

ZS-B MEGAfeed side feeder for highly economical plastics recycling. [Advancing into a new era.](#)

# ➤ Coperion's ZS-B MEGAfeed side feeder opens up a new spectrum in the recycling of difficult to process plastics recycle. Volume and feed intake limitations in mechanical and chemical recycling applications belong to the past. Significant throughput increases can be achieved with fluffy fibers and flakes.

## ZS-B MEGAfeed side feeder. Entering new throughput areas in recycling plastic flakes and fibers.

With the ZS-B MEGAfeed side feeder from Coperion, the recycling of plastics reaches a new dimension. The ZS-B MEGAfeed makes the recycling of lightweight, very voluminous recycled flakes and fibers significantly more economical and, in some cases, possible in the first place.

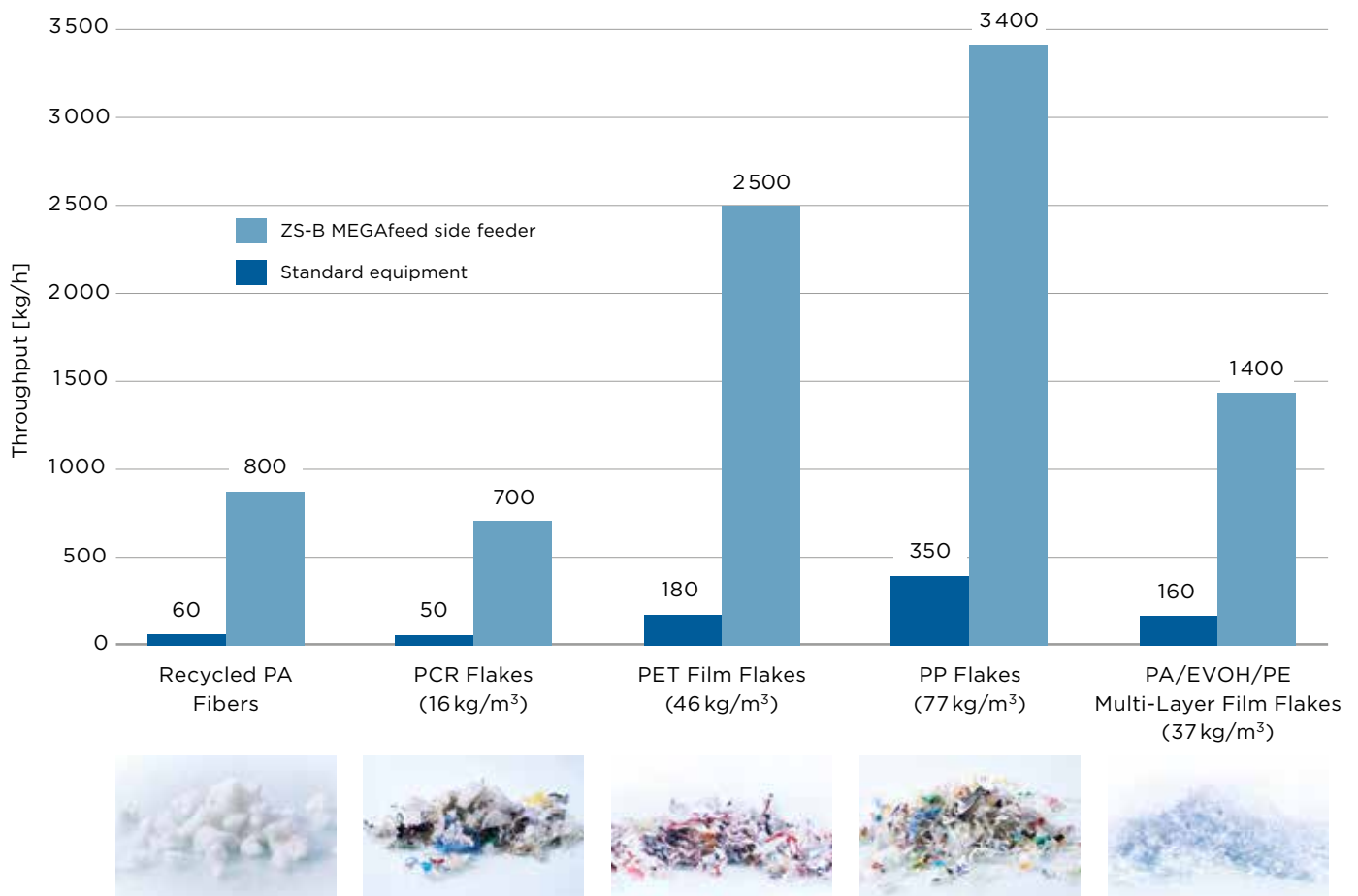
Thanks to the innovative design of the ZS-B MEGAfeed side feeder plastic recycle with bulk densities starting as low as 20 kg/m<sup>3</sup>, which was previously considered feed-limited and therefore not economically recyclable, can be reliably fed in large quantities into the ZSK twin screw extruder.

## New perspectives in mechanical and chemical recycling.

Both in the recycling of post-industrial waste and in the reprocessing of post-consumer waste, the ZS-B MEGAfeed technology opens up completely new dimensions. The ZS-B MEGAfeed achieves an immense increase in the feeding rate of flakes and fibers from a wide variety of plastics (e.g. PA, PE, PET, PP), and thus significantly higher throughput rates - in both mechanical and chemical recycling.

The ZS-B MEGAfeed from Coperion has a process patent pending.

› THROUGHPUT COMPARISON - DATA FROM TESTS RUN ON A ZSK 58 Mc<sup>18</sup> TWIN SCREW EXTRUDER AT COPERION'S TEST CENTER





### Mechanical Upcycling

Mechanical upcycling of fibers and flakes can now be done with high throughput in one process step. The recyclate no longer has to be melted (agglomerated/compacted) on one line and compounded on another. Thanks to the ZS-B MEGAfeed, the entire process is possible within one ZSK twin screw extruder – at extremely high throughput rates. Investment costs for the process are reduced, production becomes more efficient and energy consumption is significantly lower.



### PET Recycling

When recycling PET, the feeding rate is no longer a limiting factor. With the ZS-B MEGAfeed PET flakes and fibers can be fed into the ZSK twin screw extruder in large quantities without pre-drying and crystallization, and processed there. Existing Coperion PET recycling lines can be retrofitted with the ZS-B MEGAfeed technology.



### Chemical Recycling

Using the ZS-B MEGAfeed post-consumer waste can also be fed in very large quantities into the ZSK twin screw extruder and reaches significantly higher throughput rates than before. This makes pre-heating via the mechanical energy input of the twin screws even more economical in chemical recycling processes.

› With the ZS-B MEGAfeed side feeder fluffy fibers and flakes can be recycled with even higher throughputs.

### At a glance - Advantages of the ZS-B MEGAfeed side feeder

- › Significant increase in the economic efficiency of recycling plastic flakes and fibers
- › Flake and fiber waste, previously considered non-recyclable with a twin screw extruder, now becomes a valuable raw material for plastics recycling and compounding.
- › Fluffy material can be easily handled.
- › Preconditioning process steps previously necessary, such as compacting, premelting and prefiltration, are completely eliminated. Melting, compounding, degassing and filtration are now combined in one machine/process step without thermal stress.
- › Significantly lower total cost of ownership as higher throughputs are achieved or smaller extruder sizes are sufficient for a given throughput.
- › Reduced investment costs and energy consumption, less emissions. The recycling process becomes significantly more efficient with the ZS-B MEGAfeed.

› ZS-B MEGAfeed FOR DIFFICULT TO FEED FLAKES AND FIBERS



› ZS-B MEGAfeed FOR SIGNIFICANTLY MORE EFFICIENT RECYCLING PROCESSES



› IDEAL FOR MECHANICAL AND CHEMICAL RECYCLING PROCESSES



## >Europe

**Coperion GmbH**  
Theodorstrasse 10  
70469 Stuttgart, Germany  
Tel.: +49 711 897-0  
Fax: +49 711 897-3999

**Coperion GmbH**  
Niederbieger Strasse 9  
88250 Weingarten, Germany  
Tel.: +49 751 408-0  
Fax: +49 751 408-200

info@coperion.com  
www.coperion.com

## >Asia

Belgium, Luxembourg, Netherlands  
**Coperion N.V.**  
Industrieweg 2, 2845 Niel, Belgium  
Tel.: +32 3 870-5100  
Fax: +32 3 877-0710

France  
**Coperion S.a.r.l.**  
56 boulevard de Courcerin  
77183 Croissy-Beaubourg, France  
Tel.: +33 164 801 600  
Fax: +33 164 801 599

Germany  
**Coperion GmbH**  
**Germany West Office**  
Industriestrasse 71a  
50389 Wesseling, Germany  
Tel.: +49 2232 20700-10  
Fax: +49 2232 20700-11

**Coperion Pelletizing Technology GmbH**  
Heinrich-Krumm-Strasse 6  
63073 Offenbach, Germany  
Tel.: +49 69 989 5238-0  
Fax: +49 69 989 5238-25

**Coperion K-Tron Deutschland GmbH**  
Heinrich-Krumm-Strasse 6  
63073 Offenbach, Germany  
Tel.: +49 69 8300 899-0  
Fax: +49 69 8300 9498

Italy  
**Coperion S.r.l.**  
Via E. da Rotterdam, 25  
44122 Ferrara, Italy  
Tel.: +39 0532 7799-11  
Fax: +39 0532 7799-80

**Coperion S.r.l.**  
**Milan Office**  
Via XXV Aprile, 49  
20091 Bresso (MI), Italy  
Tel.: +39 02 241 049-01  
Fax: +39 02 241 049-22

Russian Federation, CIS  
**OOO Coperion**  
Proezd Serebryakova 14,  
Bld. 15, Office 219  
129343 Moscow, Russian Federation  
Tel.: +7 499 258 4206  
Fax: +7 499 258 4206

Spain, Portugal  
**Coperion, S.L.**  
Balmes, 73, pral.  
08007 Barcelona, Spain  
Tel.: +34 93 45173-37  
Fax: +34 93 45175-32

Switzerland  
**Coperion K-Tron (Schweiz) GmbH**  
Lenzhardweg 43/45  
5702 Niederlenz, Switzerland  
Tel.: +41 62 885-7171  
Fax: +41 62 885-7180

United Kingdom  
**Coperion Ltd.**  
**Coperion K-Tron Great Britain Ltd.**  
Unit 4, Acorn Business Park  
Heaton Lane  
Stockport, SK4 1AS, United Kingdom  
Tel.: +44 161 209 4810  
Fax: +44 161 474 0292

## >America

China  
**Coperion (Nanjing) Machinery Co. Ltd.**  
No. 1296 Jiyin Avenue  
Jiangning District  
Nanjing 211106, PR China  
Tel.: +86 25 5278 6288  
Fax: +86 25 5261 1188

**Coperion (Nanjing) Machinery Co. Ltd.**  
**Taiwan Branch Office**  
7F-2, No.201, Fuxing N. Road  
Songsshan District  
Taipei City 105403, Taiwan  
Tel.: +886 2 2547 5267  
Fax: +886 2 2547 5980

**Coperion International Trading (Shanghai) Co. Ltd.**  
**Coperion Machinery & Systems (Shanghai) Co. Ltd.**  
3<sup>rd</sup> Floor, Building B1  
6000 Shenzhuan Road  
Dongjing Town, Songjiang District  
Shanghai 201619, PR China  
Tel.: +86 21 6767 9505  
Fax: +86 21 6767 9108

**Coperion K-Tron (Shanghai) Co. Ltd.**  
3<sup>rd</sup> Floor, Building B1  
6000 Shenzhuan Road  
Dongjing Town, Songjiang District  
Shanghai 201619, PR China  
Tel.: +86 21 6767 9505  
Fax: +86 21 6767 9108

India  
**Coperion Ideal Pvt. Ltd.**  
Ideal House, A-35, Sector 64  
201307 Noida (U.P.), India  
Tel.: +91 120 4299 333  
Fax: +91 120 4308 583

Japan  
**Coperion K.K.**  
4F, Leaf Square Shin-Yokohama Bldg.  
3-7-3, Shin-Yokohama,  
Kohoku-ku Yokohama,  
Kanagawa 222-0033, Japan  
Tel.: +81 45 595 9801  
Fax: +81 45 595 9802

Saudi Arabia  
**Coperion Middle East Co. Ltd.**  
Street # 327, Sector G, Block 2, Lot # 31  
Jubail 2 Industrial City,  
Kingdom of Saudi Arabia  
Tel.: +966 13 510 4420  
Fax: +966 13 510 4421

Singapore  
**Coperion Pte. Ltd.**  
**Coperion K-Tron Asia Pte. Ltd.**  
8 Jurong Town Hall Road  
#28-01/02/03 The JTC Summit  
Singapore 609434  
Tel.: +65 641 88-200  
Fax: +65 641 88-203

South America  
**Coperion Ltda.**  
R. Arinos, 1000  
RBCA - Royal Business Center  
Anhanguera, Módulo 4  
Parque Industrial Anhanguera  
06276-032 Osasco - SP, Brazil  
Tel.: +55 11 3874-2740  
Fax: +55 11 3874-2757

USA, Canada, Mexico, NAFTA  
**Coperion Corporation**  
590 Woodbury Glassboro Road  
Sewell, NJ 08080, USA  
Tel.: +1 201 327-6300  
Fax: +1 201 825-6494

**Coperion Corporation Wytheville Office**  
196 Appalachian Drive  
Wytheville, VA 24382, USA  
Tel.: +1 276 228-7717  
Fax: +1 276-227-7044

**Coperion Corporation Houston Office**  
5825 North Sam Houston Pkwy West  
Suite 250  
Houston, TX 77086, USA  
Tel.: +1 281 449-9944  
Fax: +1 281 449-4599

**Coperion K-Tron Salina, Inc.**  
606 North Front Street  
Salina, KS 67401, USA  
Tel.: +1 785 825-1611  
Fax: +1 785 825-8759

**Coperion K-Tron Salina, Inc. Sewell Office**  
590 Woodbury Glassboro Road  
Sewell, NJ 08080, USA  
Tel.: +1 856 589-0500  
Fax: +1 856 589-8113

For more information about  
the worldwide Coperion network,  
visit [www.coperion.com](http://www.coperion.com)