Plant of polyurethane products

+1 52 55 85264272  mex
+1 832 8352727  usa

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About us:

Plant of polyurethane products “TIMOL - IT”:

- 5 European brands
- 18 brands of polyurethane (from countries such as Great Britain, France, Italy, Australia, Germany).
- 10 types of polyurethane for different areas and customer needs.

Production capacity:

- 5 tons of finished products per day.

Customer base:

- More than 20 foreign partners
- More than 30 largest Ukrainian corporations
- More than 3,000 counter-parties.
- A team of 25 qualified professionals.

Quality of products, guaranteed by Quality Department and approved by Ministry of Economic Development of Ukraine for injection molding polyurethanes.

Constant expansion of technologies for the introduction of innovative technologies and production methods.

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ADVANTAGES OR POLYURETHANE

Castable polyurethanes are typically used for their high performance properties such as abrasion resistance, tear resistance and load bearing capabilities. These extraordinary properties provide cost effective alternatives for many industrial applications, by lessening the downtime in process operations. Tooling costs are also a major factor. Since polyurethanes are a cast material, tooling can be quite inexpensive compared to the massive structures needed for rubber compression or plastic injection moulding.

Polyurethane Vs. Rubber

The chief advantage of castable polyurethanes over rubber is their abrasion resistance, the combination of a high tear resistance and a high modulus is what gives polyurethanes this advantage. Other advantages include significantly lower moulding costs, much broader durometer range, ozone resistance, and can also be pigmented with a variety of colours. Having a selection of colours allows colour coding of parts or possibly matching the company’s logo.

Polyurethane Vs. Metal

Most metals are much heavier than polyurethanes. This makes urethanes much easier to handle and cheaper to operate equipment. Noise levels are minimised since polyurethanes have the tendency to absorb sound. Polyurethanes can outwear metals in many situations, especially where parts are subject to abrasive materials. Polyurethane’s resistance to corrosion provides another significant advantage over metals. Another key advantage polyurethanes have over metals is that they can be manufactured much cheaper. Casting metal parts is quite a bit more expensive than casting polyurethanes. Welding and machining of metal parts is time consuming and expensive.

Polyurethane Vs. Plastic

As with the previous materials mentioned, the key advantage of polyurethanes over plastics is abrasion resistance. This is due to the fact that polyurethanes have the elastomeric properties that plastics lack. This leads to another advantage of urethanes over plastics; elastomeric memory. Polyurethanes will, in most cases, return to their original shape when they have been stretched. Since polyurethanes are elastomeric, they are not brittle like some plastics. Even in the highest durometer ranges polyurethanes remain elastomeric.
Products

Pipe lining  Wear liners  Wheels & Rollers  Screens

Cyclones  Valves & Seals  Polyurethane Spraying

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PIPE LINING

At TIMOL we specialize in polyurethane pipe lining. Polyurethane pipe lining provides an elective solution to overcome abrasion and corrosion problems associated with moving material in the mining and agricultural industries. We fabricate and line a large range of pipes and associated fittings including straight pipe, elbows, reducers, tee spools, and much more. Our pipe spinning machines allow us to line pipe up to 12 meters in length. Due to our spinning process, the polyurethane lined pipes have a seamless knish with no joins or uneven surfaces.

Key Advantages

- Reduced wear which increases the lifespan of plant and equipment
- Low friction coefficient so less energy is required to move materials
- Reduce plant downtime
- Internal shape of pipe can differ from external as a mould is inserted in to cast fitting and the polyurethane is cast between pipe and mould. An example is creating a reducer in a straight pipe spool giving significant additional polyurethane at the wear point.

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WEAR LINERS

TIMOL produce a large range of wear liners. These liners are commonly used in cyclones, chutes, buckets, hoppers and drop landings along with many other applications to overcome abrasion, impact, noise and corrosion problems. In conjunction with liners we also produce and stock a range of polyurethane wear components like vortex Inders and spigot boots for cyclones.

Key Advantages

- Reduced wear which increases the lifespan of plant equipment
- Low friction coefficient so less energy is required to move materials
- Reduce noise level – polyurethane is a great material for absorbing noise
- Reduced downtime due to decreased wear and easily interchangeable polyurethane parts
- 2 tone polyurethane products which allow for early wear detection
WHEELS & ROLLERS

We have the facilities to engineer, fabricate and line new wheels as well as refurbish old wheels. Polyurethane is cast directly to the wheel; this creates a secure bond between the polyurethane and the wheel hub. It also insures a seamless wheel. Our polyurethane wheels offer higher load bearing capacity and are more durable than alternatives such as rubber and plastics. TIMOL can machine wheels to provide the exact profile and surface texture that you require. In addition we have the expertise to ensure the right type of polyurethane is used for your specific requirements. TIMOL line a huge range of wheels and rollers, including, forklift wheels, road rollers, conveyor rollers, trommel wheels, guide wheels, drive rollers and pulleys, idler rollers, feed rollers, printing rollers, laundry wheels and rollers.

Key Advantages

- Reduced wear due to excellent abrasion resistance
- Increased lifespan of plant equipment
- High resilience
- Refurbishment of old wheels saving the cost of a new unit
- Reduced noise levels
TIMOL produce polyurethane screens to suit a range of different mineral processing application. Our screens are currently being used in many different trammel applications. We custom make screens to your requirements including specific screen apertures to ensure correct mineral separation and choosing the correct polyurethane product to suit your application.

Key Advantages

- Reduce wear
- Combines high throughput without blinding
- High material velocity for added efficiency
- High resilience
- Increase the life of associate plant and equipment
- Reduced noise levels
- Reduced downtime through less wear and ease of replacement

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TIMOL produce a large range of polyurethane valves and seals, including detector cones, lining of knife and buttery valves, balls for check valves and a range of seals including v seals. Our polyurethane detection cones will extend the life of valves, they’re light and offer great abrasive and corrosive resistance. TIMOL produce a large range of detector cone sizes from 50mm to 500mm, and custom sizes can be produced.

Key Advantages

- Cost effective way to protect valves from abrasive and corrosive materials
- Can easily and quickly be replaced at the end of their service life
- Can be customised to suit your application
CYCLONES

TIMOL can produce new cyclone components using your drawings or can repair existing cyclones by removing old liners, repairing any damaged or worn steel work and then relining with high performance polyurethane. We can also supply vortexinders and spigots to your specific requirements.

Key Advantages

- Reduced wear which increases the lifespan of plant equipment
- Low friction coefficient so less energy is required to move materials
- Transition sections such as inlet feed can be very smooth increasing efficiency of cyclone
- Reduced downtime due to decreased wear and easily interchangeable polyurethane parts.

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Polyurethane Spraying

With extensive knowledge in all aspects of Polyurethane Processing, TIMOL also offers spraying of Polyurethanes, providing durable corrosive resistant coatings to intricate and complex products or systems. We also utilize this process in extending our Polyurethane moulding capabilities by means of producing large product shells or outer coatings to be later lined with syntactic materials or other composite types. This process lends itself to the production of large buoyancy modules and other such fabrications.