



Quick Reference Catalog



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Leaders in Clean Since 1893

For over 125 years, Insinger Machine Co. has been on the leading edge of commercial dishwasher innovation and technology. Insinger delivers a full-line of high-quality warewashing equipment and service to the education, hospitality, healthcare, corrections and military markets worldwide. Family-owned and operated, our corporate headquarters and manufacturing facility are located in Philadelphia, PA.

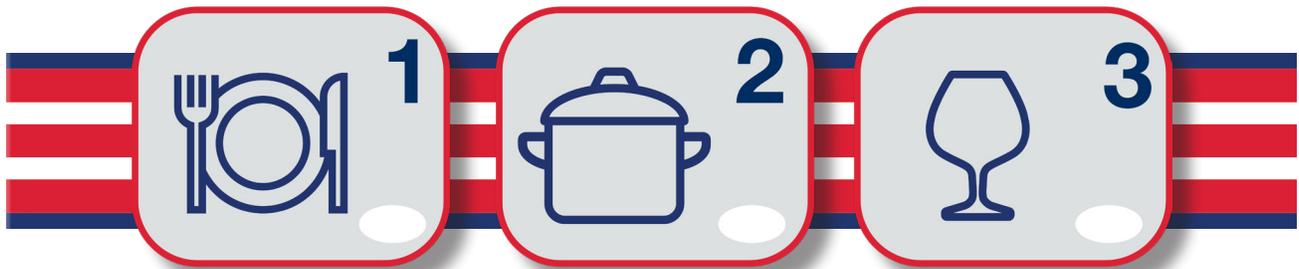
CADET

- High Temperature Undercounter Dishwasher
- Capacity is 30 (20" x 20") racks per hour
- Three dedicated wash cycles (Dishware, Cookware, Glassware)
- Energy Star 3.0 certified
- Extremely quiet with sound suppression lined panels. Rated at <65dB
- Built-in atmospheric booster with dedicated rinse pump provide consistent, constant 180°F hot water to properly sanitize ware—no external booster required
- Only requires 70°F minimum water temperature for 180°F high temp sanitation
- Includes everything you need to get started



Three dishwashers in one!

Three Cycles, Endless Options.



Dishware, Cookware, and Glassware

ENSIGN⁴⁰⁻²

- Automatic counter type single tank dishwasher with pass-through telescoping hood
- 0.75 gallons/rack
- Capacity is 43 (16" x 16") racks per hour or 720 dishes per hour
- No venting required



COMMANDER ACE

Ideal for cafes, pizza shops, and smaller food-service operations

High Temp Door Type Dishwasher

LED Indicator lights for easy monitoring

- High Temperature Door Type Dishwasher
- Capacity is 60 (20" x 20") racks per hour
- Three dedicated wash cycles (Dishware, Cookware, and Glassware)
- Energy Star 3.0 certified
- ACE Mode: Automated Cleaning Effect. Delimes and sanitizes the interior of the machine, including the booster heater, saving you labor and chemical costs
- Includes everything you need to get started
- Dedicated quick delime cycle
- Full stainless steel construction
- Built-in chemical dispensing pumps with priming system and pumped drain system
- Digital display with membrane switches with LED indicator on the hood



**PAIRS PERFECTLY
WITH CADET!**

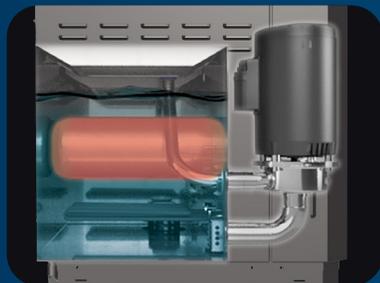
CX20

Ventless High Temp Door Type Dishwasher

- Capacity is 60 (20" x 20") racks per hour or 1625 dishes per hour
- Quad-Arm Wash System—washes faster with better results
- Industry First! IS (Integrated + Submerged) Booster recaptures radiant heat, saving energy and money
- Foot-operated drain pedal eliminates back strain
- Swing out control panel means all components and controls are accessible from the front of the machine
- Ergo-Grip door handle provides multiple options for hand placement and eliminates the need to modify dish tables for corner installation



World's Fastest Ventless Dishwasher!
60 RACKS PER HOUR



Integrated & Submerged Booster



Quad-Arm Wash System



Corner Clearance Built-In

ADMIRAL ADVANCED



ADMIRAL 44
ADVANCED



ADMIRAL 66
ADVANCED

Single Tank Rack Conveyor Dishwashers

- Available in 44" and 66" configurations
- Automatic conveyor, rack type, single tank dishwasher with recirculating wash and fresh water final rinse (with a recirculating pre-wash on the Admiral 66)
- Built-in IS (Integrated + Submerged) Booster
- Optional VaporGuard System for hood-free operation
- CrossFire Wash System provides superior cleaning
- Redesigned control panel



SERVICE FRIENDLY



RACKAWARE PLUS



ENERGY STAR 3.0

Rack Conveyor Dishwashers



SPEEDER⁶⁴

- Automatic conveyor, rack type, double tank dishwasher with recirculating wash and rinse and fresh water final rinse.
- 0.52 gallons/rack final rinse consumption
- Capacity is 277 (20" x 20") racks per hour or 6,925 dishes per hour
- CrossFire Wash System provides superior cleaning



SPEEDER⁸⁶

- Automatic conveyor, rack type, double tank dishwasher with recirculating pre-wash, wash, rinse and fresh water final rinse.
- 0.52 gallons/rack final rinse consumption
- Capacity is 277 (20" x 20") racks per hour or 6,925 dishes per hour
- CrossFire Wash System provides superior cleaning



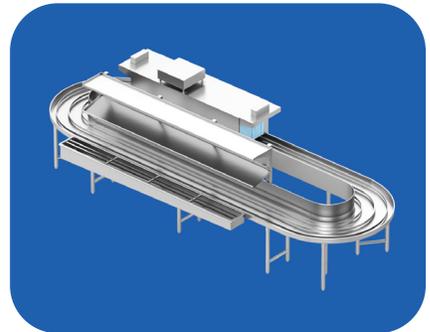
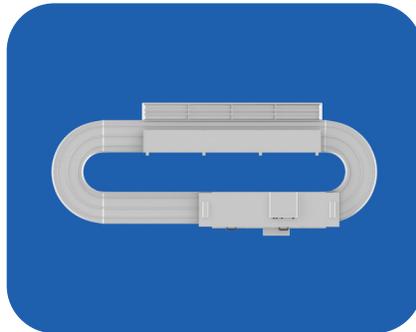
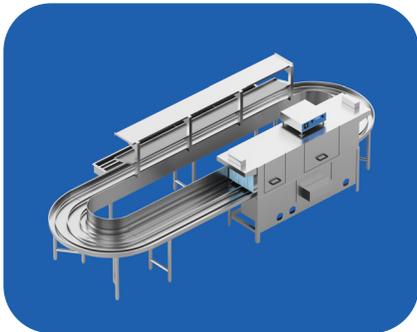
SUPER¹⁰⁶

- Automatic conveyor, rack type, three tank dishwasher with recirculating pre-wash, wash, rinse and fresh water final rinse.
- 0.72 gallons/rack final rinse consumption
- Capacity is 330 (20" x 20") racks per hour or 8,250 dishes per hour
- CrossFire Wash System provides superior cleaning

Rack Conveyor Accessories

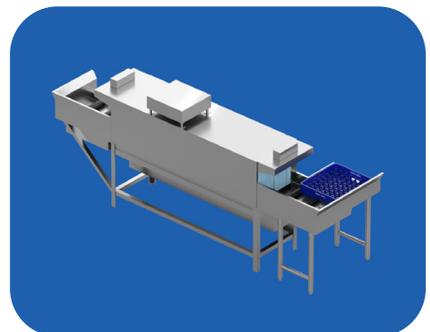
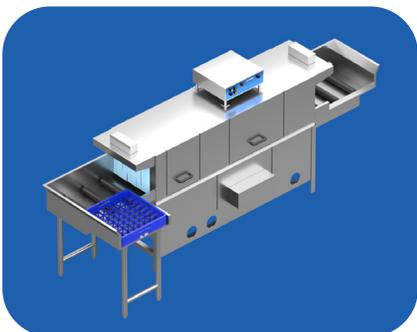
RACK-A-MATIC

- Custom-built warewashing system
- Adaptable to almost any dish room layout
- Works with any rack conveyor dishwashers (See individual specification sheets for each dish machine)
- Labor efficiency is increased by endless conveyor design
- Systems can be furnished with any type of shelving, disposer, troughs, tray rests or other accessories to meet specific needs



POWER LOADER & UNLOADER

- Labor and space saving; ideal for corner layout
- Dishroom operates at peak efficiency; auto load/unload
- May be used independently or in combination with each other
- Unique design allows for use around columns and in difficult areas
- Eliminates cumbersome, space consuming curved rollers



Flight Type Dishwashers

CENTURY SERIES

- Available in 14', 17', 19' and +21' configurations
- CrossFire Wash System provides superior cleaning



Century 14

CENTURY 14

- Capacity is 8,725 dishes per hour
- Conveyor speed of 7 feet per minute

CENTURY 17

- Capacity is 8,861 dishes per hour
- Conveyor speed of 7.1 feet per minute

CENTURY 19

- Capacity is 8,812 dishes per hour
- Conveyor speed of 6.8 feet per minute

CENTURY +21

- Capacity is 14,300 dishes per hour
- Conveyor speed of 11 feet per minute



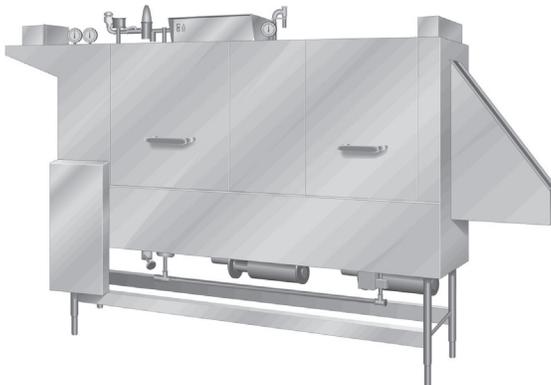
Century +21

Tray Washers



TRAC³²¹

- Automatic conveyor, single tank tray washer with recirculating pre-wash, wash and fresh water final rinse
- 248 gallons/hour final rinse consumption
- Capacity is 528 trays per hour (based on a 15" tray)



TRAC³²¹ RPW

- Automatic conveyor, double tank tray washer with recirculating pre-wash, wash and fresh water final rinse
- 248 gallons/hour final rinse consumption
- Capacity is 528 trays per hour (based on a 15" tray)



TRAC⁸⁷⁸

- Automatic conveyor, triple tank tray washer with recirculating pre-wash, wash and rinse and fresh water final rinse
- 197 gallons/hour final rinse consumption
- Capacity is up to 878 trays per hour (based on a 15" tray)

Tray Washer Accessories



TRAY DRYER

- Automatic conveyor tray dryer provides 99% dry trays
- Unique Air Wiper design reduces ability for bacteria to grow on wet, stacked trays
- Dryer and cleaner workplace—less racking of trays for drying
- Compatible with TRAC Series Tray Washers



TRAY STACKER

- Factory installed option for tray washers and tray dryers
- Automatically unloads and stacks clean dry trays on a tray handling cart
- Labor saving—only need one operator
- Sanitary—dry, stacked trays without additional handling
- Tray unloading rate is matched to the dryer tray processing rate

Pot & Pan Washers



CA-3

- Automatic door type pot, pan and utensil washer with timed wash and rinse cycle
- Capacity is 25 (24" x 28") racks per hour or 150 bun/pans per hour or 100 steam table (2" thick) pans per hour
- Fully automatic operation with power on/off button
- Cycle starts when doors are closed



DA-3

- Automatic door type pot, pan and utensil washer with timed wash and rinse cycle
- Capacity is 50 (24" x 28") racks per hour or 276 bun/pans per hour or 184 steam table (2" thick) pans per hour
- Fully automatic operation with power on/off button
- Cycle starts when doors are closed
- Twice the volume of CA-3



Pot & Pan Washers



SW-12

- Available in three configurations:
Front-Load, Pass-Through, and Corner Unit
- Automatic door type warewasher with timed wash and rinse cycle
- 12 racks per hour; 12 pans per rack
- Timers are all adjustable
- Fully automatic operation with power on/off button
- Cycle starts when doors are closed



SW-14

- Available in two configurations:
Front-Load and Pass-Through
- Automatic door type warewasher with timed wash and rinse cycle
- 12 racks per hour; 14 pans per rack
- Timers are all adjustable
- Fully automatic operation with power on/off button
- Cycle starts when doors are closed



SW-25

- Automatic door type warewasher with timed wash and rinse cycle
- 13 racks per hour; 12 pans per rack
- Timers are all adjustable
- Fully automatic operation with power on/off button
- Cycle starts when doors are closed



Pot & Pan Washers



SW-36

- Automatic door type warewasher with timed wash and rinse cycle
- 12 racks per hour; 36 pans per rack
- Timers are all adjustable
- Fully automatic operation with power on/off button
- Cycle starts when doors are closed



SW-48

- Automatic door type warewasher with timed wash and rinse cycle
- 13 racks per hour; 48 pans per rack
- Timers are all adjustable
- Fully automatic operation with power on/off button
- Cycle starts when doors are closed



SW-78

- Automatic door type warewasher with timed wash and rinse cycle
- 13 racks per hour; 78 pans per rack
- Timers are all adjustable
- Fully automatic operation with power on/off button
- Cycle starts when doors are closed

Pot & Pan Washing Systems



AQUA SCRUBBER

- Designed to your specification
- Automatic scrub sink reduces labor costs up to 56%
- Innovative angled corners with 2 jets in each corner keep the ware moving
- No corners = No jams or deadzones
- 2 hp TEFC pump
- Custom build to your application or choose from 2 pre-engineered systems



SMART SCRUBBER

- Three options available: 96", 112" and 136"
- Automatic scrub sink that creates the same turbulent whirlpool pattern as our Quadjet AquaScrubber at a SMART price point
- Simplified design
- SMART controls – pump on/off and heat on/off
- 110V electric for easy install and operation



Conveyor Systems

ROTARY TRAY ACCUMULATOR

The Rotary Tray Accumulator is a custom designed system available in 3, 4 or 5 tiers. Any tray size is accommodated with the flexible and space efficient design. The product allows for the possibility of storing and carrying up to 5 times more trays than a traditional tray return conveyor. This flexible system design allows the accumulator to be ordered with optional features that are custom tailored.



FLEX AND POLYCORD BELT TRAY RETURN CONVEYOR

The popularity of the flex belt model is largely due to its flexibility in use, from front-end operations with tray collection to the dishwashing operation. The system is self-cleaning and can accommodate a wide variety of items, trayed or individual.

The Polycord Tray Return Conveyor can replace other tray return conveyors. It meets the highest sanitary and safety requirements of every operation. There is no need for belting washing systems or expensive cleansers, simply use a damp cloth on the beds and cords.



Flex Belt



Polycord Belt

Disposers

- Commercial food waste disposers for every application: schools, cruise ships, large restaurants, hospitals and universities
- Easy to service worn mechanical parts without disassembling electrical components
- 3/4 to 10 hp motors available
- Offset body available for N, S and G Series
- Constructed using solid cast metal



I (6")



N (8")



S (10")



G (15")

Security Package



TRAC 878 Tray Washer and Tray Dryer with security packages

Where vandalism in dish rooms is a problem, add the Insinger security package to your warewashing equipment. Designed specifically for high-risk facilities, the security package replaces standard parts on the dishwasher with tamper-resistant components. The security package is available on all Insinger dishwashers.

- Every Security Package machine comes with stainless steel front and side panels standard
- The door handles are welded to the doors. Doors are secured to the machine by heavy-duty hasps
- All fill valves are enclosed in a stainless steel shield and the drain lever is equipped with provisions for a padlock
- All electric wiring is mounted in hard conduit
- For extra safety, we not only weld the tray cradles, we also weld the wash arms to the manifold on our tray washers
- Totally-enclosed special pumps and motors for all Security Package tray washers
- Both the wash and pre-wash thermometers are enclosed in a perforated stainless steel box. The final rinse thermometer, pressure gauge and vacuum breaker are also protected by a security case. Two padlock hasps are provided for locking the control panel security cover



Stainless steel perforated boxes are used to protect the thermometers and gauges from damage.

Product Categories

<p>ESSENTIAL  SERIES</p>	<p>CADET</p>	<p>COMMANDER ACE</p>
<p>PREMIER  SERIES</p>	<p>CX20</p>	<p>ADMIRAL ADVANCED</p>
<p>FLAGSHIP  SERIES</p>	<p>CENTURY SERIES</p>	
	<p>AQUASCRUBBER</p>	<p>SMARTSCRUBBER</p>
	<p>CA-3</p>	<p>DA-3</p>
	<p>SPEEDER 64 SPEEDER 86 SUPER 106</p>	
	<p>SW-12 SW-25 SW-36 SW-48 SW-78</p>	
	<p>TD 321 TRAC 321 TRAC 878 TRAY STACKER</p>	
	<p>SCULLERY  SERIES</p>	<p>45SA</p>
<p>CX20 MARINE EDITION</p>		

Which Dishwasher is Right for You?

Small Operations	"Mom & Pop" Shops	CADET
	Cafes	ENSIGN⁴⁰⁻²
	Small Offices	<small>COMMANDER</small> ACE
	Nursing Homes	CX20
Mid-Size Operations	Day Cares	
	Chain Restaurants	
	K-12 Schools	ADMIRAL <small>44 66 ADVANCED</small>
	Universities	
	Institutions	
	Large Restaurants	SPEEDER⁶⁴
Prisons	SPEEDER⁸⁶	
Hospitals		
Employee Dining		
Hotels	SUPER¹⁰⁶	
Large Operations	Universities	
	Casinos	
	Large Schools	CENTURY
	Hospitals	
	Institutions	

Dish Room Setup

There is a lot to consider when designing a dish room. It may not sound like a vital part of a food-service operation, but in reality, the dish room is just as important as the food prep area or cooking stations.

How? Well, just think you have sixty people an hour visiting your restaurant. That's sixty dishes, sixty cups or glasses, sixty sets of utensils and you need to turn them over every hour for the next eight hours. It impacts your whole operation. If you don't have clean dishes, you can't serve food.

This section was put together to help you answer the critical questions you need to make your dish room, and in-turn your whole operation work at optimum levels.

On the next few pages, you will find a worksheet to help you determine the correct dishwasher for your operation, machine sizing guides categorized by industry and a checklist and questionnaire to help you design your dish room to be as efficient as possible.

Below is a checklist of items that are a must for your dish room and optional items, that are not integral, but can make your operation even more efficient if you have the space to include them:

MUST HAVES:

- Insinger Dishwasher
- Hot Water Source
- Dishracks
- Handwashing Sink
- Compartment Sinks or Automatic Washing System Sinks
- Clean and Soiled Dish Tables
- Detergents and Sanitizers
- Food Disposal Unit
- Dry Storage Area
- Stackable Dish Racks
- Dish Carts
- Rack Dollies
- Shelving

OPTIONAL ITEMS:

- Sani-buckets
- Water Treatment Product
- Scraping Area with 30 Gallon Trash Can
- Rubber Gloves and Disposable Aprons
- Dedicated Undercounter
- Poker Chip Dollies
- Hand Washing Sink or Cleantech System



Machine Sizing Calculation Form

- A) Number of Pieces Per Seat _____ Pieces
- B) Number of Seats _____ Seats
- C) Number of Turns During Peak Hour _____ Turns
- D) Total Number of Pieces (A x B x C) _____ Pieces/Hour
- E) Multiplier for Additional Items (D x 1.1) _____ Pieces/Hour
- F) Efficiency Factor (E x 0.7)
(employee efficiency, kitchen design, flow) _____ Pieces/Hour
- G) Total Racks Per Hour (F ÷ 20 to 25) _____ Racks/Hour

Insinger Models & Racks Per Hour

CADET Undercounter	30 Racks/Hour
CX20 Door Type	60 Racks/Hour
Admiral Series Conveyor Type	233 Racks/Hour
Speeder Series Conveyor Type	277 Racks/Hour
Super 106 Conveyor Type	330 Racks/Hour
Century Flight Type	8,736 Dishes/Hour

Dishroom Design Checklist

Project Name:

Date:

Site Address:

Contact :

Phone #:

E-mail:

What type of dishwasher is existing, if any?

Use the following questions, as a guide, to determine the dishwasher that will provide optimum results for your operation.

How many seats or meals are served per day or cycle?

What are the menu considerations?

What ware is being washed? Plates? Glassware? S/S flatware? Silver plated flatware? Plastic? Compartment trays? Bake sheets? Large ware?

What is the largest item that is being run through the dishwasher?

What are the dimensions?

What volume of ware is being washed?

What is the required delivery date?

DISHROOM DIMENSIONS

What are the dimensions of the allotted space? Include bussing, scrapping, sorting, racking, warewashing, pre-rinsing, and drying.

Would a Power Loader and Power Unloader enhance the productivity of the operation?

What is the current flow of work? What is working well and what could use improvement?

Once the type of dishwasher has been determined you will need to choose the machine specifics.

TANK HEAT

What type of tank heat is the customer using or considering?

Electric immersion coil?

Steam injection? Is there "clean steam"?

Steam coil? NOTE: There needs to be a steam condensation return line.

Infrared gas? Gas is available on the Admiral 44, 66, Speeder 64 and Century flight machines. (Liquid propane or natural gas).

BOOSTER

What booster size is required? 40° rise 70° rise

Built-in Remote

NOTE: 70° rise is the safer assumption; many facilities have trouble getting 140°F water to the booster and they must be sure they can make the NSF range for final rinse (Minimum of 180°F).

UTILITIES

Incoming Water

What is the temperature of the water fed to the dishwasher?

What is the temperature of the water fed to the booster?

Incoming Electric

Is there an existing dishwasher? YES NO

What is the electric service fed to the dishwasher? Voltage? Phase?

What is the circuit breaker on the line fed to the dishwasher?

What is the electric service fed to the booster?

What is the circuit breaker on the line fed to the booster?

VENTILATION REVIEW

Is there existing duck work? YES NO Does it require any changes? YES NO

NOTE: The exhaust requirement for each dishwasher is listed on the back of each spec sheet.

TABLES

Are tables to be used if there is an existing dishroom? Will alterations need to be made to existing table?
 YES NO

Will new tables need to be ordered? Lengths: Soiled _____ Clean _____

OPTIONAL EQUIPMENT

What options are desired? Some options that you may want to consider are listed below. Check each spec sheet for all the options available for each dishwasher.

- | | |
|---|---|
| <input type="checkbox"/> Pressure reduction valve | <input type="checkbox"/> Security packages |
| <input type="checkbox"/> Totally enclosed motor | <input type="checkbox"/> Insulated doors |
| <input type="checkbox"/> Split doors or lift out doors (for low ceilings) | <input type="checkbox"/> Stainless steel belt |
| <input type="checkbox"/> Wall mounted control panel | <input type="checkbox"/> Load-end flushing system |

DELIVERY

Check delivery path dimensions. What is the smallest dimension the machine will pass (w x l x h)

Are there joints that will need to be welded in the field? YES NO

Where will the machine be delivered?

Is there a dock? YES NO

Will a lift gate be needed? YES NO

Is there room to store the machine at the facility prior to installation? YES NO

CADET



COMMANDER
ACE



ESSENTIAL  SERIES

X20



ADMIRAL
ADVANCED

PREMIER  SERIES



FLAGSHIP  SERIES

SPEEDER SERIES
SUPER 106



TRAC SERIES

CA-3 & DA-3
SW SERIES



AQUASCRUBBER
SMARTSCRUBBER

DISPOSERS



SCULLERY  SERIES



455A



X20
MARINE EDITION

Follow

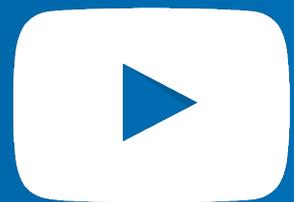


Insinger

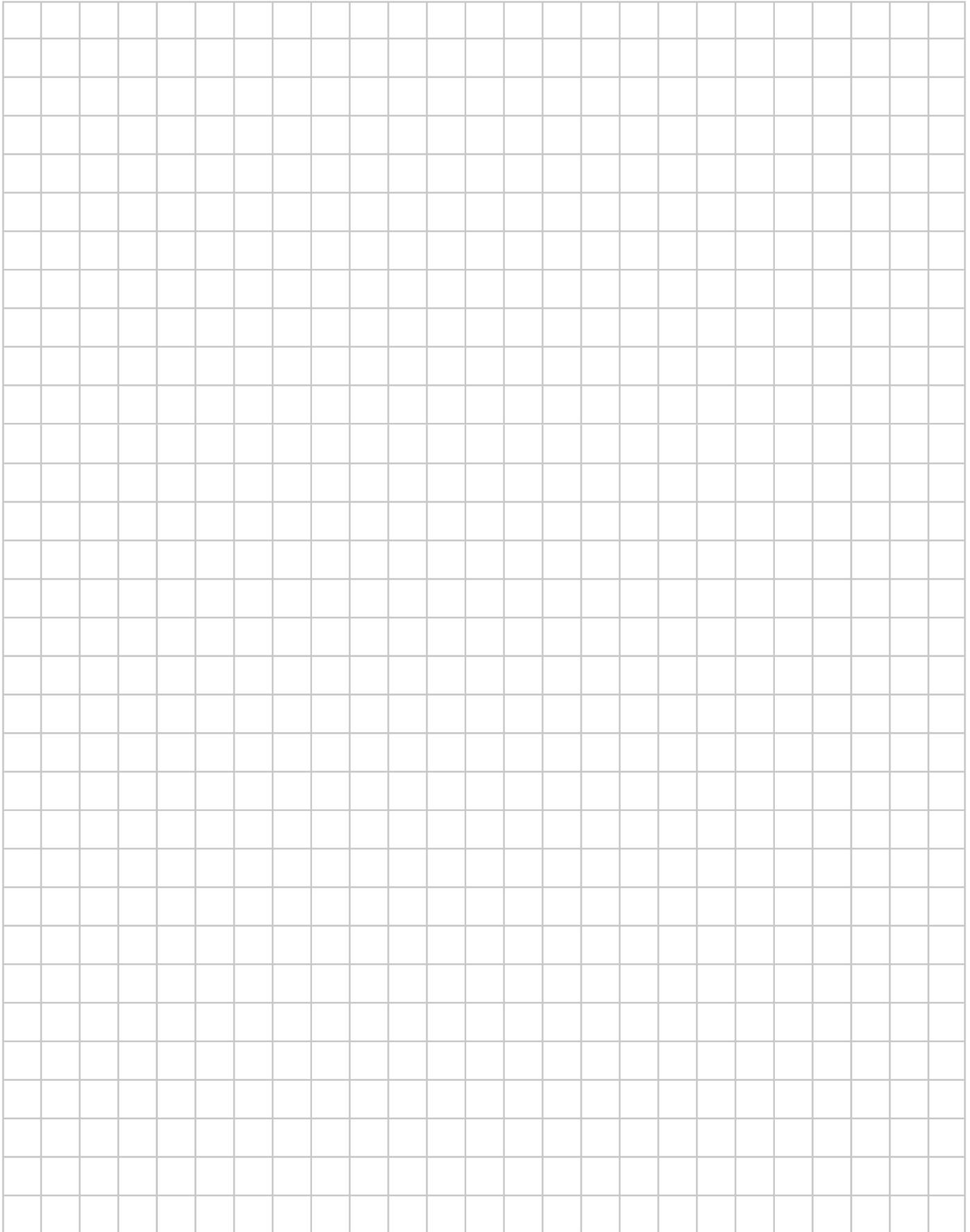
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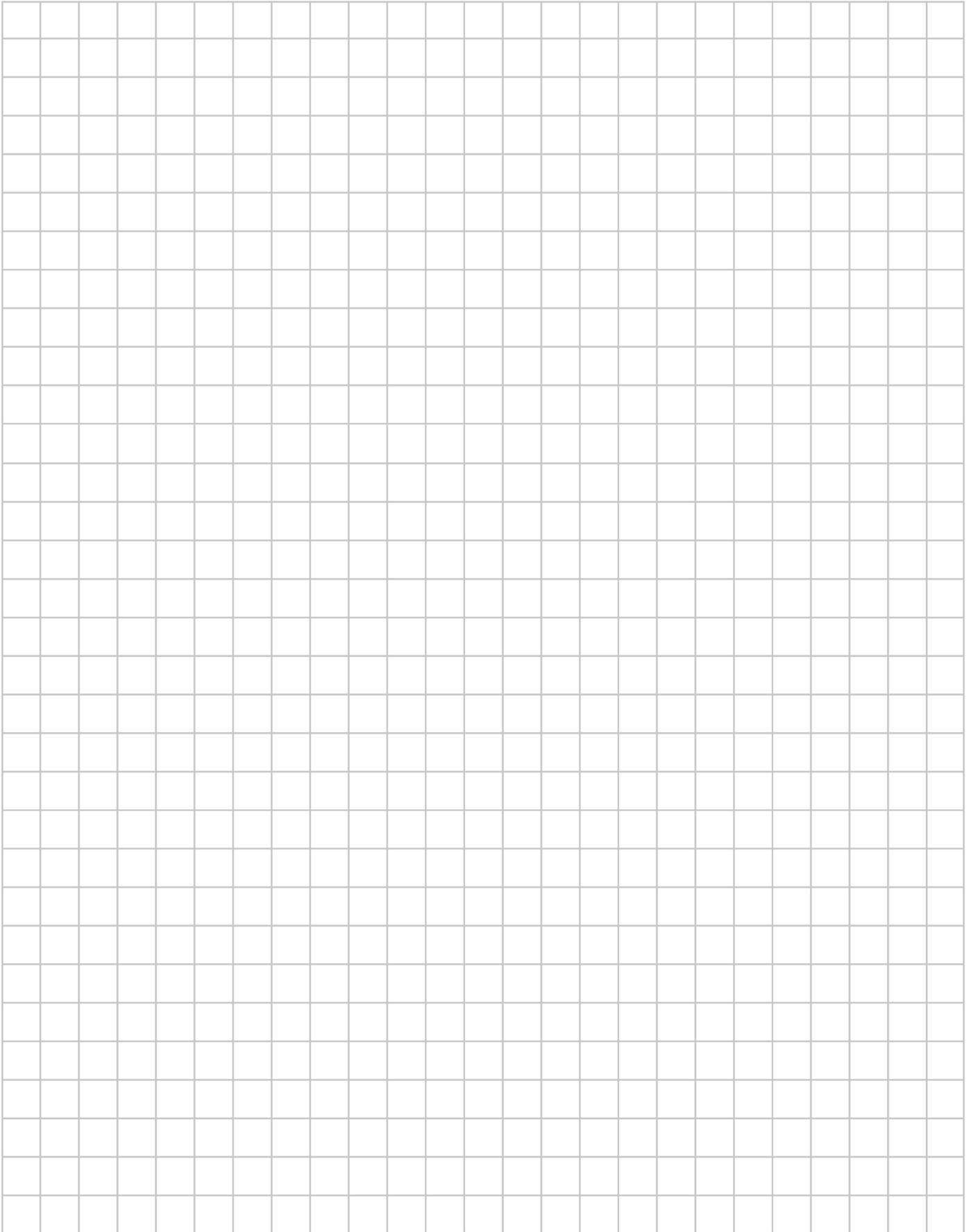
@InsingerMachine



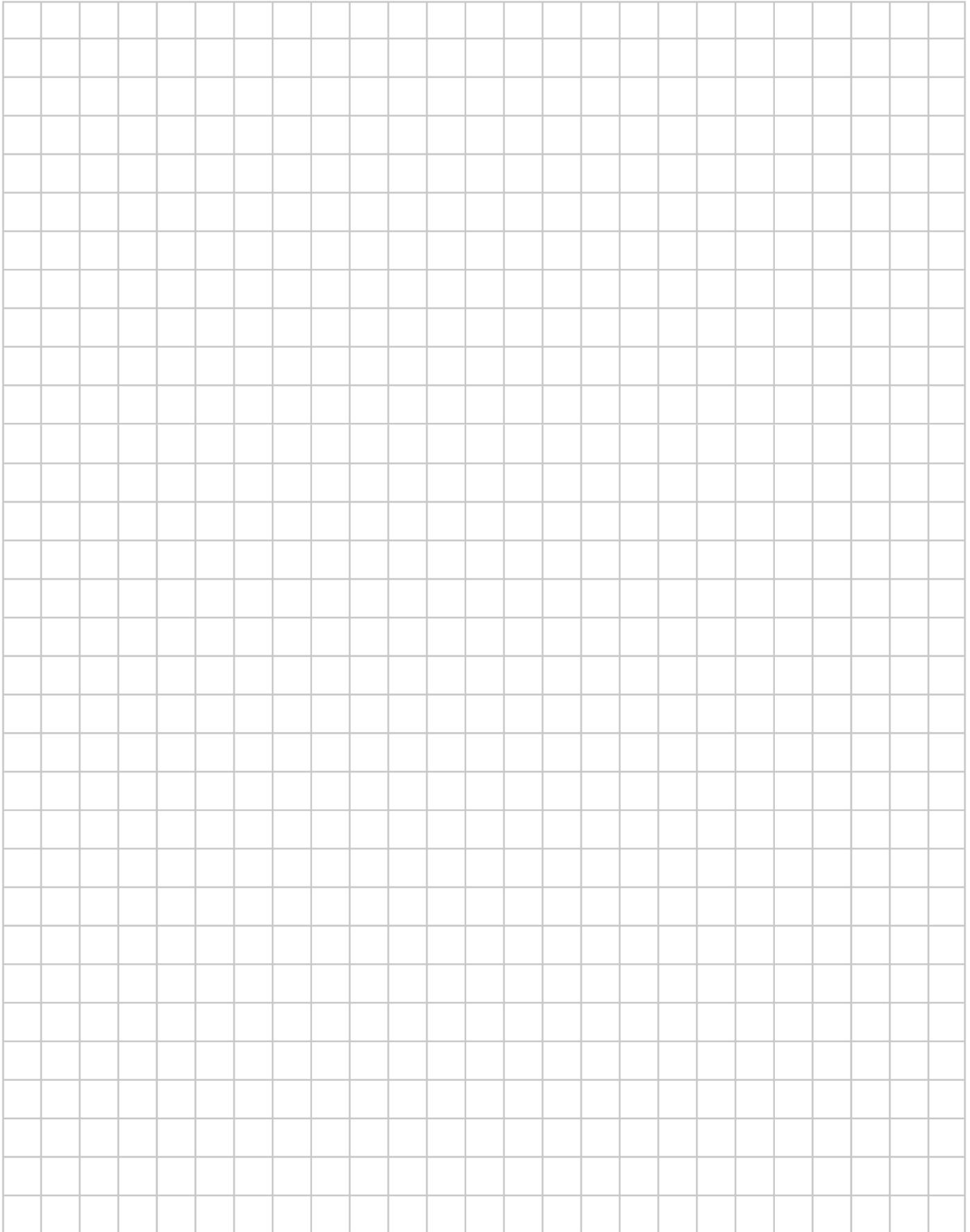
Notes/Sketches



Notes/Sketches



Notes/Sketches





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