office: The Easy Peel Shim Company · 410 E. 40th Street, Suite 3310,
New York, NY 10016 · 888.317.2889 - ph (toll free) · 888.317.1055 - fax (toll free)
E-mail: us.sales@lamecogroup.com

www.LamecoGroup.com