



CUSTOM GRINDERS

INNOVATION FOR YOUR UNIQUE PROCESS

Grind whole blocks or barrels. Hard or soft, reduce product into smaller, more manageable pieces. Grind starting media directly to prepare your product for blending and cooking. Dealing with exceptionally hard or cold product? Break it. Add a Pre-Breaker before the Grinder to reduce the size of your starting media to be ground (*most applications do not require one, as KOSS Grinders are very robust*).

BROAD RANGE OF FEATURES & OPTIONS

- ✓ **Variety of Extrusion Options**
 - * Modified Face & Head Plates
 - * Interchangeable Screens (*varied patterns & hole diameters*)
- ✓ **Augers (fully polished)**
 - * Single/Twin Screw (*1 or 2*)
 - * Standard, Hooked or Serrated Flights (*for aggressive action*)
 - * Forward & Reverse Control
 - * Pre-Chop over Augers (*pre-break cold or very hard blocks*)
- ✓ **Interior Fully Polished**
- ✓ **Exterior Bead-Blasted (or fully polished)**
- ✓ **Cleaning (CIP-able)**
 - * Multiple CIP Hook-up Options
 - * Auger Wash Racks, Frame-Mounted Wash Baskets and Auger Removal Tools (*varied cleaning & convenience opt.*)
- ✓ **Footing Features**
 - * Casters (*for mobility*)
 - * Sanitary Adjustable Ball, Tab, Bolted Plate (*non-adj. avail.*)
 - * Load Cells
- ✓ **Control Panel**
 - * Start/Stop Button
 - * Emergency Stop
 - * Variable Frequency Drive and Disconnect
- ✓ **Motor & Gear Drives (custom horse power, motor options)**
- ✓ **Safety Solutions, Custom**
 - * More Emergency Stops
 - * Proximity Switches
 - * Light Curtain (*sensors*)
 - * Additional Guarding, Caging or Modifications Reducing Contact (*between machine and operators/maint. personnel*)

Your process is unique - we believe your equipment should also be one-of-a-kind. Our family at KOSS wants you to have the best possible experience, and part of that is the novel ability to easily change a variable, such as your extrusion size. We believe your equipment should suit you.

Enjoy the flexibility interchangeable screens offer. Want to try running a different product or change a process variable? Select from a variety of extrusion screen sizes. One KOSS Grinder can easily provide you with a variety of end results. Screens sizes can be changed out in minutes on even our largest Grinder!

Our custom sanitary stainless steel Grinders, designed and fabricated to USDA & WDA Sanitary Standards, are capable of grinding a variety of soft and hard cheeses. Our easy-to-clean machines feature removable augers as well as easy-access head plates. Lab-size Grinder head plates frequently feature quick disassembly and release latches.



GRINDERS

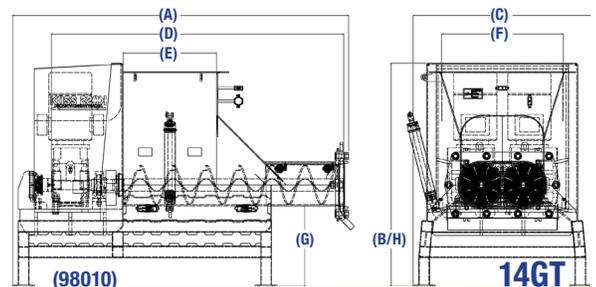
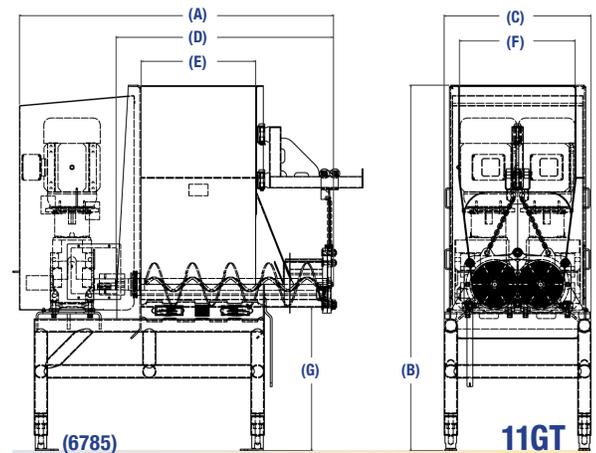
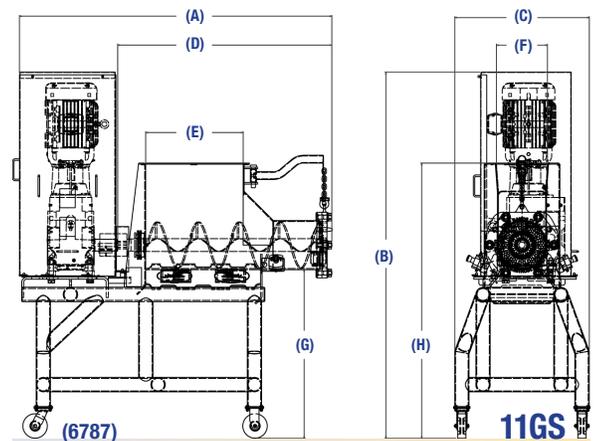
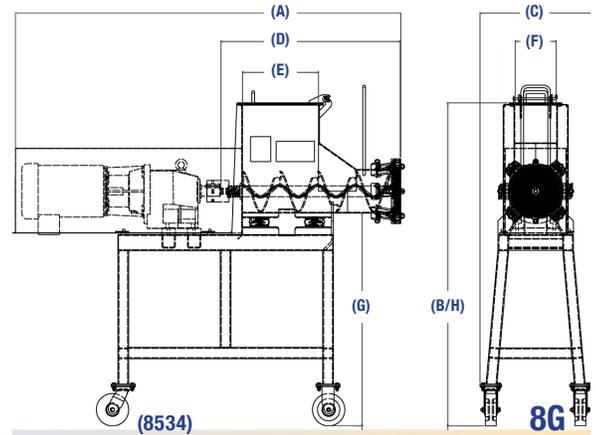
CUSTOMIZED TO COMPLEMENT UNIQUE APPLICATIONS

These easy-to-clean machines come in various model sizes (5, 8, 11, 14, etc.), based upon auger diameter (in inches). Smaller size Grinders are on casters for mobility (rear casters swivel for enhanced maneuverability). Medium to Larger size Grinders often include a frame-mounted strainer basket (for small parts during disassembly). Consider a portable Auger Wash Rack for optimal auger handling, safer for both your personnel and your machine.

Enjoy safe & easy face plate removal and auger handling 11GS/11GT models feature a face plate safely attached (via shackle pin) to lifting chain(s) on a pivoting jib crane arm. Reduce the risk of marring inner product contact surfaces by using designated tools. The face plate and auger removal tools have convenient homes, right on the Grinder frame (no need to hunt for the right wrench).

SAMPLE GRINDER DIMENSIONS (serial#)	8G (8534)	11GS (6787)	11GT (6785)	14GT (98010)
Length (A)	71-1/2	76-1/8	82-1/4	122-1/8
Height (B)	59-7/8	89-1/4	95-5/8	81-1/4
Width (C)	20-5/8	32-3/4	38-1/2	64-7/8
Scew Length (D)	33-1/4	52-3/8	56-7/8	106-3/8
Hopper Length (E)	14-1/8	23-3/4	30	34
Hopper Width (F)	7-3/4	12-3/8	30-1/4	44-1/4
Discharge Height (G)	39-3/8	41-1/8	37-1/2	29-1/4
Entry Height (H)	59-5/8	67-1/4	71-1/2	78-1/8

Approximations, rounded to nearest 1/8 inch. Sample dimensions are intended for general reference, will vary per customer/product specifications. Grind Times will vary significantly per process (product, temp., moisture, speed, screen size, ...).



KOSS
INDUSTRIAL, INC.



8G GRINDERS

Grind 40 LB in ~35 seconds

Typically with a 7.5 HP motor, a KOSS 8G is well suited for smaller batch sizes, it can grind: trim, 20s, and 40s at rates up to 4,500 LB/HR. Fit an 8G to a custom KOSS Cooker for a streamlined process. For grinding block cheese in a more cost-effective 8G, consider our 8GSE Grinders (*economy style*), redesigned with more economical features.



ADDITIONAL INNOVATION

We are able to provide a variety of methods for material handling, ranging from sanitary product handling to package conveyance. Whether you are in need of a conveyor (*screw, auger, belt, or flume*), a dumper (*hydraulic or chain-driven*), carts, a hoist, trolleys, or buggies - we provide custom solutions for unique applications.

11GS GRINDERS

Grind 40 LB in ~21 seconds,

Typically with a 20 HP motor, a standard CIP-able 11GS Grinder (1900 LB, 99"H x 50"W x 86"L) can grind: trim, 20s, 40s, and 60s at rates up to 7,000 LB/HR.



PRE-BREAKERS

Most applications do not require one (*KOSS Grinders are very robust*). Break your starting product into smaller, more manageable fragments with this custom stainless steel solution for unique applications. Designed and fabricated to USDA & WDA Sanitary Standards, KOSS' quality customizing ensures a great fit for your breaking needs. Lock-able swivel casters offer enhanced maneuverability, allowing for more precise positioning. Features a combination of finishes: polished product contact surfaces and panel box, with a bead-blasted frame, guarding, and additional surfaces.

11GT GRINDERS

Grind 500 LB in ~30 seconds

Typically with 20-25 HP motors, 11GT Grinders are quite popular, grinding: trim, 20s, 40s, 60s, and 500s at rates up to 20,000 LB/HR. They are frequently paired with other items; i.e. chain-driven Buggy Dumpers, Incline Conveyors (*product entry/exit*), Blenders, Cookers, Auger Wash Racks, etc.



DUMPERS

When customizing a dumper to fit your process there are multiple options available (*dump height being the most prominent*). Consider hydraulic or chain driven designs, as well as options such as removable buckets (*on casters for mobility*). KOSS Dumpers are customized to customer specifications.

CONVEYORS

Direct food contact units are our specialty. Consider adding an Entry and/or Exit Conveyor to your Grinder Line. High quality KOSS Conveyors are fully customizable and available in many styles: standard flat, curved, incline, mechanical, CIP-able, draining, sanitary, industrial, packaging, dip, ...and more. Designed and fabricated to USDA & WDA Sanitary Standards, consider innovating with KOSS.

14GT GRINDERS

Grind 640 LB in ~17 seconds

14GT models often feature 30-40 HP motors, our twin screw Grinders are capable of grinding sizes from trim to 640s at rates over 65,000 LB/HR. Consider us for your large scale production needs; KOSS quality: innovation that lasts.



PRODUCTION LINES & AUTOMATION

For complete solutions, consider our innovative systems. We create Process Layouts and Plant Designs to offer production flexibility with high-efficiency and low complexity & maintenance. Our team understands the inherent challenges of providing solutions complying with regulatory standards, and we excel at meeting those unique requirements present in each project. We serve applications such as: CIP, Dairy, Food & Beverage, Pasteurization, Ultra Filtration, Wastewater Management, ...and more. Specializing in Sanitary Process Control (Batch & Continuous) we have many years of experience. **Optimize your Manufacturing Process and Energy Efficiency - find your turnkey solution today!**

KOSS
ATTN: _____

Process & Sizing Specifications

For a viable, relevant solution that is ideal for both you and your application, please provide as much detail as possible. Submit additional information with confidence: project scopes, timelines, layouts, drawings, images, etc. Rest assured that KOSS values and maintains client confidentiality – your proprietary information will be utilized only for your company's project(s).

MODEL	SCREW	GRINDING	AT RATES *
5GS	single	Trim & Harped Blocks	≤1,200 LB/HR
8GS	single	Trim, 20 & 40 LB Blocks	≤4,500 LB/HR
11GS	single	Trim, 20, 40 & 60 LB	≤7,000 LB/HR
11GT	twin	Trim, 20, 40 & 500 LB	≤20,000 LB/HR
14GT	twin	Trim, 40, 500 & 640 LB	65,000+ LB/HR
24GT	twin	Trim, 40, 500 & 640 LB+	100,000+ LB/HR

REQUEST ■ PRESENTATION ■ QUOTE

COMPANY _____

LOCATION _____

CONTACT _____

ADDRESS _____

PHONE / FAX _____

EMAIL _____

All models fully customizable. Production rate and individual applications' unique product variables determine specific size.

* Numbers will vary based upon both product application and equipment configuration variables (extrusion hole size, drive ratio, media entry, etc.)

Please fill in the blanks & circle all that apply!



FOOTING



CASTERS (MOBILE)



SANITARY ADJ. BALL



SANITARY ADJ. TAB



SANITARY ADJ. BOLTED PLATE



BOLTED PLATE



LOAD CELL MOUNT

PRODUCT type(s) (to be ground).....

production rate..... moisture range.....

INPUT largest size block (to be ground)TRIM 20 LB 40 LB 60 LB 500 LB 640 LB OTHER_____

media entry MANUAL CONVEYOR COLUMN DUMPER OTHER_____

OUTPUT ground size (dia)..... 1/8" 3/16" 1/4" 5/16" 3/8" 1/2" 5/8" 3/4" 1" CHUNKED OTHER_____

discharging into..... grinder discharge height (H)

FACILITIES available floor space.....(LxW) ceiling height..... (H)

smallest door size equip to pass through.....(W) (H)

UTILITIES air PSI water..... GPM electrical.....

EQUIP cleaning.. CIP-ABLE HAND-WASH ext. finish...BEAD-BLAST POLISH discharge safety hood..YES NO

SAFETY PROX SWITCH COVER LIGHT CURTAIN FEED HOODED DISCHARGE OTHER_____

ACCESSORY portable auger wash rack (for safe and effective auger handling, the frame-mounted small parts basket provides easy cleaning and convenient organization) 

MOTOR VOLTAGE / HZ power ...1PH 3PH voltages.....US INTL

CONTROLS panels.....ON-GRINDER WALL-MOUNT OTHER_____

operator interface  PUSH BUTTON  HMI STANDALONE  HMI DISTRIBUTED

data collection ...  CHART RECORDER  VIDEOGRAPHIC  PROCESS HISTORIAN w/ REPORTING (for process line)

ANTICIPATED LEVEL OF AWESOMENESS (1=LOW, 10=HIGH) 1 2 3 4 5 6 7 8 9 10

Looking for basic function; no frills, no fuss? Or do you seek the epitome of innovation, so fully-loaded it makes your competitors green with envy?

Please supply any additional / missing information, so we may better understand your needs:

