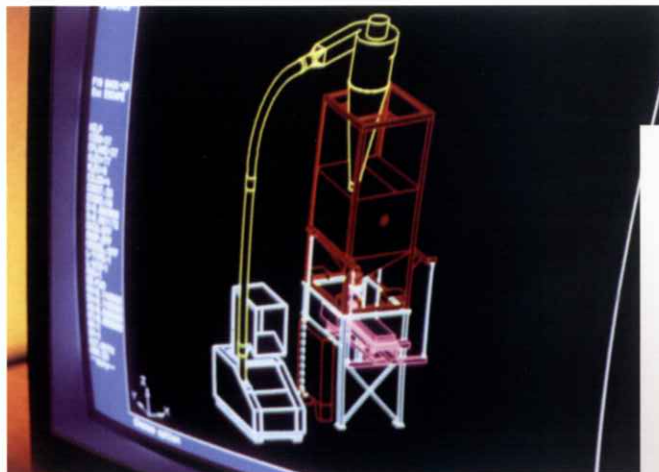




**POLYMER SYSTEMS**

SIZE REDUCTION EQUIPMENT



**From CAD to reality ...**



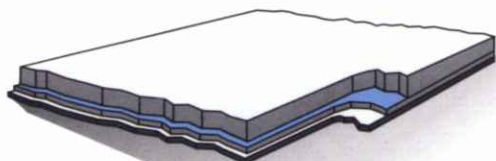
Shurfeed™ 2000  
Model SF 2036  
with evacuation  
system, surge  
bin and fines  
classifier.

## **GRANULATORS FOR ALL APPLICATIONS**

Polymer Systems offers a complete line of granulators for a wide range of injection, extrusion and blow molding applications — from compact press-side and auger-feed machines to heavy duty central granulators. Through standard or custom configurations, Polymer granulators can handle all assignments from the routine to the most challenging, including hot melt, film, sheet and multiple-feed applications.

## **LOWER NOISE LEVELS**

A special sound-deadening composite material is used for hopper walls on all Press Side, Large Part, Shurfeed™ 2000 and Heavy Duty Polymer granulators. This unique triple-ply laminate has a thin elastomeric membrane between two sheets of steel — the same type of construction used in firewalls of some luxury automobiles.



It dramatically reduces noise transmitted through the hopper walls and out the feed opening by dampening the sharp, metallic ringing noise caused by material hitting the inside walls.

Competitive double-wall designs simply do not curb these offensive noise emissions through the feed opening. Standard Polymer granulators operate at noise levels below 90 dbA with most materials. For operation below 80dbA, Press Side, Large Part and Auger Feed machines are available as Silenator™ (SIL) models with sound-deadening enclosures.





## **CLEAN, HIGH QUALITY GRANULATE**

Virtually every major granulator manufacturer in the world has followed our original "scissors-action" design — the Double Angle Cut®. Counter-slanted rotor and bed knives produce a slicing action for clean, uniform granulate with less energy consumption, lower heat buildup and fewer fines.



## **TOTAL SYSTEM CAPABILITY**

Polymer Systems offers comprehensive application engineering services for system development, design and testing. Our size reduction experts will help you plan effectively, and can customize equipment to meet specific automation goals or infeed requirements. Special granulator configurations can be combined with conveying, parts handling and control equipment to form turnkey material recovery systems with unique capabilities.

\*Call us to discuss your particular material recovery or recycling requirements.



*Heavy Duty Model 2441 supplied  
as a complete material recovery system  
for a high volume application.*

# **POLYMER GRANULATORS FOR ...**

## **AUTOMATION**

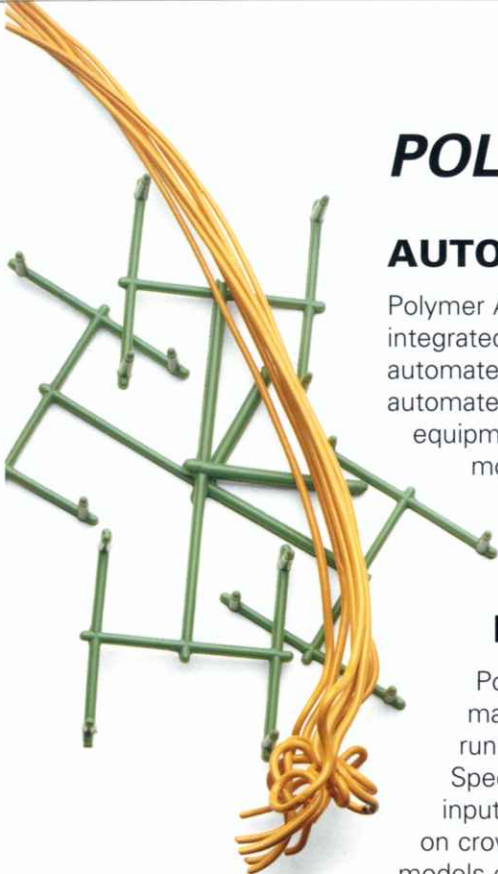
Polymer Auger Feed, Hot Melt and Press Side granulators are easily integrated with various system components for continuous in-line, automated processing. Optional feed chutes may be added to facilitate automated infeed. Blower evacuation, cyclone separating and de-dusting equipment can be installed for closed-loop processing. With auger feed models, parts/runner separators, metal detection devices, automatic evacuation systems and other features can be combined for hands-off operating convenience.

## **MANUAL FEED**

Polymer Large Part and Press-Side Granulators are multi-purpose machines well-suited for manual insertion of off-spec parts, sprues, runners and other scrap. Infeed heights are conveniently located. Special hoppers can also be fitted to accept top, side, rear and feed roll input. Both of these models are caster-mounted for easy maneuvering on crowded production floors. The catch bins of press-side models can be ordered with front or side access for maximum floor plan flexibility.

## **CENTRALIZED SYSTEMS**

In central locations within busy production environments, Polymer Shurfeed™ 2000, Heavy Duty, Alpine CL and RO models are ideal for high-volume throughput of the toughest materials — bulky parts, pipes, thick sections, and large amounts of sheet, film and blow molding scrap. The bolt-on hopper design allows installation of alternative hoppers to suit specific infeed setups, manual or automatic. Centralized Polymer systems can incorporate material conveying, evacuation and particle size classifying equipment.





## AUGER FEED

Reliable material recovery systems for automated processing of sprues, runners and rejects. May be located under the press or fed via conveyor. Standard (AE) and soundproofed (A) models.



MODEL  
HMG 1010



MODEL  
1010A  
Auger Feed  
Granulator



## HMG™ HOT MELT

Material recovery systems for hot extrudate, parisons, etc. in wire and cable, extrusion blow molding and compounding operations. Modified cutting chamber recovers hot plastics up to 600°F (316° C) without precooling.



## PRESS SIDE

Upright, general-purpose models designed for maximum versatility and user convenience at the press. Sound-proofed (SIL) models are available, using the industry's only field-installable enclosure to reduce noise levels below 80 dbA.



Model 912 SIL

Model 1116 SPL

## GRANULATORS FOR AUTOMATION

### AUGER FEED

#### MODELS

88	1010
Throat size at chamber entrance, in. (mm)	
8 x 8 (203 x 203)	10 x 10 (254 x 254)
TEFC Granulator Motor HP (kW)	
3 - 5 (2.2 - 3.7)	5 - 7.5 - 10 (3.7 - 6 - 8)
TEFC Auger Motor HP (kW)	
3/4 (.6)	1.5 (1.1)
Cutting circle diameter, in. (mm)	
7.6 (193)	9.5 (241)
Auger diameter, in. (mm)	
5 (127)	8 (203)
Throughput*, lb/hr (kg/hr)	
175 (80)	275 (124)

\*Average results; varies with materials, screen size and part shapes.

### HOT MELT

#### MODELS

HMG™ 88	HMG™ 1010	HMG™ 1627
Throat size of chamber, in. (mm)		
8 x 8 (203)	10 x 10 (254 x 254)	16 x 27 (406 x 686)
Feed opening, in. (mm)		
4 x 2 (102 x 51)	9 x 3 (229 x 76)	26 x 3 (660 x 76)
Motor HP (kW)		
5 (3.7)	7.5 - 10 - 15 (5.6 - 7.5 - 11)	25 - 60 (19 - 45)
Blower HP (kW)		
1.5 (1.1)	3 - 5 - 7.5 (2.2 - 3.7 - 5.6)	7.5 (5.6)
Cutting circle diameter, in. (mm)		
7.6 (193)	9.5 (241)	14.75 (375)
Throughput*, lb/hr (kg/hr)		
100 (45)	400 (180)	1200 (540)

\*Conservative results based on HDPE; varies with type of process, materials and screen size

### PRESS SIDE

#### MODELS

68	912	1116	1120
Throat size at chamber entrance, in. (mm)			
6 x 8 (152 x 203)	9 x 12 (229 x 305)	11 x 16 (279 x 406)	11 x 20 (279 x 508)
Screen area, in.2(cm2)			
88 (576)	190 (1243)	297 (1942)	373 (2439)
Motor * HP (kW)			
5 (4)	7.5 - 10 (5.6 - 7.5)	10 - 25 (7.5 - 19)	15 - 25 (11-19)
Cutting circle diameter, in. (mm)			
7 (178)	10.3 (262)	12.5 (318)	12.5 (318)
Throughput**, lb/hr (kg/hr)			
250 (113)	325 (146)	400 (180)	460 (207)

\*TEFC optional 15 HP and above.

\*\*Average results; varies with materials, screen size and part shapes.

## LARGE PART

Upright models for large, thin-walled parts including housings, helmets, blown bottles, automotive and bumper components, also volumes of small parts, sprues and runners. Especially suited for blow molding applications and post consumer recycling. Standard and soundproofed (SIL) models.



Computer monitor housing



Model 1632 SIL



Model 1626

8" heavy wall PVC pipe and in-ground utility box cover



## HEAVY DUTY

Rugged, powerful central granulators for the most demanding material recovery — heavy moldings, pipe, sheet, film and blow molding scrap.

## GRANULATORS FOR AUTOMATED OR MANUAL FEED

### LARGE PART

#### MODELS

1620	1624	1632
<b>Throat size of chamber, in. (mm)</b>		
16 x 20 (406 x 508)	16 x 24 (406 x 610)	16 x 32 (406 x 813)
<b>Screen area, in.<sup>2</sup> (cm<sup>2</sup>)</b>		
470 (3032)	564 (3639)	750 (4839)
<b>Motor HP (kW)</b>		
20 - 30 (15 - 22)	25 - 30 (19 - 22)	30 - 40 (22 - 30)
<b>Cutting circle diameter, in. (mm)</b>		
16 (406)	16 (406)	16 (406)
<b>Throughput*, lb/hr (kg/hr)</b>		
500 (230)	700 (320)	900 (410)

\*Average results; varies with materials, screen size and part shapes

### HEAVY DUTY

#### MODELS

1626	2441	3656	3674
<b>Throat size at chamber entrance, in. (mm)</b>			
16 x 26 (406 x 660)	24 x 41 (610 x 1041)	36 x 56 (914 x 1422)	36 x 74 (914 x 1880)
<b>Screen area, in.<sup>2</sup> (cm<sup>2</sup>)</b>			
490 (3160)	1214 (7820)	1950 (12,500)	2600 (16,700)
<b>Motor* HP (kW)</b>			
50-75-100 (37-56-75)	100-150-200 (75-112-149)	150-250 (112-186)	2 x 150-250 (2 x 112-186)
<b>Cutting circle diameter, in. (mm)</b>			
17.25 (438)	24 (610)	36 (914)	36 (914)
<b>Throughput**, lb/hr (kg/hr)</b>			
2500 (1140)	6000 (2730)	10,000 (22,000)	15,000 (33,000)

\*Open drip-proof standard, TEFC optional.

\*\*Average results; varies with materials, screen size and part shapes.



## PREMIUM SHURFEED™

A specially designed back wall smooths material transition to the cutting circle to practically eliminate flyback. Overall system shock, noise and energy usage are reduced as well. These are the quietest granulators of this size on the market.



## SHURFEED™ 2000

Unique chamber design handles tough, bulky parts, thick sections, sheet and film without flyback. Excellent for blow-molded bottles from production and post-consumer sources.



## GRANULATORS FOR QUIET OPERATION

### PREMIUM SHURFEED™

#### MODELS

SF 1416	SF 1420	SF 1820	SF 1824
<b>Throat size at chamber entrance, in. (mm)</b>			
14 x 16 (355 x 406)	14 x 20 (355 x 508)	18 x 20 (457 x 508)	18 x 24 (457 x 610)
<b>Screen area, in.<sup>2</sup> (cm<sup>2</sup>)</b>			
271 (1748)	337 (2174)	410 (2645)	493 (3180)
<b>Motor* HP (kW)</b>			
10, 15, 25 (7.5, 11, 19)	15 - 30 (11 - 22)	20 - 40 (15 - 30)	25 - 50 (19 - 38)
<b>Cutting circle diameter, in. (mm)</b>			
12.5 (318)	12.5 (318)	16 (406)	16 (406)
<b>Throughput*, lb/hr (kg/hr)</b>			
950 (432)	1200 (545)	1800 (818)	2100 (955)

\*Average results; varies with materials, screen size and part shapes.

### SHURFEED™ 2000

#### MODELS

2030	2036	2042	2652
<b>Throat size at chamber entrance, in. (mm)</b>			
20 x 30 (508 x 762)	20 x 36 (508 x 762)	20 x 42 (508 x 914)	26 x 52 (508 x 1067)
<b>Screen area, in.<sup>2</sup> (cm<sup>2</sup>)</b>			
730 (4562)	910 (5688)	1050 (6563)	1520 (9506)
<b>Motor* HP (kW)</b>			
40 - 50 (30 - 37)	50 - 60 - 75 (37 - 48 - 56)	75 (56)	(2) 50 - 100 (2) (37 - 75)
<b>Cutting circle diameter, in. (mm)</b>			
20 (508)	20 (508)	20 (508)	27.375 (695)
<b>Throughput*, lb/hr (kg/hr)</b>			
2000 (910)	2400 (1100)	2800 (1275)	5000 (11,000)

\*Open drip-proof standard, TEFC optional.

\*\*Average results; varies with materials, screen size and part shapes.

\*\*Also available in 24" x 30", 24" x 36" and 24" x 42" models

## CL SERIES

Ideally suited for large heavy duty granulation of sheet, injection and blow molded parts, extruded profiles and recycling applications requiring high throughput rates.



## Rotoplex® Series

Designed especially for very different applications including purgings and tough films such as BOPP and BOPE at very high throughput rates.



## LARGE, HEAVY DUTY, CENTRAL GRANULATORS

### ALPINE CL SERIES

#### MODELS

45/100CL	60/140CL	80/140CL	90/200CL
<b>Throat size at chamber entrance, in. (mm)</b>			
18 x 40 (450 x 1,000)	24 x 55 (600 x 1,400)	32 x 55 (800 x 1,400)	36 x 79 (900 x 2,000)
<b>Knives, Rotor/Bed</b>			
4/2	4/2	6/2	10/3
<b>Motor* HP (kW)</b>			
60 - 100 (45-75)	100 - 150 (75-110)	150 - 200 (110-150)	350 - 400 (250-315)
<b>Cutting circle diameter, in. (mm)</b>			
18 (450)	24 (600)	32 (800)	36 (900)
<b>Throughput**, lb/hr (kg/hr)</b>			
2,000 (900)	3,300 (1,500)	4,400 (2,000)	8,800 (4,000)

Patented cross-scissor-cut rotor

\*Open drip-proof standard, TEFC optional.

\*\*Average results; varies with materials, screen size, part shapes and thickness

NOTE: There are 9 models in the CL Series, with sizes in-between the above models.

### ALPINE RO SERIES

#### MODELS

40/63RO	50/80RO	63/125RO	90/300RO
<b>Throat size at chamber entrance, in. (mm)</b>			
16 x 25 (400 x 630)	20 x 32 (500 x 800)	25 x 49 (630 x 1250)	36 x 118 (900 x 3000)
<b>Knives, Rotor/Bed</b>			
4/3	5/4	6/5	10/7
<b>Motor* HP (kW)</b>			
40 - 50 (30 - 37)	75 - 100 (55 - 75)	150 (110)	2 x 325 = 650 (2 x 250 = 500)
<b>Cutting circle diameter, in. (mm)</b>			
16 (400)	20 (500)	25 (630)	36 (900)
<b>Throughput**, lb/hr (kg/hr)</b>			
1,300 (600)	2,300 (1,050)	4,000 (1,800)	13,000 (6,000)

Patented cross-scissor-cut rotor

\*Open drip-proof standard, TEFC optional.

\*\*Average results; varies with materials, screen size and part shape and thickness.

NOTE: There are 17 models in the RO Series, with sizes in-between the above models.



## HOSOKAWA POLYMER SYSTEMS

Hosokawa Polymer Systems is a member of the Hosokawa Micron Group, responding to global needs through an emphasis on materials science and engineering. The Group is an international provider of equipment and systems for powder and particle processing, product recovery, plastic processing, and confectionery products. The Group maintains facilities for research, engineering, manufacturing, and service in each of the world's major industrial markets.

Visit our Web site at [www.polysys.com](http://www.polysys.com)

### Hosokawa Polymer Systems

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Hosokawa Polymer Systems encourages and supports post-consumer recycling efforts. We offer systems for a variety of recovery applications.