



Micropellet  $\leq 1.0\text{mm}$     Minipellet  $< 2.0\text{mm} > 1.0\text{mm}$

**G**ala began producing micropellets in 1980. Since that time the capability of our machines to cut increasingly smaller micropellets has advanced considerably by developing improvements to both equipment and processing technology. Gala now has a dedicated team to address micropellet inquiries and to ensure the best equipment is chosen for each application.

To produce micropellets, the polymer melt must be supplied at high pressure to the die plate. It should also be filtered to prevent blocking of the die plate holes, which may require the use of a gear pump and screen changer.

At the die head a polymer diverter valve will direct melt accurately to the die. The die plates themselves are configured to cope with the various demands of the different applications including the use of extra low pressure designs, very thermally efficient characteristics and appropriate hole configurations. The selection of cutter hubs, like the selection of die plates, is derived from many years of extensive experience in this area.

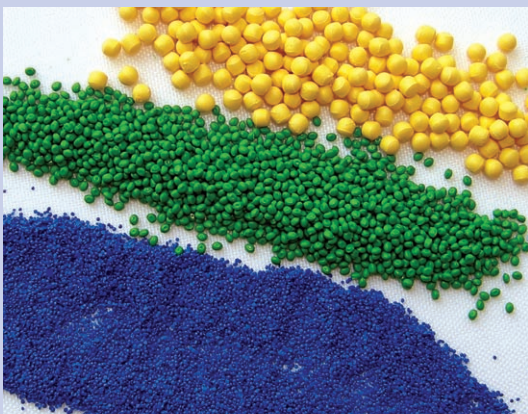
The micropellet tempered water systems are variants of the successful standard Gala units and feature Gala centrifugal dryers suitable for the micropellet application. Special high performance ML (multi-layer) screens enhance the drying efficiency.



*An assortment of micropellets, minipellets and standard 3 mm pellets – all produced using Gala technology and equipment.*

Gala micropelletizing systems are customized to suit the size and output specification of the production requirement. We can supply lab units as well as large production units for micropellet applications.

The nature of the material will determine the minimum pellet size possible, but sizes of 400-500 micron are common.



*Micropellets and minipellets compared to standard 3 mm pellets.*

## ADVANTAGES AND BENEFITS

- Better Flowability
- Virtually Dust-Free
- Potentially Faster Cook Times
- Reduced Cook Temperatures
- Better Color Distribution

## APPLICATIONS

The first question most people ask when confronted with very small micropellets is, "What are they used for?" This is why the Gala micropellet team is application oriented. It is not unusual to find us involved with the end process.

## MAJOR APPLICATIONS INCLUDE:

**Rotomolding** – Micropellets offer advantages not only for small intricate technical moldings, such as offering higher bulk density and high part definition, but also for large part moldings where reduction in cycle times or temperatures are experienced. A major advantage over powder is the elimination of the two-step compounding and grinding operations, replacing it with the single step compounding micropelletizing operation. Most importantly, micropellets offer a dust free alternative to powder.

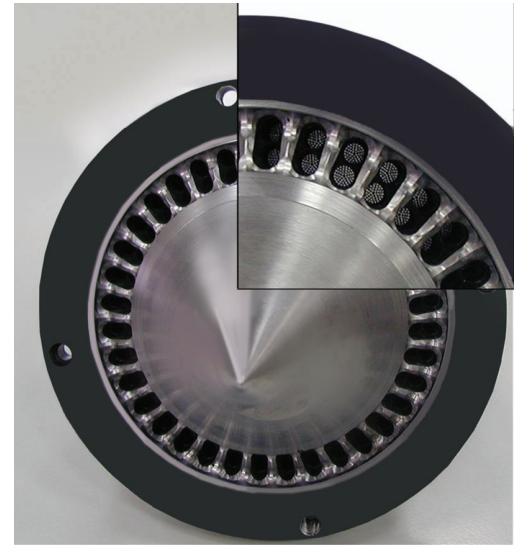
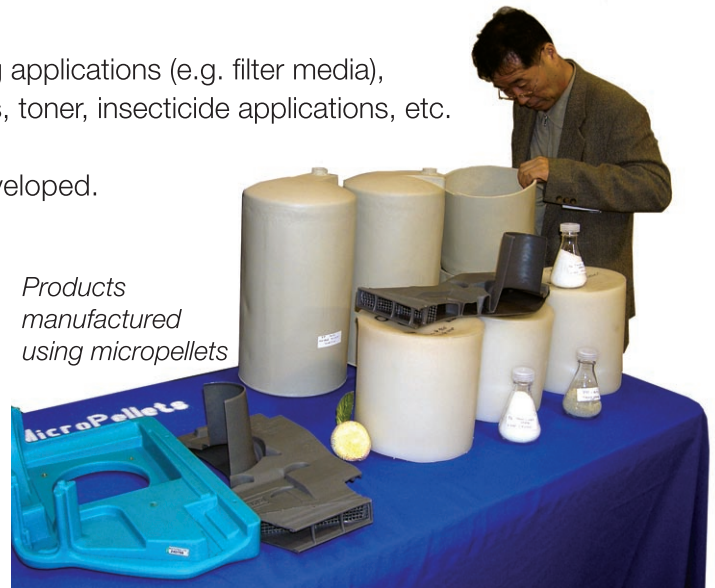
**Masterbatch** – Minipellets and micropellets allow very accurate dosing at low rates (eg. for transparent colors). These minipellets allow for better distribution, giving a high-end premium product quality.

Other applications are wide and varied, but include sintering applications (e.g. filter media), clothing decoration, flooring and sports surface applications, toner, insecticide applications, etc.

New applications for micropellets are continually being developed. Please contact Gala to discuss your needs.

LLDPE • LDPE • MDPE • HDPE • XLHDPE  
PP CoPo • PP Homo • TPO • TPU  
Polycaprolactone • PA66 • PA6 • PA11  
PA12 • PC • PET – Co • PET – G • EVA  
PB • ABS • PVdF • PVC – flex  
PS • EPS • CPE • Toner • TPEV • TPE  
Some wax type materials

*Products  
manufactured  
using micropellets*



*Gala Micropellet Die Plate for small pellets*

Covered by all or more of U.S. Patent Nos. 4,888,990; 4,896,435; 5,059,103; 5,403,176; 5,265,347; 5,624,688; 5,638,606; 6,138,375; 6,237,244; 6,332,765; 6,551,087; 6,739,457; 6,793,473; 6,807,748; 6,824,371; 6,925,741; 7,024,794; 7,033,152; 7,157,032; 7,171,762; 7,172,397; and Patents Pending, as well as foreign patents and applications. Gala trademarks are registered under US Registration Nos. 2846928, 2333008, 2045090, 2034576, as well as foreign registrations and pending applications for registration.



## Technology • Innovation • Commitment

USA: Gala Industries, Inc. • 181 Pauley Street • Eagle Rock, Virginia 24085  
(540) 884-2589 • [www.gala-industries.com](http://www.gala-industries.com)

Europe: Gala Kunststoff- und Kautschukmaschinen GmbH • Bruchweg 28 - 30 • 46509 Xanten, Germany  
+49 (0) 2801 980 - 0 • [www.gala-europe.de](http://www.gala-europe.de)

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