

COMET

PLASTIC EQUIPMENT, LLC

*Providing auxiliary equipment
to the plastics industry for
over 40 years.*



Conveying Systems

Honeycomb

Matrix Dryers

Hot Air Dryers

*Compressed
Air Dryers*

Color Feeders

Blenders

Granulators

Vision Systems

Mold Dehumidifiers

Material Handling

Extrusion Equipment

cometpe.com

Value and Commitment



Comet's corporate mission is simple and as true today as it was over 40 years ago: Provide low cost auxiliary equipment enabling our customers to manufacture better products.

Service Leader

For over 40 years, Comet has been providing plastics auxiliary equipment to Fortune 500 companies in the industry, as well as to start-ups and custom shops all over the world. Our comprehensive suite of auxiliary equipment is used to manufacture packaging, automotive, electrical, medical, clean-room, and appliance products. We take pride in building lasting relationships, understanding our customers' needs by meeting or exceeding their expectations, and consistently providing outstanding service and quality.

Technology Leader

Our equipment utilizes state-of-the-art designs and proven technology. From high-tech controls to low maintenance designs, manufacturers count on Comet to provide auxiliary equipment that lowers their manufacturing costs.

Global Leader

Comet proudly manufactures its equipment in the USA, Europe, and Asia. We maintain strategic partnerships around the world.



Table of Contents

Proportioning Valves	
CPV Two-Component Proportioning Valve	4
CPV-U Proportioning Valve	5
Conveying Systems	
CAL-U Self-Contained Hopper Loader	6
CWCS Multi-Station Small Conveying System	7
CAL-UG Single Hopper Loader	8
CAL-UG124 Multi-Loader Conveying System	9
CHR-U Filterless Central Hopper Receiver	10
VL Compressed Air Venturi Loader	11
Allen-Bradley Custom Control System	12
Compressed & Heatless Air Dryers	
3DX Compressed Air Resin Dryer	13
CCAD-U Mini Compressed Air Resin Dryer	14
3DX-M Micro Compressed Air Resin Dryer	15
Honeycomb Matrix Dryers	
CD-H Honeycomb Matrix Dehumidifying Dryer	16
CDD Honeycomb Matrix Dryer/Hopper Combo	17
CCD Honeycomb Matrix Compact Dryer with Loading	18
Hot Air Dryers	
CHD-U Hot Air Hopper Dryer	19
PET Crystallizers	
CCR Closed-Loop Crystallizer	20
Volumetric Color Feeders	
CCM Feeder	21
AC/IC-1100 Screw-Type Feeder for Extrusion	22
SMD Screw-Type for Injection Molding	23
Powder Color Feeders	
PF-1200 Screw-Type Powder Color Feeder	24
Gravimetric Color Feeders	
ColorSave 1000F Single Component Gravimetric Feeder	25
Blenders	
CGB Gravimetric Blender	26
Material Handling	
PowerMaxx	27
Surge/Day Bin	27
Flo-Thru Hopper	27
Bolted & Welded Silos	27
Tilt Table	27
Forklift Support & Untie Framework	27
Granulators	
CG-16N/20N Low Speed Granulator	28
CG-23/30/36 Central Granulator	29
CG-50 Central Granulator	30
Vision Systems	
PE-500 All-In-One Mold Protector	31
Temperature Controllers	
CTM-W Water Temperature Controller	32
CTM-E Oil Temperature Controller	33
Mold Dehumidifiers	
CMD-H Mold Dehumidifier	34
Installations	35-41
Custom Solutions	42-43

Proportioning Valves



CPV-40

CPV Two-Component Proportioning Valve

Comet's corrosion-free stainless steel CPV two-component proportioning valves enable two materials to be conveyed in a preselected percentage through an individual hopper loader or a central vacuum receiver.

Features

- Guaranteed to never jam when switching between materials (e.g. virgin and regrind).
- Switch materials as often as desired during a single conveying cycle.
- Easy to install and use with the highest mix accuracy possible.
- Eliminates virgin and regrind layering common in ratio loaders through inline mixing.
- Creates a more uniform density of materials making the melt easier to control in the barrel of the processing machine.
- Connects quickly and easily to any hopper loader or central vacuum system to reduce labor cost.

Specifications

CPV Models	Maximum Material Flow (kg/hr)	Pipe Size (in)	Dimensions (mm) (H x W x D)	Weight (kg)
CPV-40	90	1.5	330 x 240 x 135	12.7
CPV-50	180	2	330 x 240 x 135	12.7
CPV-65	270	2.5	330 x 240 x 135	12.7



CPV-38U-C

CPV-U Proportioning Valve

Comet's CPV-U series proportioning valves use a unique valve body design to smoothly convey virgin and regrind materials to the processing machine in a pre-selected ratio. The CPV-U can be mounted on an individual hopper loader or onto a pipeline. After the material loading time and proportioning valve is set, the opening and closing start time of the air cylinder controls the feeding proportion of virgin and regrind to the hopper loader.

Features

- Easy to install and operate.
- Unique valve body design conveys material smoothly.
- Solenoid valve ensures the air cylinder accurately proportions virgin and regrind materials.
- Instantly recycles the regrind material to reduce production costs.
- Select one to four function levels to mix material evenly.

Specifications

CPV-U Models	Maximum Material Flow (kg/hr)	Pipe Size (in)	Dimensions (mm) (H x W x D)	Weight (kg)
CPV-38U-C	350	1.5	270 x 260 x 150	3.5
CPV-50U-C	550	2	270 x 260 x 150	3.8

C = equipped with control box (when used in conjunction with CAL loaders, control box is not needed).

Hopper Loaders



CAL-3U-E



CAL-6U



CAL-6U-3

CAL-U Self-Contained Hopper Loader

Comet's CAL-U series hopper loaders transfer pellets and regrind from a single source (usually a gaylord) to a single destination (usually a blender, drying hopper, or machine throat) in facilities not having centralized conveying systems. The stainless steel hopper ensures no material contamination and the soundproof motor cover reduces motor noise.

Features

- Adjust positioning of material hopper and base.
- Rapidly rotating, high-efficient carbon brush motor generates high-pressure air.
- Wire controller with automatic cleaning function.
- Reliable reed switch for material level detection.
- Quick release hinged hopper lid ensures quick cleanup time and easy maintenance.
- Detachable hand-held control panel.
- User-friendly microprocessor control with easy-to-read digital display showing operating status.
- Cloth mesh filter.

Specifications

CAL-U Models	Dimensions (mm) (H x W x D)	Weight (kg)
CAL-1U ~ 12U	525-270 x 325 ~ 745 x 340-410	10 ~ 14
CAL-1.5U-E ~ 12U-E	670-260 x 325 ~ 935 x 340-410	11 ~ 18
CAL-3U-3 ~ 6U-3	610 x 340 x 475 ~ 700 x 380-540	18 ~ 33

U = reed switch. U-E = photosensor switch.



CWCS (7.5HP)



Use up to 12 CWHR-U Hopper Receivers (optional) on one pump

CWCS Multi-Station Small Conveying System

Comet's CWCS series small conveying system is suitable for conveying virgin material over long distances. This system can be used with up to 12 CWHR-U Comet hopper receivers or 12 CWHR-U-E glass receivers making it a cost-effective way to convey plastic materials to different molding machines or hoppers.

Features

- Down-blowing design with cyclone separator and dust collector bin built into the filter helps reduce filter load.
- The main unit is equipped with error faults and audio/visual motor overload alarm indicators.
- Separate contamination-free stainless steel hopper receivers.

Specifications

CWCS Models	Motor Power (kW)	Convey. Capacity (kg/hr)	Main Unit Dimensions (mm) (H x W x D)	Weight (kg)
CWCS-3.5HP	2.4	850	1380 x 505 x 615	130
CWCS-5HP	3.7	1200	1380 x 505 x 615	175
CWCS-5HP-D	3.7	1350	1380 x 790 x 515	180
CWCS-7.5HP	5.5	1450	1830 x 720 x 720	181
CWCS-7.5HP-D	5.5	1600	1830 x 900 x 720	183
CWCS-10HP	7.5	1800	1830 x 720 x 720	185
CWCS-10HP-D	7.5	2000	1830 x 900 x 720	192

D = double-stage blower.

Single Pump Systems



CAL-2HP-UG



CAL-5HP-UG

CAL-UG Single Vacuum Hopper Loader

Comet's CAL-UG series single vacuum hopper loaders are designed specifically for transporting plastic granules to extruders, injection molding, and blow molding machines. The CAL-UG, comprised of six models, is equipped with a vacuum blower from 2HP and up, a cyclone dust separator, and a dust collection bin to effectively reduce filter load.

Features

- Equipped with an error alarm light.
- Two types of optional filters for powder: **bag** for 30% powder conveying or **plate** for 100% powder conveying.
- Central filter equipped with an air accumulator and self-cleaning device.
- In case of power failure, data stored on EPROM does not require a backup battery.

Specifications

CAL-UG Models	Motor Power (kW) (50/60Hz)	Convey. Capacity (kg/hr)	Main Unit Dimensions (mm) (H x W x D)	Weight (kg)
CAL-2HP-UG	1.5 / 1/8	500	1000 x 400 x 500	54
CAL-3.5HP-UG	2/4 / 2.6	750	1380 x 490 x 590	73
CAL-5HP-UG	3.75 / 4.2	1000	1380 x 490 x 590	74
CAL-7.5HP-UG	5.5 / 6.3	1200	1830 x 585 x 675	156
CAL-10HP-UG	7.5 / 8.6	1600	1830 x 585 x 675	160
CAL-20HP-UG	13 / 18.7	2000	2100 x 680 x 800	226

CAL-3.5HP-UG124



CHR-U-S central vacuum receivers



CAL-UG124 Multi-Loader Conveying System

Comet's CAL-UG124 multi-station hopper loader series is equipped with a high-pressure blower and four CHR-U-S central vacuum receivers to lower production costs.

Features

- Dust collection chamber features a cyclone separator and dust collector bin to reduce filter load.
- Separate stainless steel vacuum receivers ensure no material contamination.
- Separate dust collector to remove dust and fines.
- Main unit equipped with error faults, motor overload indicators, and vacuum-breaking idle valve to protect the blower.
- Easy to operate and install.

Specifications

CAL-UG124 Models	Motor Power (kW) 50/60Hz	Convey. Capacity (kg/hr)	Main Unit Dimensions (mm) (H x W x D)	Weight (kg)
2HP	1.5 / 1/8	550	1050 x 430 x 555	60
3.5HP	2/4 / 2.6	850	1380 x 565 x 615	130
5HP	3.75 / 4.2	1200	1380 x 565 x 615	175
5HP-D	3.75 / 4.2	1350	1380 x 790 x 615	180
7.5HP	5.5 / 6.3	1450	1830 x 720 x 720	181
7.5HP-D	5.5 / 6.3	1600	1830 x 900 x 720	183
10HP	7.5 / 8.6	1800	1830 x 720 x 720	185
10HP-D	7.5 / 8.6	2000	1830 x 900 x 720	192

D = double-stage blower.

Central Receivers



CHR-6U



CHR-6U-E

CHR-U Filterless Central Hopper Receiver

Comet's CHR-U central receivers are designed to provide rapid transportation of free-flowing virgin pellets and regrind directly to your processing machine. Two types are available:

Vacuum Loader (U): Vacuum-style with a magnetic reed switch mounts directly on a dryer or machine hopper.

Photosensor Loader (U-E): Photosensor control-style can be installed directly onto a molding machine feed throat.

Features

- 100% corrosion-free stainless steel.
- Reed switch on vacuum hopper guarantees material is supplied on time, without interruption.
- Photosensor switch accurately controls the loading process.
- Internal vacuum diaphragm valve ensures continuous loading and enables auto-control by a centralized system.
- Internal stainless steel mesh filter.

Specifications

CHR-U Models	Hopper Capacity (L)	Conveying Capacity (kg/hr)	Dimensions (mm) (H x W x D)	Weight (kg)
CHR-6U	6	300	420 x 285 x 360	6
CHR-6U-E	6	300	600 x 275 x 360	8
CHR-12U	12	500	470 x 315 x 400	7
CHR-12U-E	12	500	700 x 315 x 400	12
CHR-24U	24	750 - 1000	690 x 315 x 400	9
CHR-24U-E	24	750 - 1000	1120 x 360 x 400	13
CHR-36U	36	1200 - 1600	930 x 315 x 400	11
CHR-48U	48	2000	975 x 350 x 485	15

E = photosensor hopper with glass tube. Loading capacity and dimensions may vary depending on which vacuum hopper is used (other CHR-U models available).



VL Compressed Air Venturi Loader

Comet's VL series venturi loaders use compressed air through a venturi generating a vacuum to convey plastic granules. It is a simple, effective material conveying unit using pressurized air (approximately 80 PSI) to create a vacuum for conveying plastic granules. The VL series is ideally suited for conveying raw material directly to the molding machine feed throat.

Two models available:

VL-50: conveys up to 40 kg/hr (88 lbs/hr).

VL-100: conveys up to 60 kg/hr (132 lbs/hr).

Features

- Contamination-free stainless steel material hopper and base.
- Environmentally friendly air exhaust filter.
- High pressure air conveys material ensuring quiet operation.
- Capacity sensor mounted onto the glass tube for accurate level sensing.
- Compressed air filter and regulator.
- Easy access to material hopper for convenient cleaning.
- Adjustable hopper and base mounts.

Specifications

VL Models	Material Hopper (L)	Conveying Capacity (kg/hr)	Dimensions (mm) (H x W x D)	Weight (kg)
VL-50	0.5	40	380 x 145 x 150	4.5
VL-100	2.8	60	730 x 165 x 160	7



*Allen-Bradley SLC-504 Microprocessor
Control for Conveying Systems*

Allen-Bradley Custom Control System

Allen-Bradley controls set the standard for reliability and flexibility. They are the key to lowering production costs, improving throughput, and increasing quality and flexibility. Comet offers highly integrated control solutions from Allen-Bradley to assure your system will be able to solve all these challenges.

Custom Allen-Bradley controls include all programming software and documentation as part of the Comet package. Programmed data storage is complementary so you can easily modify or expand the controls while being assured your original software is safe. Time and cost saving benefits result in faster startups from Comet's pre-integrated products, all designed to work together. Allen-Bradley parts and software support are available worldwide.

Features

Comet can also build controls using Modicon, Siemens, Omron, and B&R controls.

Compressed Air Dryers



3DX-02

3DX-12



3DX Compressed Air Resin Dryer

Comet's 3DX series compressed air dryers are ideally suited for small- to mid-volume throughputs. They efficiently manage batch drying fluctuations caused by residual moisture. The 3DX series is completely modular and comes in 38 standard hopper base sizes so the operator can adapt to different materials, shot weights, or changing production conditions. The 3DX design consist of four main components: compressed air module, material hopper, dryer lid, and hopper extension. This flexible design enables seamless integration with all standard hopper sizes and configurations.

Features

- Swiveling, detachable control terminal.
- Microprocessor controller with large display and joystick.
- Adjustable material and filling level sensor.
- Ring nozzle system for even air distribution with the hopper.
- Optional dewpoint display with sensor.

Specifications

3DX Models	Hopper Capacity (L)	Air Consumption (max. PSF)	Electric Capacity (W)	Dimensions w/ Integrated Material Feed (mm) (H x W x D)
3DX-005	.5-.54	.0104	750	—
3DX-02	.2-.2.10	.016	750	350 x 230 x 337
3DX-07	1.85-1.86	.0617	1150	680 x 230 x 337
3DX-12	3.17-3.19	.0951	1150	680 x 230 x 387
3DX-27	7.13-7.19	.18	1150	885 x 280 x 437
3DX-42	11.10-1.113	.28	1150	885 x 350 x 507
3DX-62	16.38-16.43	.41	1150	1150 x 350 x 507

Mini Compressed Air Dryers



CCAD-U Mini Compressed Air Resin Dryer

Comet's CCAD-U compressed air dryer series integrates plastic drying and conveying into one compact unit making it ideally suited for vertical and stand-alone injection molding machines where space is limited due to factory height. CCAD-U dryers are excellent for small batch drying of commonly used engineered plastics like ABS and PS or as a pre-heating treatment before molding.

Features

- PID temperature controller reaches $\pm 1^{\circ}\text{C}$.
- Air outlet filter reduces environmental pollutants.
- *CCAD-1U~6U* comes with an insulated dual-layer glass tube hopper to view material levels. For automatic material feeding, couple with a *VL-50*.
- *CCAD-12U~40U* comes with a stainless steel storage hopper. For automatic material feeding, couple with an *CAL-1U*.
- To enhance efficiency and reach dewpoints under -40°C (-40°F), couple with an *HAD* heatless air dryer.

Specifications

CCAD-U Models	Hopper Capacity (L)	Drying Temp./ Heater Power ($^{\circ}\text{C}$ / W)	Dimensions (mm) (H x W x D)	Weight (kg)
CCAD-1U	1	160 / 300	650 x 310 x 220	10
CCAD-3U	3	160 / 300	680 x 320 x 220	13
CCAD-6U	6	160 / 300	870 x 350 x 220	15
CCAD-12U	12	160 / 600	780 x 430 x 455	25
CCAD-20U	20	160 / 600	882 x 467 x 460	30
CCAD-40U	40	160 / 1200	1000 x 530 x 430	45



3DX-M Micro Compressed Air Resin Dryer

Comet's 3DX-M micro compressed air dryers are ideally suited for small and micro injection molding machines. They feature a double wall of Borosilicate glass for optimal thermal protection. There are three hopper sizes available: 2, 4 and 7 liters.

Two versions available:

3DX-M Integral: Main components are built into one unit.

3DX-M Split: Process air module and hopper are separated allowing for more flexible installation, improve ease of use, and to take the weight off the feed throat.

Features

- Process air with dewpoints of -25°C (-13°F) (if required to -65°C / -85°F).
- Throughputs from .05 to 4 kg/hr.
- 2, 4 and 7 liter hopper sizes.
- Totally adjustable material sensors combined with an automatic compressed air loading device.
- Automatic filling with adjustable filling level sensor.
- Energy saving compact module design for easy "plug & play" installation.
- Direct feed throat mount.
- Automatic temperature controller with flexible electronic control.
- Integrated control for easy cleaning.

Honeycomb Matrix Dryers



CD-40H

CD-H Honeycomb Matrix Dehumidifying Dryer

Comet's CD-H series portable honeycomb matrix dryers are suitable for drying hygroscopic plastics. The honeycomb rotor provides superior strength, flow, and moisture transfer with dewpoints lower than -40°C (-40°F). The largest unit can provide dry air up to of $4,000\text{ m}^3/\text{hr}$.

Features

- A molecular sieve/silica gel and sintered honeycomb matrix rotor guarantees precise dehumidification.
- Twin cooling coils accurately cool down regenerative air and ensure a low return air temperature and dewpoint.
- PID microprocessor temperature controller.
- Compact design can save over 50% floor space.

Specifications

CD-H Models	Regen. Heater (kW) (50/60Hz)	Process Heater (kW) (50/60Hz)	Dimensions (mm) (H x W x D)	Weight (kg)
CD-40H	0.2/0.2	0.2/0.2	1260 x 480 x 755	145
CD-80H	0.2/0.2	0.75/0.9	1360 x 530 x 820	170
CD-120H	0.2/0.2	0.75/0.9	1360 x 530 x 820	170
CD-200H	0.4/0.5	1.5/1.8	1560 x 660 x 1050	265
CD-400H	0.75/0.9	3.75/4.5	1745 x 700 x 1255	330
CD-700H	1.5/0.8	5.5/6.3	1935 x 900 x 1380	480
CD-1000H	2.4/3	9/11	2145 x 1300 x 1550	700
CD-1500H	5.5/6.3	9x2/11x2	2060 x 1410 x 2150	1010
CD-2000H	5.5/6.3	13x2/15x2	2060 x 1410 x 2150	1300
CD-3000H	9/11	13x3/15x3	2240 x 2035 x 2160	1600
CD-4000H	5.5x2/6.3x2	13x4/15x4	2060 x 2750 x 2250	2200



CDD-160U/120H

CDD Honeycomb Matrix Dryer/Hopper Combo

Comet's CDD series honeycomb matrix dryers combine dehumidifying and drying into a single unit. They have many applications in processing plastic materials such as PET, PBT, PA, PC, etc. All models feature CD-H honeycomb dehumidifiers with a built-in process heater and insulated drying hopper.

Features

- Honeycomb rotor provides continuous closed-loop drying requiring less maintenance while eliminating contamination problems associated with desiccant beds.
- Can maintain a dehumidified dry air dewpoint of at least -40°C (-40°F) or lower.
- Insulated drying hopper features down-blowing dry air and cyclone exhaust improving drying efficiency and reducing energy consumption.
- Compact size for easy movement and portability.

Specifications

CDD Models	Regen. Heater (kW)	Process Heater (kW)	Dimensions (mm) (H x W x D)	Weight (kg)
20U/30H ~ 230U/120H	3	3	1240 x 875 x 810 ~ 2010 x 1220 x 855	110 ~ 295
300U/200H ~ 450U/200H	4	12	2140 x 1450 x 1050 ~ 2440 x 1450 x 1050	420 ~ 550
600U/400H ~ 750U/400H	7.2	18	2380 x 1745 x 1255 ~ 2610 x 1745 x 1255	620 ~ 650
900U/700H ~ 1200U/700H	10	24	2640 x 2140 x 1380 ~ 3070 x 2140 x 1380	830 ~ 870

Honeycomb Dryers with Loading

*CCD-160U/120H
(optical models
available)*



CCD Honeycomb Matrix Compact Dryer with Loading

Comet's CCD series compact dryers combine dehumidifying plastic resin and conveying into a single unit including: loading the drying hopper, dehumidifying and drying the plastic resin, and loading the dry resin into the processing machine. The CCD series is suitable for drying hygroscopic plastic materials such as PA, PC, PBT, and PET.

Features

- Equipped with a honeycomb rotor to achieve stable, dry air dewpoints of -40°C (-40°F).
- Two models available: fully integrated and semi-open.
- Feeding system equipped with a shut-off valve.
- Equipped with a microprocessor control.

Specifications

CCD Models	Hopper Capacity (L)	Drying Heater (kW)	Dimensions (mm) (H x W x D)	Weight (kg)
CCD-40U/30H	40	3.9	1550 x 1040 x 875	295
CCD-160U/80H	160	6	1860 x 1190 x 875	385
CCD-160U/120H	160	6	1860 x 1190 x 875	505
CCD-230U/120H	230	6	2070 x 1190 x 875	515
CCD-300U/200H	300	12	2160 x 1460 x 1020	565
CCD-450U/200H	450	12	2350 x 1460 x 1020	595
CCD-600U/400H	600	18	2380 x 1745 x 1255	640
CCD-750U/400H	750	18	2610 x 1745 x 1255	690
CCD-900U/700H	900	24	2640 x 2140 x 1380	850
CCD-1200U/700H	1200	24	3070 x 2140 x 1380	900



CHD-300U

CHD-U Hot Air Hopper Dryer

Comet's CHD-U series stainless steel hot air hopper dryers are ideally suited as a stand-alone unit or to use with honeycomb dryers to dry engineered plastics. There are 25 models available ranging from 25 to 5,080 kg (56 to 11,200 lbs). The microprocessor control features a digital display and an auto start/stop timer. Airtight material clean-out doors are available on models CHD-80U and above.

Features

- Microprocessor control with digital display for accurate temperature control.
- Overheat protection.
- Digital PID temperature controller with LED display.
- Hot air, down-blowing design ensures hot air is evenly distributed to maintain a steady temperature in the hopper and to increase drying efficiency.

Specifications

CHD-U Models	Hopper Capacity (L)	Heater Power (kW)	Dimensions (mm) (H x W x D)	Weight (kg)
20U ~750U	20 ~ 750	2.2 ~ 18	730 x 575 x 325 ~ 2100 x 1170 x 915	40 ~ 220
900U~1200U	900 ~ 1200	18 ~ 24	2173 x 1410 x 1050 ~ 2598 x 1410 x 1050	410 ~ 560
1500U~8000U	1500 ~ 8000	32 ~ 128	3170 x 1640 x 1250 ~ 6030 x 2250 x 1800	685 ~ 1820

PET Crystallizer



CCR Closed-Loop Crystallizer

Comet's CCR closed-loop crystallizer is used to re-crystallize PET amorphous material before drying to prevent clumps from occurring. Once re-crystallized, the PET material can be conveyed to a material storage bin or directly into a drying hopper. The CCR system consists mainly of heating elements, an insulated hopper, and an agitator screw mixing device.

Features

- Constant fixed speed agitator keeps PET material moving to prevent clumping as it is heated during the crystallization process.
- Processed material is quickly dried and dehumidified.
- Double overheat protector reduces the possibility of either mechanical or man-made heating problems.

Specifications

CCR Models	Hopper Capacity (kW)	Max. Throughput (kg/hr)	Dimensions (mm) (H x W)	Weight (kg)
CCR-160U	160	50	2380 x 1040	235
CCR-450U	450	150	3850 x 2370	500
CCR-900U	900	300	4450 x 2890	865
CCR-1600U	1600	500	5350 x 3570	2290
CCR-2500U	2500	750	5600 x 4050	2790



CCM Volumetric Color Feeder

Comet's CCM series volumetric color feeders are simple, economical screw metering units that accurately meter color concentrate, regrind, and additives directly into the molding machine or extruder feed throat. The CCM is a suitable solution for auto-proportional mixing of free-flowing materials such as pellets and powders.

Features

- Brushless DC motor is maintenance free.
- Microprocessor control is simple to operate and both user-friendly and accurate.
- Modular design for easy cleaning, disassembly, and interchangeability.
- Metering screws have a chrome plated finish for durability.
- Can be adapted for extrusion machines.

Specifications

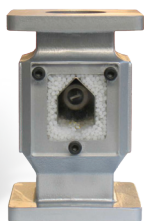
CCM Models	Output Capacity (kg/hr)	Motor. Power (kW) (50/60 Hz)	Dimensions (mm) (H x W x D)	Weight (kg)
CCM-12	0.1 ~ 10	0.06	520 x 610 x 335	29
CCM-16	0.5 ~ 30	0.06	520 x 610 x 335	29
CCM-20	3 ~ 60	0.06	520 x 610 x 335	29
CCM-30	8 ~ 110	0.06	520 x 610 x 335	29
CCM-D	—	0.06 x 2	615 x 1045 x 410	50

D = double color feeder. Output capacity depends on model chosen.

Volumetric Color Feeders



AC/IC-1100



*Transition piece's
internal baffle blends
material*

AC/IC-1100 Screw-Type Volumetric Color Feeder for Extrusion

Comet's AC/IC-1100 screw-type color feeder is designed for metering free-flowing granulated additives (color concentrate and regrind materials) directly to your extrusion machine.

The AC/IC-1100 consists of three main parts; transition piece with a quick disconnect adapter plate, metering housing with material hopper, and metering screw sleeve with electrical control box.

Features

- Standard transition piece mounts two or four AC/IC-1100s.
- 9mm (3/8") metering screw with spring-loaded steel ball.
- 16mm (5/8") stainless steel metering sleeve.
- Transition piece with quick disconnect adapter plate.
- Separate LED display with digital setting control and potentiometer.

AC/IC-1100 Specifications

Power Supply	1 - 230 VAC
Metering Screw Revolution Speed (RPM)	1 - 99.9
Metering Capacity (kg/hr)	0 - 33
Unit Construction Material	Aluminum / Stainless Steel / Polycarbonate
Noise Level	70 dBA
Dimensions (mm) (H x W)	425 x 465
Weight (kg)	16.5



Screw/Sleeve Sets

SMD-1100 Screw-Type Volumetric Color Feeder for Injection Molding

Comet's SMD-1100 screw-type color feeder series mounts on an injection molding machine to precisely meter color concentrate and regrind plastic materials. Although it was developed especially for injection molding machines, it can be used with extruder machines by simply flipping a switch on the printed circuit board. The SMD-1100 consist of three main parts; transition piece, metering housing with stainless steel material hopper, and control.

Features

- Twelve interchangeable stainless steel screw/sleeve sets.
- Metering housing viewing window to confirm screw rotation.
- When making color changes or cleaning, quick disconnect clips enable the motor section to be easily dismantled from the transition piece.
- Easily integrate the hopper loader to the main control.

SMD-1100 Specifications

Metering Screw Revolution Speed (RPM)	1 - 99.9
Metering Capacity (kg/hr)	033
Standard Screw Sleeve (mm)	9/16
Dimensions (mm) (H x W)	424 x 470
Weight (kg)	145

Powder Color Feeders



*PF-1200 with Transition Piece
Maximum Capacity: 22.7 kg/hr (50 lb/hr)*

PF-1200 Screw-Type Powder Color Feeder

Comet's PF-1200 screw-type color powder feeder is designed for precise metering of non-free-flowing powders and color pigments directly into the production machine feed throat. The changeable agitator inside the stainless steel material hopper housing enables metering of color concentrate and other coarse grained materials.

Two models available:

SMD: Designed for injection molding machines, it is equipped with a step motor having an incremental accuracy of 1/100 of a revolution.

DCD: Designed for extrusion machines, the DC drive motor can be connected to the tachometer of the extruder.

Features

- Material hopper, agitator, and metering screw are integrated into one complete package.
- Easily dismantle the unit for effortless cleaning and for filling the material hopper away from the production area.
- Modularly constructed transition piece enables several types of feeders (e.g. AC/IC-1100 or SMD) to be mounted at once.
- Unique screw designed with an open spiral and fixed internal core results in a highly accurate feed.

Specifications

PF-1200 Models	Material Hopper Volume (L)	Motor Type	Dimensions (mm) (H x W)
SMD	4	Step Motor for Injection Molding	430 x 590
DCD	4	DC Motor for Extruders	430 x 590



ColorSave 1000F Gravimetric Feeder

Comet's ColorSave 1000F single component gravimetric feeder for color concentrate and additives is designed to be installed on injection molding and extrusion machines for accurate mixture consistency. Use the ColorSave 1000F instead of a volumetric feeder to ensure overall savings by reducing the color concentrate tolerance values.

Features

- Accurate consistency prevents over metering material.
- Save up to 50% color concentrate/additives, up to 35% when compared to remote batch blenders and up to 15% compared to on-the-machine throat batch blenders.
- Improves final product quality and reduces rejects.
- Consistent delivery of shot-weight.
- Proprietary control software for real-time data collection and management of color concentrate consumption.
- Integrated automatic venturi vacuum loader.
- Easy maintenance and cleaning when switching colors or materials.

Specifications

Hopper (L)	3 / 5 / 10
Metering Capacity (kg/hr)	0.02 - 80
Loader	Integrated Automatic Venturi Vacuum Loader
Noise Level	70 dBA
Dimensions	Varies per hopper liter size ordered (call for more information)
Weight (kg)	26

Gravimetric Blenders

CGB-600-4



CGB Gravimetric Blender

Comet's CGB series gravimetric blenders mount directly on injection molding, blow molding, or extrusion machines for precise mixing of several types of materials. The calibration and self-compensation function ensures accurate material metering percentages. A high-precision electronic weigh scale ensures precise weighing of every batch with accuracies between $\pm 0.1\%$ – 0.3% .

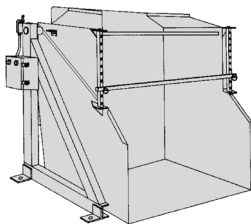
Features

- Auto-calibration after each material is weighed for accuracy.
- Store up to 100 recipes for future use.
- CGB-600 models and below are machine mount (equipped with magnetic base and manual discharge plate).
- CGB-2000 models and above have a portable floor stand and vertical cone metering valve to ensure accurate metering of granules (equipped with storage hopper).
- Recycled material compensation function.

Specifications

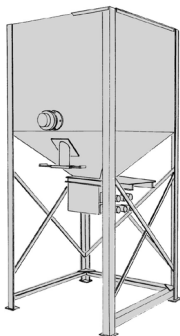
CGB Models	Metering Capacity (kg/hr)	Ingredients	Dimensions (mm) (H x W x D)	Weight (kg)
CGB-40~ CGB-600	40 to 600	4 - 6	1110~1445 x 770~905 x 675~785	135~220
CGB-1200~ CGB-2000	900-2000	4 - 8	2398~2800 x 940~1100 x 1023~1180	400~500
CGB-3000	2000- 3000	4 - 8	3375 x 1695 x 1695	850

Weigh is for floor mount and varies with machine mount.



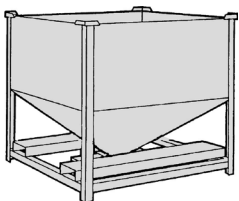
PowerMaxx

Taking plastic material from gaylords and boxes and depositing it into a material handling system is a costly, time consuming task. With Comet's rugged 1,134 kg (2,500 lb) capacity PowerMaxx, this chore is accomplished in 20 seconds or less.



Surge/Day Bins

Comet's Surge/Day Bins are designed for all your in-plant bulk storage requirements and can be used in conjunction with your outdoor storage silos.



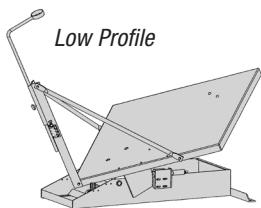
Flo-Thru Hopper

Flo-Thru Hoppers are the key element to Comet's material handling system. Gaylords are dumped into the unit via our PowerMaxx or material can be vacuumed into the Flo-Thru from storage bins.



Bolted & Welded Silos

Comet supplies top quality bolted and smooth-wall welded storage silos engineered specifically for the plastics industry. A range of sizes and factory coatings are available.



Low Profile

Tilt Tables

Low Profile: Operates off less air pressure than conventional units.

Floor Level Pneumatic: Heavy-duty, 91 kg (2,000 lb) capacity unit runs on as little as 60 PSI

Forklift Support and Untie Framework

Call for more information.

Low Speed Granulators

CG-1628N



CG-16N/20N Low Speed Granulator

Comet's sturdy CG-16N/20N series low speed granulators are designed for grinding sprues, runners, and rejected parts beside the press. Low speed granulating ensures consistent granule size and low dust and noise levels (85~90 dBA).

The CG-16N/20N uses staggered blades and unfixed blades that keep a fixed cutting clearance without adjustment after resharpening.

Features

- Material collector is located outside the cutting chamber to avoid leakage and reduce contamination.
- The optimal cutting angle makes resistance low and avoids blockage to improve cutting efficiency.
- Sound-proof material hopper and casters for portability.

Specifications

CG-16N/20N Models	Max. Throughput Capacity (kg/hr) (50/60 Hz)	Number of Fixed Blades / Rotating Blades	Dimensions (mm) (H x W x D)	Weight (kg)
CG-1621N	35	2x1 / 9	1200 x 505 x 630	175
CG-1628N	50	2x1 / 12	1200 x 575 x 630	195
CG-1635N(H)	60	2x2 / 15	1200 x 645 x 630	210
CG-2028N(H)	80	2 / 3	1270 x 575 x 695	265
CG-2028NC(H)	80	2 / 12	1270 x 575 x 695	280
CG-2042N(H)	135	2 / 3	1270 x 715 x 695	300
CG-2042NC(H)	135	2 / 18	1270 x 715 x 695	320

C = staggered blades. H = higher motor power.



CG-23/30/36 Central Granulator

Comet's CG-23/30/36 series soundproof central granulators are suitable for centralized recycling of wastes and rejected parts from injection, blow molding, and extrusion machines. The CG-23 uses staggered blades while the CG-30 and CG-36 use paddle blades to easily grab and cut through material, reduce waste, increase profitability, and save resources.

Features

- Fully enclosed design and sound-proofing ensures low noise levels.
- High quality steel blades ensure durability.
- Multiple safety features including motor overload protection.
- Compact size for saving floor space and castors for easy movement.
- Easy access for convenient maintenance and cleaning.

Specifications

CG-23/30/36 Models	Rotating Speed (RPM) (50/60 Hz)	Max. Output (kg/hr)	Dimensions (mm) (H x W x D)	Weight (kg)
CG-2324~2348	415/500	90~150	2210 x 1340~1580 x 1245	470~600
CG-3048~3060	415/500	185~220	2210 x 1580~1700 x 1390	700~780
CG-3650~3675	540/650	620~800	3155 x 1260~1510 x 1750	1480~1730

Central Granulators



CG-50 Central Granulator

Comet's powerful CG-50 series airtight, double-layered soundproof central granulators are designed to use beside the press or for central operation for injection, extrusion, or blow molding machines. V-type rotating blades offer the latest in cutting technology by sending material into the center of the rotating blades thus preventing the material from sticking to the outside edges of the cutting chamber.

Features

- Cutting blades constructed of heavy-duty steel that are reusable after sharpening.
- The unit's rugged structure, with airtight double-soundproof layers, keeps noise levels minimal.
- Extremely rigid, damage resistant, contamination-free cutting chamber ensures a long service life and easy maintenance.
- V-type transmission belts help maintain close contact, a balanced operation, and are easy to disassemble and repair.
- The feed chute opens with a self-lock electric rod to insure safe operation.

Specifications

CG-50 Models	Rotating Speed (RPM) (50/60 Hz)	Max. Output (kg/hr)	Dimensions (mm) (H x W x D)	Weight (kg)
CG-5060	525/630	800	3153 x 2300 x 1725	3600
CG-5090	525/630	1200	3153 x 2600 x 1725	3960



High-accuracy camera (with stand), main unit, incandescent lighting fixture, I/O unit, I/O cable set, and camera and interface cables.

PE-500 All-In-One Mold Protector

Comet's PE-500 is designed to detect shortages and burrs, broken pins and plugs, insert loading errors, molded parts left in the cavity, both positions of the slide core and top pin centering, and metal die casting errors so defective parts don't mix into the production line thus lowering production costs.

Features

- Reduces costly mold repair, prevents lead-time delays, and improves mold cycle times.
- Stably monitors even when installed on bicolor or vertical rotary machines to pinpoint over- and under-injection as well as remove defects.
- Lightweight (weighs only .950 grams (2 lbs) so you can operate the unit with one hand while setting parameters or monitoring the screen with the other.
- High-tech calculator shortens capture time to just 0.03 seconds and data monitoring time to below 0.02 seconds.
- 800 x 480 pixel camera for precise monitoring of even the smallest mold parts and the most intricate mold details.
- One unit can handle two cameras to enable monitoring the detail of multi-cavity small parts while also monitoring large molded parts.
- Unique compensation technology minimizes external light interference and machine vibration without causing shutdown.



CTM-607-W (water)

CTM-W Water Temperature Controller

Comet's CTM-W water temperature controllers are self-contained and designed to heat and maintain constant mold temperatures. The PID multi-stage temperature controller can maintain a mold temperature accuracy of $\pm 0.5^{\circ}\text{C}$.

CTM-W Water Temperature Controller

- Reaches a heating temperature of 120°C (250°F).
- Equipped with high pressure protection, safety pressure relief, automatic water supply, and air exhaust.
- High efficiency stainless steel water cycle pump precisely maintains temperature control and high efficiency heat exchange of both molds and mold loops with small diameters.
- Multiple safety features including pump overload protection, overheat protection, and low level protection that can automatically detect abnormal performance.

Specifications

CTM-W Models	Max. Temp.	Cooling Method	Dimensions (mm) (H x W x D)	Weight (kg)
CTM-607W	120°C (250°F)	Direct	635 x 320 x 740	55
CTM-607W-D			655 x 590 x 760	95
CTM-910W			635 x 320 x 740	60
CTM-910W-D			655 x 590 x 760	105
CTM-1220W			630 x 320 x 775	120
CTM-2440W			820 x 360 x 963	140
CTM-3650W			964 x 467 x 1011	150

D = dual heating zones



CTM-405-E (oil)

CTM-E Oil Temperature Controller

Comet's CTM-E oil temperature controller is designed to heat molds while maintaining a steady temperature. Media is conveyed to the molds, after being pressurized by the pump, and heated by an electrical heat tube. The CTM-E heats oil up to 150°C (302°F).

CTM-E Oil Temperature Controller

- PID multi-stage temperature control system can maintain mold temperatures with ± 1 accuracy.
- High efficiency, high temperature pump for efficient heat exchange.
- Multiple safety features including power reverse phase protection, pump overload protection, and overheat protection.
- Low level protection can automatically detect abnormal performance and indicates this via a visible alarm.

Specifications

CTM-E Models	Max. Temp.	Cooling Method	Dimensions (mm) (H x W x D)	Weight (kg)
CTM-405-E	150°C	Indirect	575 x 325 x 530	44
CTM-405-WE (water/oil)	120°C	Direct	575 x 285 x 505	33

E = equipped with low level protection.

WE = equipped with water inlet low pressure protection.



CMD-500H

CMD-H Mold Dehumidifier

Comet's CMD-H series mold dehumidifiers are designed to remove moisture on mold surfaces (especially PET preforms). A honeycomb rotor dehumidifies the air surrounding the mold to generate a dry airflow and ensuring the mold remains at a -10°C to 0°C (14°F to 32°F) dewpoint temperature.

Features

- Prevents corrosion, reduces cycle time, and increases the service life of the mold.
- PID control sets regenerative temperatures accurately.
- Honeycomb rotor ensures constant dehumidifying.
- Motor overload and phase reverse alarm functions.
- Return air cooling and filtering.
- Air temperature generated is approximately 29°C (84°F) so moisture condensation on the sight-glass window of the processing machine does not occur.

Specifications

CMD-H Models	Regen. Heater (kW)	Regen. Blower (kW) (50/60Hz)	Dimensions (mm) (H x W x D)	Weight (kg)
CMD-500H	4	0.4	1730 x 650 x 700	260
CMD-1000H	7.2	0.75	1780 x 800 x 805	335
CMD-1500H	15	2.2	2040 x 1150 x 1075	350
CMD-2000H	24	2.2	1940 x 1300 x 1075	450

Dryer Installations

Automotive



Two of four CDD-1200/700 dryers

Custom Molder



CD honeycomb matrix dryer with two CHD drying hoppers and separate drying controls

Auto Lens



CD-300 honeycomb matrix dryer, three CHD dryer hoppers, and CAL hopper loaders on a 3-color Engel machine

Dryer Installations



Custom Molder

CD-200 with DH-400



Custom Molder

CHD hot air dryer on a stand

Automotive



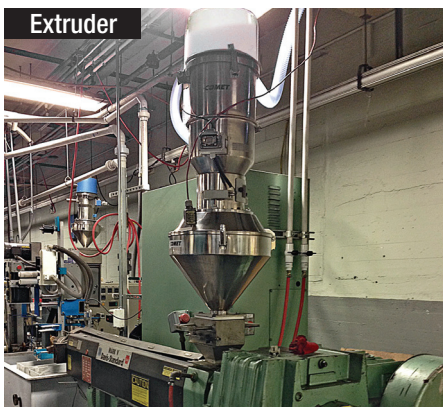
CHD dryer hopper and CAL hopper loaders

Housewares



CAL 10HP vacuum system

Extruder



CHR-24 central loader on an extruder

Extruder



Two CHR and one CAL loader mounted on a blender

Material Conveying Installations



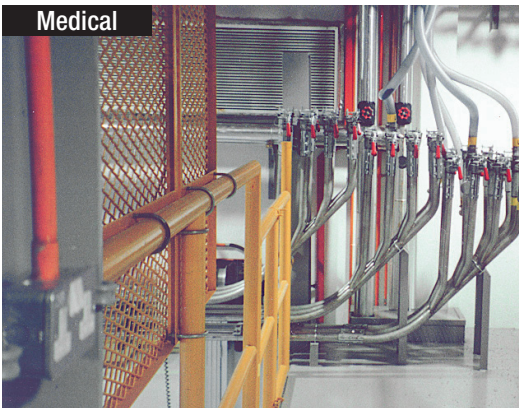
Allen-Bradley conveying control has automatic backup pump, filter, and relief valve for tube extrusion



Manifold



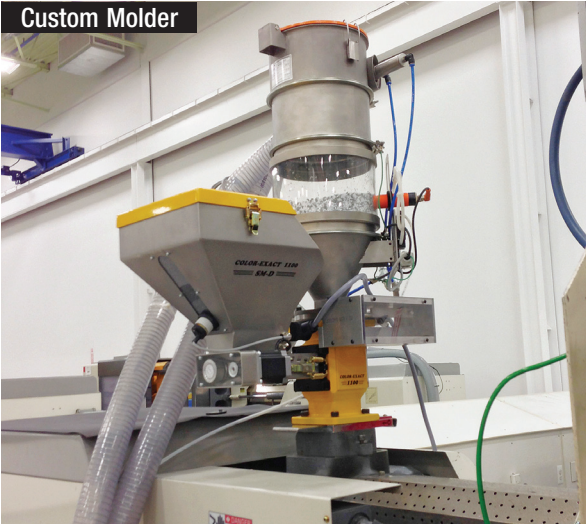
Two surge bins with two CHR receivers



Stainless steel manifold transferring eight bins of plastic resin from the lower level to the mezzanine level

Color Feeder Installations

Custom Molder



SMD-1100 with open Helix precision injection molding

Custom Molder



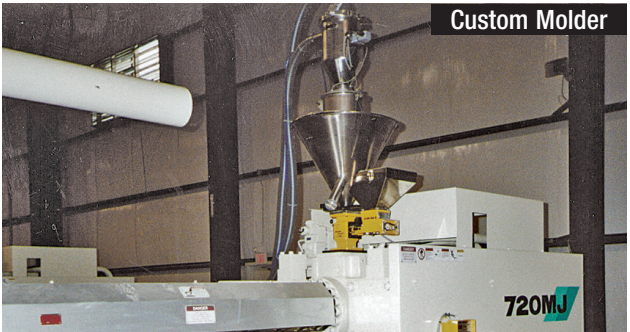
SMD-1100 mounted on a molding machine

Custom Molder



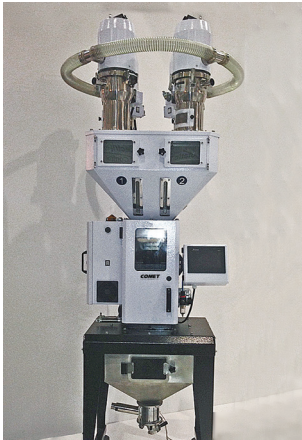
Three SMD color feeders on a molding machine

Custom Molder



Ten SMD-1100s, one on each machine

Blender Installations



CGB weigh blender on a stand

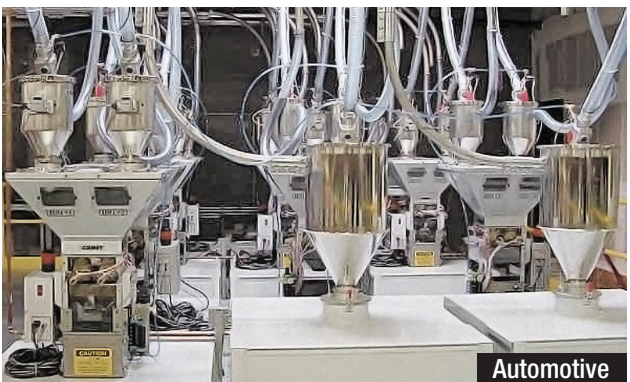


Weigh blender for extrusion



Automotive

12 central weigh blenders for color on mezzanine



Automotive

Central weigh blenders and regrind surge bins

Automotive



Two welded silos on load cells

Housewares



Bolted corrugated silos

Film Extrusion

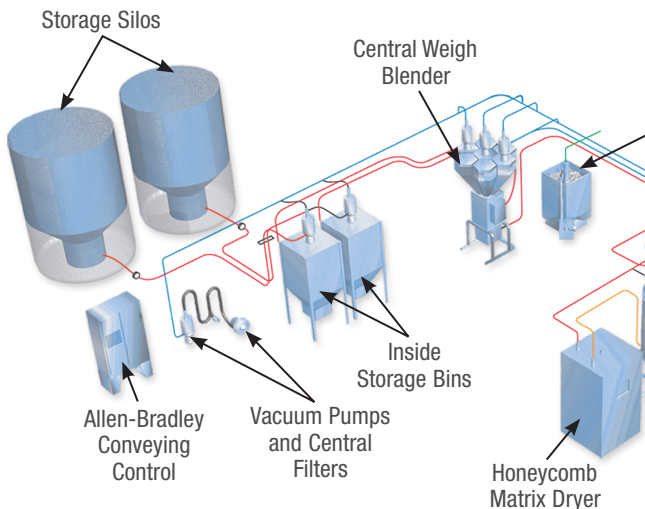


Rail car unload system

Computer Maker



Low profile tilt tables and piping

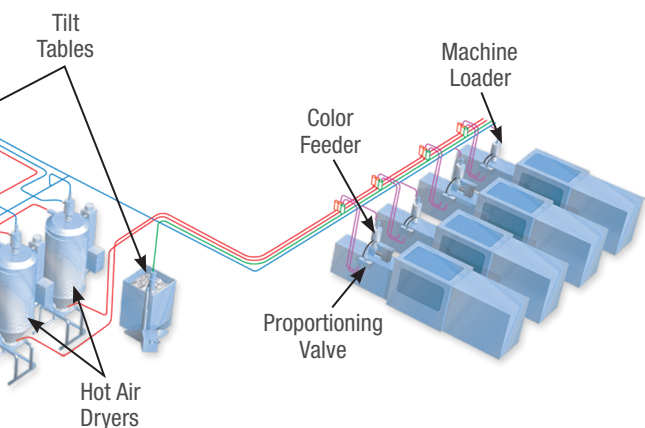


Complete Manufacturing Experience. Equip

When setting up the most efficient plastics processing operation, careful consideration, design, and implementation of auxiliary equipment that will support the entire production line can mean the difference between marginal profits and over-the-top results. Gone are the days when auxiliary equipment was treated as a mere afterthought to the overall molding or extruding operation.

Comet designs systems fitting your specific plant's operating needs. Your unique Comet design will minimize costs, reduce downtime, increase output, and reduce maintenance... all at competitive prices. Before you invest in a resin handling system, contact the customization experts at Comet where you will always reduce system operating costs by 30 - 70%.

... a company you can count on for all your plastics processing machinery needs.



Solutions From Comet ***ment. Expertise.***

Comet provides turnkey systems with:

- Installation and crew supervision.
- Special equipment (cranes, forklifts, pneumatic tools).
- Detailed operation and maintenance training of completed installations.

YOUR

CUSTOM SOLUTION

is just a **PHONE CALL**

AWAY!

800.328.5088



COMET
PLASTIC EQUIPMENT, LLC

800-328-5088

6555 Garden Rd., Unit 16
Riviera Beach FL 33404
Phone: (+1) 561-842-0011
Fax: (+1) 561-841-0400
info@cometpe.com



cometpe.com

We reserve the right to change specifications without prior notice.