Mistakes to Avoid with Your Disc Springs

Disc springs, with their versatility and potential, offer a plethora of benefits in numerous industries. However, to truly harness their capabilities requires careful consideration and attention to detail to avoid common pitfalls in their utilization. Here are some key mistakes to steer clear of when working with disc springs to ensure optimal performance and longevity.

1. Neglecting Early Collaboration

One of the gravest errors is overlooking the opportunity to engage Mubea's development and design expertise early in your design process. By involving us from the outset, you can tap into our wealth of knowledge and experience to optimize your design for efficiency and performance. Concurrent engineering and collaborative efforts in the early stages not only streamline the design process but also ensure that potential issues are addressed before they escalate, resulting in a win-win situation for all parties involved.

2. Overlooking Spring Geometry

Not all spring geometries are created equal, and selecting the wrong one can lead to suboptimal performance. For instance, tall, thin springs may not be suitable for stacking in series due to the risk of uneven deflection, while narrow-ring springs often require larger force tolerances compared to their wider counterparts. It's imperative to carefully consider the application requirements and select the appropriate spring geometry accordingly. Providing comprehensive information to the spring design team ensures that they have the necessary insights to make informed decisions and create a design that meets your specific needs.

3. Ignoring Material Selection

The choice of disc spring material plays a crucial role in the performance and durability of disc springs. Using the wrong material or failing to consider factors such as corrosion resistance, fatigue strength, and temperature tolerance can lead to premature failure or reduced performance. It's essential to consult with experts like Mubea to select the most suitable material for your specific application, taking into account environmental conditions and operational requirements.

4. Neglecting Load and Deflection Calculations

Proper load and deflection calculations are essential for designing disc springs that meet the desired performance criteria. Failing to accurately calculate these parameters can result in springs that are either underloaded or overloaded, leading to inefficient operation or potential

damage. Mubea's engineering team specializes in precise calculations and can help ensure that your disc springs are designed to perform optimally under the expected loads and deflections.

5. Underestimating Maintenance Requirements

Disc springs, like any mechanical component, require regular maintenance to ensure continued performance and reliability. Neglecting maintenance tasks such as inspection, lubrication, and replacement of worn components can lead to unexpected downtime and costly repairs. It's essential to establish a proactive maintenance schedule and adhere to it diligently to keep your disc springs operating at their best.

By avoiding these common mistakes and partnering with Mubea for your disc spring needs, you can ensure that your applications benefit from reliable performance, extended lifespan, and optimal efficiency. Contact us today to learn more about our disc spring solutions and engineering support services.

Yes, You Really Do Need to Floss

We all know how important it is to take care of our teeth, and when we see a dentist for routine check-ups, he or she will usually ask about flossing habits. This can put some patients in an awkward position because they don't floss regularly, and why should they if brushing works just fine?

But does it? Let's take a look at the benefits of flossing your teeth in addition to brushing.

How Often Should You Floss?

According to the ADA, people should floss their teeth at least once a day. It can be in the morning, before bed, or both. Brushing before flossing is recommended so that the process loosens plaque and food particles between and around the teeth. Following flossing with a rinse helps fully remove particles that harbor bacteria from the teeth and gums.

Benefits Of Flossing Your Teeth

Flossing your teeth, though it can initially be uncomfortable, presents several oral health benefits. The main function of flossing is to remove hard-to-reach plaque and bacteria from between the teeth, but flossing can supplement brushing in the following ways as well:

- Flossing pulls away plaque from below the gum line, which can be difficult to reach for the bristles of a toothbrush. Removing plaque from below the gums prevents damage to tooth enamel and prevents tartar buildup.
- Flossing helps to get rid of bacteria that cause bad breath more effectively than what's done through brushing alone.
- Flossing strengthens the gums and reduces soreness, redness, and inflammation along the gum line.
- Flossing reduces the risk of developing both cavities and gingivitis, each
 of which can cause gum disease and tooth decay if left unmanaged.

Solutions For Flossing Issues

If you struggle with regularly flossing your teeth, you're not alone. Many people find flossing uncomfortable, inconvenient, or even painful. Fortunately, a few solutions exist for dealing with the common issues associated with flossing.

If your gums are particularly sensitive, you might shy away from flossing because doing so hurts and causes the gum line to bleed. In this case, try using a softer floss and work on your flossing routine so that your movements are more gentle.

If you have dental work that gets in the way of regular flossing (ex: braces), special flossing products are available to meet that challenge. There are flossers that are specifically designed to fit between metal wires and brackets.

Even if your gums respond well to flossing, certain health conditions exist that make it difficult to hold and maneuver dental floss. Electric flossers or water flossers can make flossing much easier, and unlike standard dental floss, these types of flossers regulate the pressure they use. The result is clean teeth and comfortable gums.

Finally, if you're trying to teach a small child how to floss, the process can feel frustrating. While it's important to teach children about how flossing improves their oral health, you need to do so in ways they understand. The dental health market is full of children's oral care products, and these products include helpful flossing tools for children.

The Takeaway

Flossing, though not the funnest activity, is incredibly important when it comes to your oral health. Do your best to make it a habit.

BATHROOM REMODELING IDEAS TO TRANSFORM YOUR MORNINGS

Your hair is a mess, your mascara is smudged, and you have lipstick on your teeth. Or maybe you missed a spot shaving, there's toothpaste on your tie, your hair is also a mess... Needless to say, you had a rough time getting ready this morning.

If this sounds like you on a regular basis, your bathroom might be to blame. Of course, you're going to have a hard time getting ready if your space isn't functional. It might be time to embark on a bathroom remodeling project.

If you need a change but don't know where to start, we've got you covered.

TRY A NEW LAYOUT

A remodeling project is the perfect time to try out different bathroom layouts. Your current setup might not be ideal for your morning routine. Think about how you use the space now and what you could do to improve it.

Are you always bumping into everyone in the morning? Consider moving some fixtures around to improve traffic flow.

If your bathroom is big enough, you might want to divide it into separate zones. Have one designated area for showering and washing up and another area for doing hair and makeup.

DITCH THE DOUBLE VANITY

Double vanities are extremely popular but think about your morning routine before installing one. You might find that it would be better to have only one sink but more counter space for your toiletries.

If you do need two sinks, consider wall-mounted sinks instead of a double vanity. This saves space, which is helpful in a small bathroom.

ADD STORAGE

You can never have enough storage space, especially in a bathroom. If you have enough room, you can add built-in cabinets to help store towels, toiletries, and other essentials.

For smaller spaces, built-in nooks are a great alternative. They can be added to a custom vanity or built directly into the wall.

REMOVE THE TUB

Do you ever use your bathtub? If the answer is no, consider swapping it out for a walk-in shower.

With a smaller footprint than a bathtub, the shower will add usable square footage to your bathroom. You can use this space to add other essentials or to simply help improve traffic flow.

NEW BATHROOM LIGHTING

Like with other areas of your home, proper lighting is an essential component of a functional bathroom. To help make your mornings easier, you'll want a combination of overhead and task lighting.

For overhead lighting, you could add a hint of luxury with a gorgeous chandelier. If your bathroom doesn't have windows, consider a light fixture with a built-in vent fan.

For task lighting, let your morning routine help you decide where you need more illumination. A light in the shower or sconces over the vanity might be helpful.

MORE BATHROOM REMODELING IDEAS

Getting ready in the morning can be tricky, especially if there are a lot of people or you have a small space. A functional bathroom is an essential part of starting the day off right. Keep these bathroom remodeling ideas in mind when getting started on your project.

Fischer Restoration is a general contractor specializing in repair and remodeling projects. If you're looking to start a project or have questions about bathroom remodeling costs, get in touch with us today.

The Power of Visual Storytelling

Can you remember your experiences as a young learner? If anything stands out, it might be your favorite picture books.

You were likely a recipient of the gift of visual learning. You may even now have a tendency to prefer that style of learning.

Today, teachers still use picture books as powerful learning tools. They also draw from a nearly endless array of visual aids. Read on and explore how visual storytelling helps parents and teachers of younger children improve the learning experience.

Visual Storytelling 101

You may have never heard the term used formally, but you enjoy the benefits of visual storytelling every day.

Think about the Instagram posts, the YouTube videos, and even the political cartoons you see in your online newspaper. The point of each image is to grab your attention and inspire action.

Using just one example—a YouTube video—you click on a video about the ins and outs of tent camping. You've never done it before, and you want to learn all about it before buying a tent.

Whether the YouTube creator used photographs, illustrations, graphs, symbols, or other visual stimuli, they helped you make sense of complex information using the following:

- Observation
- Recognition
- Interpretation
- Perception

Without realizing it, you used visual learning skills to help you learn about camping. The YouTube creator used storytelling to show you what camping is all about.

Younger students develop those same skills when parents and teachers use visual storytelling techniques to help them learn about the outdoors.

How Visual Learning Helps Younger Children

In general, storytelling helps young learners in several ways. It's a vital part of brain development and helps in the development of:

- Imagination
- Language
- Emotions
- Relationships

Using visual learning techniques, teachers help early learners talk about feelings, share their knowledge, and develop creativity.

When you consider that 65% of the population today are visual learners, it makes sense to implement visual storytelling early in the learning experience.

Practical Ways to Use Visual Learning

We've shared some of the benefits of visual storytelling, but how do you put it to use when working with younger students? This method of learning looks quite different in an early childhood environment than it would in a middle school classroom.

While middle school students might work together to collect information (surveys and interviews) and put it together in a visual presentation (slides or handouts), younger students don't yet have those skills.

Here are a few practical projects designed for young learners:

- Finger puppets
- Paper dolls
- Story stones

Why not offer children a chalkboard? Younger students love using chalk to write stories and draw pictures. An art easel is another option that allows children to socialize and work with one another while drawing, painting and writing.

Need More Ideas for Improving Learning?

While visual storytelling is one way parents and teachers can help younger children learn, play is also vital to improving learning. The experts at Adventurous Child are happy to help you find ways to keep play safe and engaging. We'd love to talk with you to answer any questions about our products.

How to Choose a Roof for a Historic Home

Preserving the charm and character of a historic home requires attention to every detail, with little to no room for compromise. The roof is critical for protecting the structure and contributes significantly to a historic property's overall aesthetic appeal. This guide explores top tips for choosing the perfect roof for a historic home to honor the architectural heritage while meeting the present's practical demands.

Research Your Home's Historical Period & Architectural Style

To which historical period does your home belong? Different periods have distinct architectural features and design elements. For example, Victorian homes often showcase intricate details and elaborate ornamentation, while Craftsman homes are known for their simplicity and natural materials.

Consider your home's architectural style and the characteristics influencing the ideal roofing materials. For example, a Colonial-style home typically features a steep, symmetrical roof, while a Mediterranean-style home may have a flat or low-pitched roof with clay tiles.

Consider Your Roofing Materials' Durability and Longevity

Certain materials like asphalt shingles typically have shorter lifespans than alternatives like clay tiles or metal. Assessing the longevity of the materials lets you invest in a roof that will endure over time without frequent replacement or repairs.

Evaluate the maintenance requirements of the roofing materials. Some may demand regular upkeep, such as periodic cleaning or resealing, to maintain durability and prolong lifespan. Others, like metal roofs, often require minimal maintenance, making them convenient for historic homeowners seeking long-term durability.

Choose a Roof Material Matching Your Home's Aesthetics

Consider the architectural features and design elements of your historic home, such as the roof pitch, angles, and lines. If your home has a steep, gabled roof, cedar shakes or slate tiles can enhance its traditional and classic appearance. A flat or low-pitched roof may be complemented by clay tiles or metal.

Examine the color palette and texture of your home's exterior and choose a roofing material that harmonizes with these elements. If your home features warm, earthy tones, you may choose roofing materials in shades of brown or terracotta to create a cohesive and visually pleasing look. A home with a cool color scheme might benefit from a roofing material in shades of gray or blue.

Evaluate the Material's Compatibility with the Local Climate

Assess the climate factors such as temperature extremes, humidity levels, precipitation patterns, and wind speeds in your local area. Your roofing material has to be able to withstand these conditions without significant deterioration or damage.

Consider the insulation properties of the roofing material. In regions with extreme temperatures, an insulated roof material can help regulate indoor temperatures, reducing the strain on heating and cooling systems.

And don't forget to take into account the wind resistance of the roofing material. If your location experiences strong winds or is prone to storms, choose a material with high wind resistance to prevent shingle blow-offs or roof damage.

Let Guaranteed Roofing Restore Your Historic Home

When restoring your historic home, entrusting the task to Guaranteed Roofing is a decision you won't regret. Our team of skilled professionals understands the unique requirements and challenges of restoring historic homes, and we prioritize quality and craftsmanship. Contact us today!

Driving Change: Women Making an Impact in the Transportation Industry

In the transportation industry, women make up around 8% of professional truck drivers — an all-time high. But despite the small number of women who have taken up jobs within the field, women drivers are still impacting the future of transportation.

In the aftermath of the COVID-19 pandemic, many are reconsidering their employment and tackling new career paths. The trucking industry in recent years has seen a dramatic increase in interest after coming off a shortage of drivers.

Women are changing the transportation landscape, as the industry is being transformed by women at many different levels. Whether it's in the driver's seat or within a board room, women are taking on an active role in making this a lucrative and rewarding industry for many people.

The Transportation Industry: Women in Different Roles

It's not just behind the wheel that women are having a big influence on the future of transportation. Women are filling positions as technicians, advisors, and executives at various companies. The opportunities in various fields have exploded exponentially.

This is helpful to different sectors of the industry looking to find solutions to many challenges. It makes the work more gratifying for everyone and more appealing for others to join it.

According to the American Trucking Association, around 4% of all diesel technicians are women. Despite that small number, it represents the growing desire to include women in every part of the trucking industry.

A program launched in 2022, Women in Motion, aims to promote women for positions within the field. It puts a spotlight on the women making waves in our industry and shows why women are critical to the success of the transportation industry.

Why Are Women Truckers in High Demand Now?

Following the global pandemic in 2020, demand for experienced truck drivers went up. Trucking continues to be a major part of the American economy, opening up more opportunities for job security in the current climate.

Drivers help ensure that the products and supplies people need get to where they need to be. This was especially vital when most people were confined to their homes during the pandemic.

As the demand for more drivers continues to increase, there have been more women taking up roles as drivers. An already-diverse industry became moreso.

Many companies are looking to hire more women behind the wheel of their trucks. According to a study by the Women in Trucking Association, about 8% of all truck drivers in the United States are women — a 2% increase from pre-pandemic levels. There's a good chance you'll notice more women truck drivers in your community.

The majority of trucking companies are equal opportunity employers and seek out different people to hire. This makes the job very appealing for women looking for work in the current climate.

Additionally, many women drivers feel they can earn more money within the trucking industry than in other fields. Other women have brought up the benefits of the job, including a better work environment. This addresses a real concern of issues like gender discrimination in the workplace.

Addressing the Gender Gap for Female Truck Drivers

For a long time, decisions made within the transportation industry often ignored issues like fair access. Male-dominated companies were slow to factor in gender considerations.

Some of these challenges, and underrepresentation, resulted from several key factors. This includes the lack of on the job training for women, the absence of social circles where women can grow together, and many policies that often restrict or discourage women from the job.

But progress to address these issues is happening.

As more women join the workforce at transportation companies within management or leadership positions, change will continue to take shape. Women in these positions offer new perspectives and a more complete view of the industry.

This has become even more important in the aftermath of the COVID-19 pandemic. As the world returns to normal, transportation in many areas will continue to need their unique view of the world. It will only further the development of better solutions for the industry.

Women in Transportation Making a Difference

As more women continue to seek careers in the transportation industry, more influence towards positivity will shape the future of transportation.

Women are taking the wheel and moving forward in the transportation industry at a monumental rate, paving the way for a brighter future ahead.

What Medically Compromised Patients Can Expect at Advance Dentistry

Did you know that over 30 million Americans have heart disease? It is the number one cause of death in the United States and is responsible for many comorbidities. Visiting a dentist as a

medically compromised patient can seem intimidating. The last thing we would ever do is exacerbate medical conditions or put a patient at risk.

At Advance Dentistry, we pride ourselves on a compassionate and unique approach geared to patients with underlying conditions. Most patients wonder what to expect on the first visit. Luckily, we have covered it below in our complete guide for dentist visits as a medically compromised patient.

Keep reading for more information!

What Is a Medically Compromised Patient?

Medically compromised essentially means someone has a medical condition that places them more at risk of specific procedures. In many cases, these are chronic medical conditions such as:

- Heart disease
- Cancer
- Diabetes
- Lung disease
- Kidney disease
- Stroke
- Alzheimer's

How can we safely get dental treatment for these health issues? A skilled and qualified dentist can still provide quality dental care even with medical conditions.

What To Expect for Dental Treatment

As a medically compromised patient, one can expect extra care for dental treatment. At Advance Dentistry, we specialize in treating medically compromised patients through advanced technology and additional support such as I.V. dentistry.

Technology is vital for making dental treatments painless and efficient. I.V. dentistry helps patients who have a fear of visiting the dentist. It is safe, comfortable, and has a fast recovery time. A person's medical history and the extent of dental work will determine how long dental care sessions last.

Everyone should plan ahead by bringing someone along and closely reviewing medical histories with one of Advance Dentistry's skilled dentists. Taking the fear out of visiting the dentist can help everyone receive regular dental care and help promote healthier lifestyles.

First Time Visiting a Dentist

At Advance Dentistry, the first time a person visits a dentist is completely free. We offer complimentary x-rays and examinations to help our dentists determine what is needed for dental treatments. Having underlying medical conditions can make visiting a dentist seem daunting.

Our clinic provides I.V. dentistry, highly skilled dentists, and the latest technology that makes the experience easier and painless. What are you waiting for? Contact us today to set up your first appointment and start redefining your perception of visiting a dentist.

Cannabis Topicals vs Tinctures

What is a cannabis tincture, you ask? A tincture of cannabis consists of essential compounds derived from the hemp plant. The compounds are extracted using an alcohol solution.

How does a tincture compare to cannabis topical products? Cannabis topicals are any kind of topical product that's infused with hemp ingredients. These products are applied to the skin whereas a cannabis tincture is usually taken internally.

So, how do the effects of these products differ? Do either of these delivery methods have psychotropic effects? Is it better to use topical cannabis for back pain or a tincture?

For the answers to these questions, keep reading. The following guide compares cannabis topicals vs. tinctures—their effects, uses, and more. Discover all you need to know in this guide.

What's in a Cannabis Tincture?

A pure cannabis tincture contains THC and CBD unless otherwise specified on the product label. Some will only contain CBD or THC.

The extraction process extracts other ingredients as well. These may include:

- Vitamins and other nutrients
- Essential oils
- Chlorophyll

As we mentioned before, cannabis tinctures are derived using an alcohol solution. So, the finished product contains distilled alcohol and water as well.

Most tinctures are modified with sweeteners and flavorings to improve the taste. That's because pure hemp tinctures can be very bitter. You can find more information about the contents on the label of the specific tincture you choose.

How is a Cannabis Tincture Different From Hemp Oil?

Oils are derived from hemp using a different process. Namely, the desired derivatives (CBD oil, THC oil) are floated on a carrier oil. The hemp oil separates from the other hemp ingredients in the carrier oil so it can be collected.

As a result, some of the carrier oil may still be present in the final product. And, as with tinctures, other ingredients may be added for flavor.

Even so, cannabis oils are far more potent than tinctures. But tinctures have a longer shelf-life.

What's in a Cannabis Topical Product?

A topical cannabis product may contain any hemp ingredient derived using any extraction method. They also contain any number/amount of added ingredients. Thus, the effects and potency of cannabis topicals vary greatly from product to product.

Topical vs Internally-Taken Cannabis

The biggest differences between topical and internally-taken cannabis are the effects and legal status. Cannabis products containing THC have psychotropic effects when taken internally (orally or sublingually). For this reason, such products are only legal in some states.

CBD has relaxing and mood-improving effects when taken internally. Although CBD has no psychotropic effects, it may affect the results of some drug tests.

Conversely, topical cannabis products only affect your skin. With these products, you can treat the desired area without unwanted psychotropic or emotional effects. Topically applied cannabis will not show up on a drug test.

Which Cannabis Product Is Right For You?

So, which will you choose, topical cannabis or a cannabis tincture? Use the information in this guide to help you decide.

For more help, browse our product menus. Choose your preferred dispensary location to check out our tinctures, vaporizers, edibles, and more!

The Benefits of Shims For Robotics

Shims are a widely used tool for closing gaps and adjusting space between parts. Research has shown that the metal shims market is projected to grow strongly into the year 2030.

One reason manufacturers are increasingly investing in custom shims is because of their flexibility and wide applicability. Metal shims are used in a number of different industries, including precision robotics. If your organization relies on robotics for its manufacturing and development processes, you may benefit by utilizing custom shims.

Widely used, friction shims are extremely thin steel discs with hardened, textured surfaces that are used in tight tolerance situations. When two metal parts are connected together, such as by bolts, these shims are placed between the parts. The texture on the surface of the shim increases the friction between the parts and thereby increases the strength of the connection between the components.

More Friction = Higher Torque Loads

In robotics, it's critical to be efficient with space, and shims allow you to design smaller machines. One benefit of using shims in robotic applications is allowing you to increase the coefficient of friction to transmit higher torque. This means your robotic devices will be able to handle heavier loads — this greater strength means smaller devices can complete the same tasks. Additionally, the reduced overall component weight enables faster movements, which can be highly useful in manufacturing contexts.

Increased Safety

Another benefit provided by shims is that they reduce the risk of slippage. In many contexts, slipping components can create safety hazards for your employees. However, shims allow you to increase the strength of connectors and joints, reducing the likelihood of slippage and increasing the safety of your operation.

Reduce The Number of Bolts

Many robotics applications require high levels of precision, but bolts can interfere and make it difficult to achieve a truly efficient design. Shims allow you to reduce the number of bolts needed while still achieving the same level of strength between components. This enables you to save money on hardware and design smaller, more flexible robotics components.

Find The Shims That You Need

At The Shim Shack, we produce custom, made-to-order shims in a variety of materials and sizes. We pride ourselves on specialized solutions and fast turnaround while delivering exactly what you need for your robotics projects. Our corrosion-resistant custom shims are ideal for any application, and we are dedicated to serving our customers in a quick and cost effective manner.

Whatever kind of shim you need, you'll find it at The Shim Shack.

Is a Self-Service Kiosk Right For My Fast Casual Restaurant?

Over the past few years, self-service kiosks have made their way into a variety of industries. Now that they're common in restaurants, many owners are asking whether they should implement these devices into their own eateries.

There are several benefits associated with self-service kiosks in restaurants, from saving business resources to providing faster service. Let's cover four potential benefits of introducing a self-service kiosk at your fast, casual restaurant.

Smarter Resource Expenditures

While the interaction between customers and service professionals is valuable to the restaurant industry, implementing self-service kiosks improves the way human workers are dispatched. When self-service kiosks handle the majority of orders, employees are free to perform tasks that require human touch. With smarter resource expenditures, restaurants can increase productivity without reducing service quality.

Additionally, by letting self-service kiosks cover most of the order-taking, restaurants can reduce labor costs in line with lowered operational needs.

Faster Service

Self-service kiosks add an element of convenience to the restaurant industry, especially for customers who are visiting for the first time. Instead of having to approach the counter and scan through all of the available options, a self-service kiosk allows them to take their time without interfering with other customers' wait times. They can browse through options, note special instructions and more from one convenient device.

This keeps lines moving so that customers can get in and out at their convenience. Further, employees are better able to fulfill more accurate orders because the specifics of each order are clearly listed on the receiver screen. Faster, more accurate service greatly improves customer satisfaction.

Improved Accessibility

Self-service kiosks in casual eateries or fast food establishments stand to benefit customers with disabilities in a significant way. Approximately 19% of the US population has some form of disability and accessing the same services as non-disabled people can be a challenge for many in this population. For individuals with anxiety, or those within the non-verbal spectrum, a self-service kiosk can enhance accessibility options for people with disabilities.

Increased Revenue

Self-service kiosks can <u>increase revenue for restaurants in several ways</u>. For one, they provide upselling opportunities when customers are browsing through the various options available.

Additionally, these kiosks help reduce labor costs and increase customer satisfaction by creating a streamlined experience. Kiosks rarely generate errors, so order customization becomes much easier and far more accurate. Satisfied customers tend to return, and as a result, restaurant sales increase and so does the business's revenue.

Choosing to introduce a self-service kiosk to your fast, casual restaurant requires a great deal of consideration. Should you choose to proceed with this plan, however, your company stands to reap the benefits of unique opportunities.

So much of the customer experience is becoming more technologically advanced, and taking steps to meet the needs of modern society stands to help your business not only grow, but thrive in terms of human capital, cost-savings, and customer care.