Modern packaging for bulk products

Ad Star polypropylene sacks

Brick-shaped sacks with valve

- High mechanical and impact strength
- Working temperature range from -70°C to +100°C
- Resistant to repeated bending and abrasion
- Low % of ruptured sacks
- Not susceptible to solvents and alkalis
- Do not get wet and not dampen outside
- Improve company's image
- Not subject to erosion during prolonged storage
- New environmentally friendly packing
- Possibility to print advertisement on the sacks
- 100% recyclable

Technology

Ad Star polypropylene woven sacks are designed to replace traditional paper sacks with valve for dry mixes and other granular products packaging. Having approximately the same cost of production, Ad Star polypropylene valve sacks possess significant advantages in comparison with paper. Granules of polypropylene, which is the raw material for such sacks, is not considered as a toxic material, and 100% recyclability makes packaging environmentally friendly. Possibility to produce different sizes and forms – open top or valve sacks – makes it versatile for many applications

Ad Star advantages

- ✓ **Convenient brick shape of the sacks**
- ✓ **Valve sacks for paper replacement**
- ✓ **Sacks with open top are possible**
- ✓ **Low rupture % and erosion absence**
- ✓ **Resistance to abrasion and kinks**
- ✓ **Strong protection against moisture**
- ✓ **High flexibility of the filled sacks**
- ✓ **Hygienic cleanliness and no glue**
- ✓ **Operating range from -70°C up to +100°C**
- ✓ **Protection from solvents and alkalis**
- ✓ **Good dielectric characteristics**
- ✓ **Do not decompose during storage**
- ✓ **Light weight of sacks – about 75 grams**
- ✓ **We can print advertising on the sacks**
- ✓ **Environmentally friendly packing**
- ✓ **100% recyclable**
- ✓ **Reliable and easy in operation**
- ✓ **Different sizes are available**
- ✓ **Surface lamination (coating with PP + PE)**
- ✓ **Simple and profitable recycling**

Ad Star® name is the proprietary trademark of Starlinger - supplier of the equipment for the sacks production. Initial raw materials are polypropylene granules of different colors. During the processing granules are being melted and come through extrusion machine, converting into the PP film, from which we obtain PP yarns. Then polypropylene yarns come to circular loom to weave PP tubular fabric. This fabric is being folded into the shape of the sacks on special forming machine. Patented system allow us to seal seams of the sacks using hot air without glue, that allow to achieve high strength and purity of the sacks

Ad Star sacks features

Ad Star woven sacks are manufactured in compliance with EU norms, Russian GOST 30090 – 93 “Sacks and sacks fabric”, “Household chemical products. General technical requirements”, Russian sanitary norms SP 4783 – 88 “Sanitary rules for the production of synthetic polymer materials and it’s processing factories”

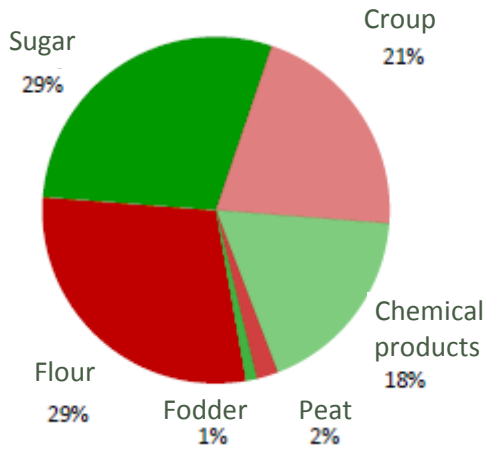
Moisture and slipping protection

Ad Star polypropylene sacks surface lamination (coating) provides possibility to achieve perfect sealing, packing and protection from moisture inside and avoids contact of the product with outside environment. To obtain opposite effect for breathing sacks we can apply perforation on the surface. It is necessary for breathable products like cement, for example. At the end of sacks filling process valve can be sealed using ultrasonic sealing device, integrated to the packaging line of the customer. Thanks to the special surface treatment Ad Star polypropylene sacks do not slip while palletizing in automatic mode, that allow full automation of packaging production. Best reputation Ad Star sacks for packing of sugar, flour, cereals, cement, chemical fertilizers, construction dry mixes, granulated products, salt

Different formats of sacks

We can produce Ad Star sacks in the form of box type sacks with valve (brick shaped sacks) or in the form of ready woven sacks with open top (open mouth sacks). In both versions the surface of the sacks is laminated (coated) with a mix of melted polyethylene and polypropylene, that makes sacks extra protected from moisture and tearing. Surface lamination also gives the sacks strong barrier characteristics for preventing oxidation reaction or deter odors of the product inside the sacks. Flex printing is applied over the lamination layer with spirit inks, 6 colors picture within 1 run out

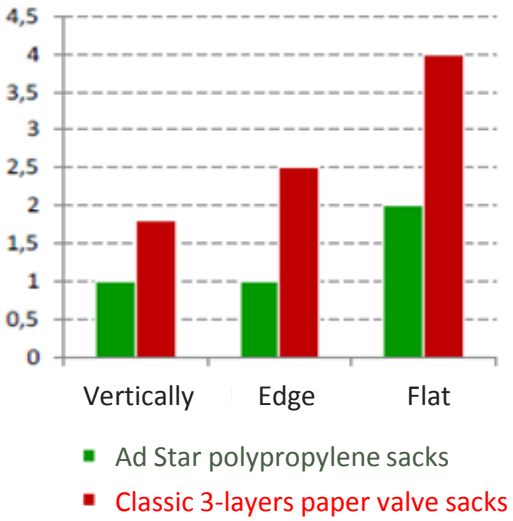
Example: Russian market of Ad Star polypropylene sacks consumption by sectors in % of total



Ad Star sacks properties

We can produce Ad Star polypropylene sacks with any color of fabric, and we can print on the sacks surface any image, according to the customer's layout in 6 different colors. This kind of packaging provides to the customer significant advantages over competitors, as it is innovative, vibrant, eye-catching packaging. Thanks to that, Ad Star sacks attract end customer's attention among typical and widely spread paper valve sacks. Moreover, Ad Star sacks almost never torn. If you nail Ad Star sack to the wall – it will not lead to the total destruction of packaging and spilling of the product. That means the buyer will not stain his clothes while taking the sacks off the shelf inside construction supermarket and carrying it from his car to the house. So, he will definitely remember this advantage and, of course, will come back for purchasing your product again. Afterwards, the buyer can throw out used empty sacks to the garbage, as it is 100% recyclable

% of rupture for Ad Star polypropylene sacks and paper valve sacks after falling down (drop)

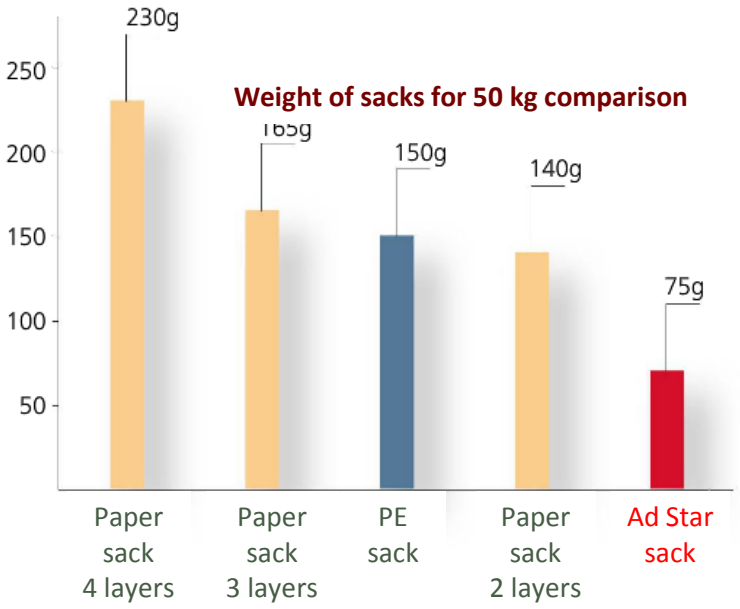


Ad Star sacks market

Gross domestic consumption of Ad Star polypropylene sacks in Russia is growing continuously since 2007, demonstrating an annual increase of 20%, and in some years considerably higher

! Using Ad Star polypropylene brick-shaped sacks with valve instead of classical multi-layer paper valve sacks for packaging of construction dry mixes, in some cases you can reduce production losses, associated with sacks rupture, more than 10 times from standard figure of 5% down to 0.25%. Also you can save your product and packaging during transportation, storage in construction supermarket, repacking and selling to the buyer

Dimensions and weight

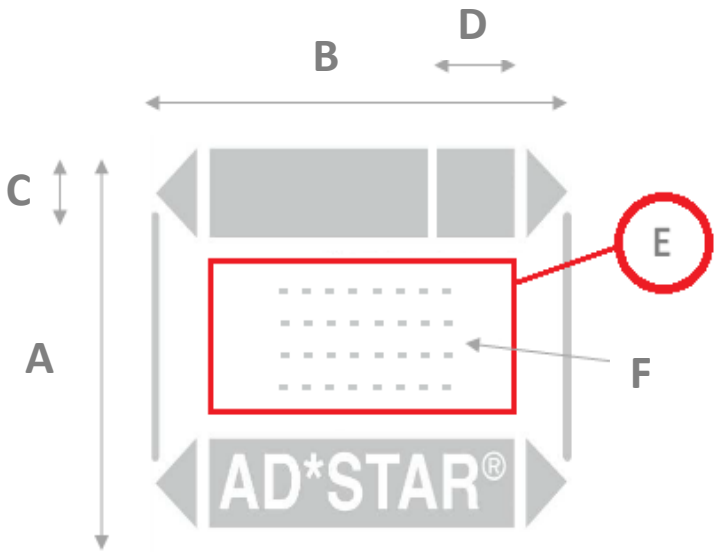


Ad Star polypropylene sacks with valve have significantly less weight compare to well known paper sacks for dry construction mixtures packaging, being also much stronger and durable

Usage of Ad Star valve sacks in the cement industry allows you to save money by drastically reducing the number of sacks rupture, including the filling process, internal warehouse moving, transportation and storage in supermarket, as a rupture % is practically approaching zero

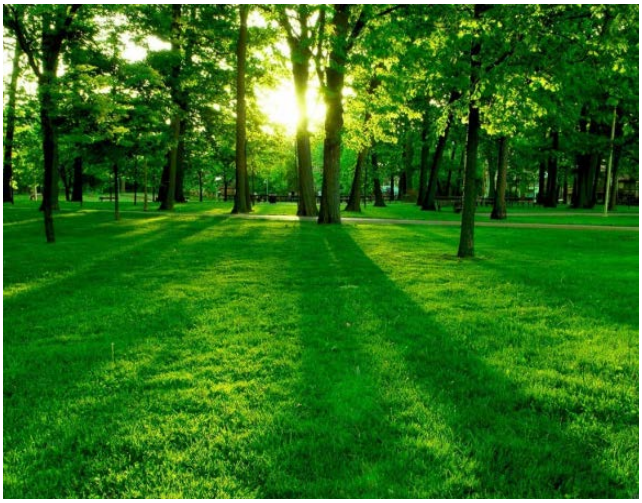
Ad Star sacks dimensions (sizes)

Parameter		Figure
Sack length	A	450 – 910 мм
Sack width	B	350 – 600 мм
Valve width	C	250 – 450 мм
Valve length	D	80 – 160 мм
Area	E	Image 6 colors
Area	F	Perforation zone



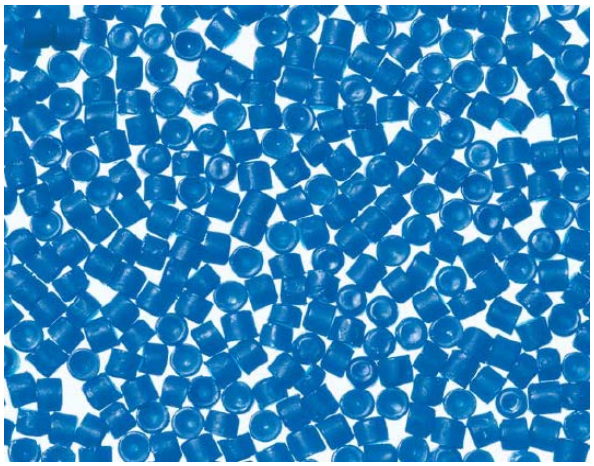
Ad Star sacks recycling

Polypropylene is 100% recyclable raw material. It is considered to be safe for humans. There is a wide range of products, fully or partially made of recycled polypropylene. Usage of these products is diverse and includes construction segment, white goods, automotive production, engineering and heavy machinery, household accessories, electronics, railroad cars, packaging industry



3 ways of recycling

At the end of life cycle Ad Star polypropylene sacks still continue to stay profitable energetic resource. 100% recycling gives possibility of obtaining secondary polypropylene granulate. It can be used as a raw material for re-production of polypropylene sacks or for other purposes



An alternative method of disposal for Ad Star polypropylene sacks is intrusion, i.e. production of various products and consumer goods by melting waste polypropylene and casting into molds. It is very profitable way of PP recycling, especially for the automotive components production

The third method of disposal for plastic sacks is it's burning without harm to the environment. It aims obtaining almost the same amount of combustion heat, as from a liquid fuel. Cement plants all over the world meet up to 30% of its energetic consumption using such kind of secondary resources

Our contacts

Упаковочная Тара и Оборудование

ТАРУС - ПРО

www.taruspro.ru