



HOSHIZAKI AMERICA. BEYOND STRONG.

It's the *promise of reliability...* and the peace of mind that comes with it.

It's performing *beyond expectations...*with relentless durability and sustainability.

It's knowing that we've already thought about your future and can endure at *the next level.*

Introducing the new Steelheart Refrigeration Series

Hoshizaki seeks natural solutions such as sustainable materials and hydrocarbon refrigerants for a clean and healthy environment. R290 hydrocarbon refrigerant is a highly refined propane proven safe in refrigeration applications. Used in Europe for over 20 years, R290 has minimal environmental impact.

Refrigerant Environmental Impact	R290	R134
Ozone depleting properties	0	0
Global Warming Potential	3	1300

With uncompromising performance, R290's thermodynamic properties are superior to other refrigerants while being both climate friendly and energy efficient. Combined with Hoshizaki's unique ducted airflow technology, you can be assured your products remain fresh, nutritious, and safe as a result of uniform temperatures and quick recovery.

As anyone that runs a commercial kitchen knows, only the strong survive. Just like our legendary ice makers, we've designed our new Steelheart Series to survive conditions that would send lesser equipment to the scrap yard. We embrace the entrepreneurial character of our customers...as you connect, serve, and delight.



HOSHIZAKI. BEYOND STRONG.

INTRODUCING

STEELHEART

BY HOSHIZAKI

WANT FLUFFY? — BUY A KITTEN —

The **uncompromising durability** we're known for, with no fragile, "fluffy features" that add cost and create maintenance nightmares.



FEATURES :

- **Stainless Steel, Inside and Out**
- **No interior Hot Spots**
- **Exceeds NSF7 Standards up to 100°**
- **R290 Hydrocarbon Refrigerant**



As anyone who runs a commercial kitchen knows, only the strong survive. Just like our legendary ice makers, we've designed our new Steelheart Series to survive conditions that would send lesser equipment to the scrap yard. **Hoshizaki. Beyond Strong.**



hoshizakiamerica.com

INTRODUCING

STEELHEART

BY HOSHIZAKI

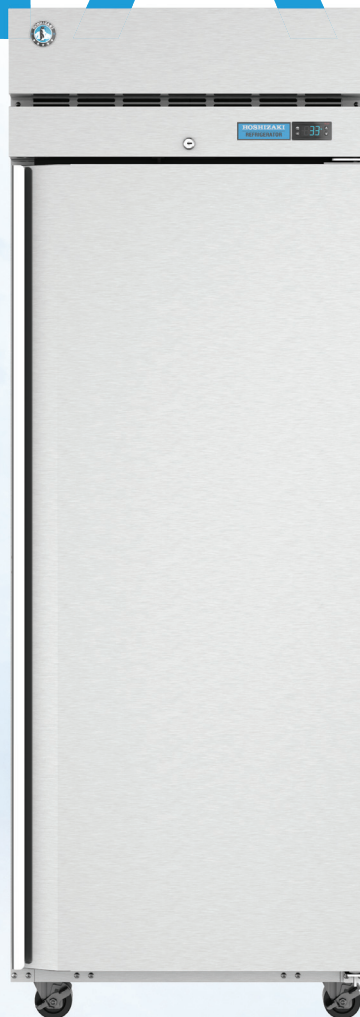
1 PART

BEAUTY

2 PARTS

BEAST

The uncompromising durability we're known for, with no fragile, "fluffy features" that add cost and create maintenance nightmares.



FEATURES :

- Stainless Steel, Inside and Out
- Unique ducted airflow
- Larger interior cabinet space for more storage
- R290 Hydrocarbon Refrigerant
- Redesigned refrigeration system for optimal performance
- Even more ENERGY STAR® qualified models

The **NAFEM** Show | **19**
Visit Booth #1457

As anyone who runs a commercial kitchen knows, only the strong survive. Just like our legendary ice makers, we've designed our new Steelheart Series to survive conditions that would send lesser equipment to the scrap yard. **Hoshizaki. Beyond Strong.**



hoshizakiamerica.com



HOSHIZAKI

UNDERCOUNTERS | WORKTOPS | SANDWICH TOPS

MEGA TOPS | PIZZA PREPS

KEY FEATURE COMPARISON

FEATURE	HOSHIZAKI Steelheart	TRUE TUC series	BEVERAGE AIR UCR/SPE/DP series	CONTINENTAL SW/CPA series	TURBO AIR TUR series	DELFIELD Coolscapes	TRAULSEN Dealers choice
Engineered to maintain NSF-7 temperatures in 100° F ambient	✓		✓	✓			
Stainless steel interior & exterior	✓				✓		
Self closing, field reversible doors with stay open feature	✓			✓		✓	
Recessed door gasket and stepped door design	✓						
Electronic thermostat with automatic defrost	✓						
3 years parts & labor 5 year compressor	✓	✓	✓	✓	✓	✓	✓



HOSHIZAKI. BEYOND STRONG.





HOSHIZAKI

STEELHEART | UPRIGHT REFRIGERATION KEY FEATURE COMPARISON

	HOSHIZAKI Steelheart Series	TRUE Spec Series	CONTINENTAL Designer Line	DELFIELD Coolscapes	BEVERAGE-AIR Horizon Series	TRAUlsen A Series	TURBO AIR Pro Series
Stainless Steel Interior and Exterior	✓				✓		✓
Louvered Ducted Airflow	✓						
Thermal Expansion Valve (TXV)	✓			✓		✓	✓
Field Reversible Doors without Additional Kits	✓		✓	Full height doors only			
Full Length Handle	✓			✓			
Energy Star	✓	✓		✓			✓
Roll Through A Standard 80" Door	✓					✓	
Cubic Storage Capacity (1 Section)	22.8	22.09	19.3	21.46	21.17	21.13	25.41

REFRIGERATION MODEL NUMBER IDENTIFICATION

HORIZONTAL REFRIGERATION | MODEL NUMBER IDENTIFICATION CODE

U R 27 A - LP01

Series Identification

U	Undercounter
W	Worktop
S	Sandwich Prep/Mega Top
P	Pizza Prep
C	Chef Base

Model Identification

R	Refrigerator
F	Freezer

Unit Width

In Inches

Series Modification

A Alphabetically increases per model revisions

Options Configuration

-LP / -D	Low Profile / Drawers
-# / -#D#	Number of 1/2-Sized Pan Capacity / Number of 1/2-Sized Pan Capacity with Number of Drawers in Sandwich Prep
-#M / -#MD#	Number of 1/2-Sized Pan Capacity / Number of 1/2-Sized Pan Capacity with Number of Drawers in Mega Top
-01	Unit with Cylinder Lock

UR27A-LP01

Undercounter,
Refrigerator,
27" Wide,
*Revision A**,
Low Profile,
With Cylinder Locks

* The series modification letter can be generally ignored when talking about the unit, this letter is only important if you are getting Tech Support or ordering service parts.

REFRIGERATION MODEL NUMBER IDENTIFICATION

HORIZONTAL REFRIGERATION | MODEL NUMBER IDENTIFICATION CODE

S R 48 A - 12MD2

Series Identification

U	Undercounter
W	Worktop
S	Sandwich Prep/Mega Top
P	Pizza Prep
C	Chef Base

Model Identification

R	Refrigerator
F	Freezer

Unit Width

In Inches

Series Modification

A Alphabetically increases per model revisions

Options Configuration

-LP / -D	Low Profile / Drawers
-# / -#D#	Number of 1/6-Sized Pan Capacity / Number of 1/6-Sized Pan Capacity with Number of Drawers in Sandwich Prep
-#M / -#MD#	Number of 1/6-Sized Pan Capacity / Number of 1/6-Sized Pan Capacity with Number of Drawers in Mega Top
-01	Unit with Cylinder Lock

SR48A-18MD2

Mega Top Prep Table,
Refrigerator,
48" Wide,
*Revision A**,
(18) 1/6-Sized Pan Capacity in Rail,
Door and 2 Drawers

* The series modification letter can be generally ignored when talking about the unit, this letter is only important if you are getting Tech Support or ordering service parts.

REFRIGERATION MODEL NUMBER IDENTIFICATION

UPRIGHT REFRIGERATION | MODEL NUMBER IDENTIFICATION CODE

R 1 A - FS

Model Identification

R Refrigerator
F Freezer

Number of Sections

1 / 2 / 3 One, Two, or Three Sections

Series Modification

A Alphabetically increases per model revisions

Door Configuration

-FS / -HS Full Height or Half Height Stainless Door
-FG / -HG Full Height or Half Height Glass Door
-FSL / -HSL Full Height or Half Height Stainless Door, Left Hand Hinge

R1A-FS

Upright Refrigerator,
One Section,
*Revision A**,
Full Stainless Door

* The series modification letter can be generally ignored when talking about the unit, this letter is only important if you are getting Tech Support or ordering service parts.



HOSHIZAKI

UNDERCOUNTER REFRIGERATORS

Existing Model:	Transitions to:
CRMR27	UR27A
CRMR27-01	UR27A-01
CRMR27-D	UR27A-D2
CRMR27-LP	UR27A-LP
CRMR36	UR36A
CRMR36-01	UR36A-01
CRMR48	UR48A
CRMR48-01	UR48A-01
CRMR48-D2	UR48A-D2
CRMR48-D4	UR48A-D4
CRMR60	UR60A
CRMR60-01	UR60A-01
CRMR72	UR72A
CRMR72-01	UR72A-01
CRMR27-GLP01	UR27A-GLP01
CRMR48-GLP01	UR48A-GLP01
CRMR60-D2	UR60A-D2
CRMR60-D4	UR60A-D4
CRMR72-D6	UR72A-D6
HR24A	HR24B

UNDERCOUNTER FREEZERS

Existing Model:	Transitions to:
CRMF27	UF27A
CRMF27-01	UF27A-01
CRMF27-D	UF27A-D2
CRMF27-GLP01	UF27A-GLP01
CRMF27-LP	UF27A-LP
CRMF48	UF48A
CRMF48-01	UF48A-01
CRMF48-D4	UF48A-D4
CRMF60	UF60A
CRMF60-01	UF60A-01

WORKTOP REFRIGERATORS

Existing Model:	Transitions to:
CRMR27-W	WR27A
CRMR27-WD	WR27A-D2
CRMR27-W01	WR27A-01
CRMR36-W	WR36A
CRMR36-W01	WR36A-01
CRMR48-W	WR48A
CRMR48-WD2	WR48A-D2
CRMR48-WD4	WR48A-D4
CRMR48-W01	WR48A-01
CRMR60-W	WR60A
CRMR60-W01	WR60A-01
CRMR60-WD2	WR60A-D2
CRMR60-WD4	WR60A-D4
CRMR72-W	WR72A
CRMR72-W01	WR72A-01
CRMR72-WD6	WR72A-D6

WORKTOP FREEZERS

Existing Model:	Transitions to:
CRMF27-W	WF27A
CRMF27-WD	WF27A-D2
CRMF27-W01	WF27A-01
CRMF48-W	WF48A
CRMF48-W01	WF48A-01
CRMF48-WD4	WF48A-D4
CRMF60-W	WF60A
CRMF60-W01	WF60A-01

MEGA TOPS PREP TABLES

Existing Model:	Transitions to:
CRMR27-12M	SR27A-12M
CRMR27-12MD	SR27A-12MD2
CRMR36-15M	SR36A-15M
CRMR48-12M	SR48A-12M
CRMR48-18M	SR48A-18M
CRMR48-18MD2	SR48A-18MD2
CRMR48-18MD4	SR48A-18MD4
CRMR60-12M	SR60A-12M
CRMR60-18M	SR60A-18M
CRMR60-24M	SR60A-24M
CRMR60-24MD2	SR60A-24MD2
CRMR60-24MD4	SR60A-24MD4
CRMR72-18M	SR72A-18M
CRMR72-24M	SR72A-24M
CRMR72-30M	SR72A-30M
CRMR72-30MD2	SR72A-30MD2
CRMR72-30MD4	SR72A-30MD4
CRMR72-30MD6	SR72A-30MD6

SANDWICH PREP TABLES

Existing Model:	Transitions to:
CRMR27-8	SR27A-8
CRMR27-8D	SR27A-8D2
CRMR36-10	SR36A-10
CRMR48-8	SR48A-8
CRMR48-12	SR48A-12
CRMR48-12D2	SR48A-12D2
CRMR48-12D4	SR48A-12D4
CRMR60-8	SR60A-8
CRMR60-12	SR60A-12
CRMR60-16	SR60A-16
CRMR72-12	SR72A-12
CRMR72-16	SR72A-16
CRMR72-18	SR72A-18



**UNDERCOUNTERS
WORKTOPS
SANDWICH PREP
MEGA TOP
CHEF BASES
PIZZA PREP TABLES**

CHEF BASES

Existing Model:	Transitions to:
CRES36	CR36A
CRES49	CR49A
CRES60	CR60A
CRES72	CR72A
CRES85	CR85A
CRES98	CR98A
CRES110	CR110A

PIZZA PREP TABLES

Existing Model:	Transitions to:
CPT46	PR46A
CPT46-D	PR46A-D2
CPT67	PR67A
CPT67-D2	PR67A-D2
CPT67-D4	PR67A-D4
CPT93	PR93A
CPT93-D2	PR93A-D2
CPT93-D4	PR93A-D4
CPT93-D6	PR93A-D6



HOSHIZAKI



UPRIGHTS

UPRIGHT REFRIGERATORS	
<i>Existing Model:</i>	<i>Transitions to:</i>
CR1S-FS	R1A-FS
CR1S-HS	R1A-HS
CR1S-FGE	R1A-FG
NEW	R1A-HG
CR2S-FS	R2A-FS
CR2S-HS	R2A-HS
CR2S-FGE	R2A-FG
NEW	R2A-HG
CR3S-FS	R3A-FS
CR3S-HS	R3A-HS
CR3S-FGE	R3A-FG
NEW	R3A-HG

UPRIGHT FREEZERS	
<i>Existing Model:</i>	<i>Transitions to:</i>
CF1S-FS	F1A-FS
CF1S-HS	F1A-HS
CF1S-FGE	F1A-FG
NEW	F1A-HG
CF2S-FS	F2A-FS
CF2S-HS	F2A-HS
CF2S-FG	F2A-FG
NEW	F2A-HG
CF3S-FS	F3A-FS
CF3S-HS	F3A-HS

LEGEND	
<i>Abbr.</i>	<i>Meaning</i>
R	Refrigerator
F	Freezer
1	One Section
2	Two Section
3	Three Section
FS	Full Solid Door
HS	Half Solid Door
FG	Full Glass Door
HG	Half Glass Door



HC Refrigerants Requirements & Recovery

HOSHIZAKI

R290 Refrigerant
R600a Refrigerant

EPA Recommends certified training for handling R290 and R600a refrigerants.



NATURAL
REFRIGERANTS

As a world-class corporation, Hoshizaki America, Inc. is committed to developing original, energy efficient products with clear benefits for our customers. We seek natural solutions - such as hydrocarbon refrigerants in our products – for a clean and healthy environment.

What are R290 & R600a refrigerants?

- They are hydrocarbon (**HC**) refrigerants.
- **R290**: Common name for high purity propane (C₃H₈)
- **R600a**: Common name for isobutane (C₄H₁₀)*
- **R290/R600a** refrigerants are proven safe, not an environmental threat, and have been used in international markets for more than 10 years.
- Only refrigerant grade **R290** or **R600a** should be used.

Why not R134a?

- Regulations ban R134a in certain uses, **effective 2019**.
- Most commercial refrigeration manufacturers are moving to **R290** as the alternative to R134a.

R290 Service Overview

- **R290 & R600a** are **FLAMMABLE**. You **MUST** observe caution and follow proper safety practices when servicing **R290/R600a** refrigeration systems.
- Servicing refers to making repairs to the hermetically sealed system and any part of the electrical system. There is a 150 gram (5.29 ounces) charge limit of **R290/R600a** for commercial applications.
- Repair on **R290/R600a** systems **MUST** always be done in a well ventilated area.
- Because **R290/R600a** is highly flammable, a combustible gas leak detector and safety placard is required when servicing **R290/R600a** systems.

Servicing R290/R600a vs. R134a

- Operationally very similar systems:
 - Operating pressures of **R290/R600a** systems are slightly higher than an equivalent R134a system.
- **Example:**
 - At 100°F, evaporating pressure in an **R290** system is approx. 46 psig.
 - At 100°F, evaporating pressure in an **R134a** system is 26.6 psig.
- Specialized training is not mandated, but is recommended.
(Online Training Available) www.rses.org

R290 and R600a Parts and Requirements

- Spark resistant/sealed electrical components are required.
 - Only like component replacement parts are to be used on **R290/R600a** systems. **NO** substitutes.
 - Avoid unapproved parts at all times.

R290/R600a Recovery

Hoshizaki recommends recovery as outlined by RSES procedures and noted in our service manual.

- Using proper refrigerant practices, place piercing valves toward the end (crimped area) of the high and low-side process tubes, then recover the refrigerant into an approved container or device.

Note: Warning labels as provided by Hoshizaki.

▲ DANGER

Risk of Fire or Explosion. Flammable Refrigerant Used

- To be repaired only by trained service personnel.
- Do not puncture refrigerant tubing. Risk of fire or explosion due to puncture of refrigerant tubing; follow handling instructions carefully.
- Consult instruction manual / service manual before attempting to install or service this product. All safety precautions must be followed.
- Dispose of properly in accordance with federal or local regulations.

Risque De Feu Ou D'Explosion. Le Frigorigène Est Inflammable

- Confier les réparations à un technicien spécialisé.
- Ne pas perforez la tubulure contenant le frigorigène. Risque de feu ou d'explosion si la tubulure contenant le frigorigène est perforée; suivre les instructions de maintenance avec soin.
- Consulter le manuel du propriétaire/guide de réparation avant de tenter un
- Éliminer conformément aux

REFRIGERATOR

Model: SR60A-24MD4
Serial: H50001C

AG SUPPLY VOLTAGE: 115/120 V
AMPERES: 5-9
DESIGN PRESSURE: HI-380PSI LO-380PSI
REFRIGERANT TYPE: R290 3-1.02

THIS EQUIPMENT IS INTENDED FOR USE IN ROOMS HAVING AN AMBIENT TEMPERATURE OF 87°F (31°C) OR LESS. MOTOR-COMPRESSOR THERMALLY PROTECTED.

HOSHIZAKI AMERICA, INC.
Clerks, CA
hoshizakiamerica.com

COMMERCIAL REFRIGERATOR AND/OR FREEZER

▲ DANGER

Risk of fire or explosion. Flammable refrigerant used. Do not use mechanical devices to defrost. Do not puncture refrigerant tubing.

Risque de feu ou d'explosion. Le frigorigène est inflammable. Ne pas utiliser d'appareils mécaniques pour dégivrer le réfrigérateur. Ne pas perforez la tubulure contenant le frigorigène.

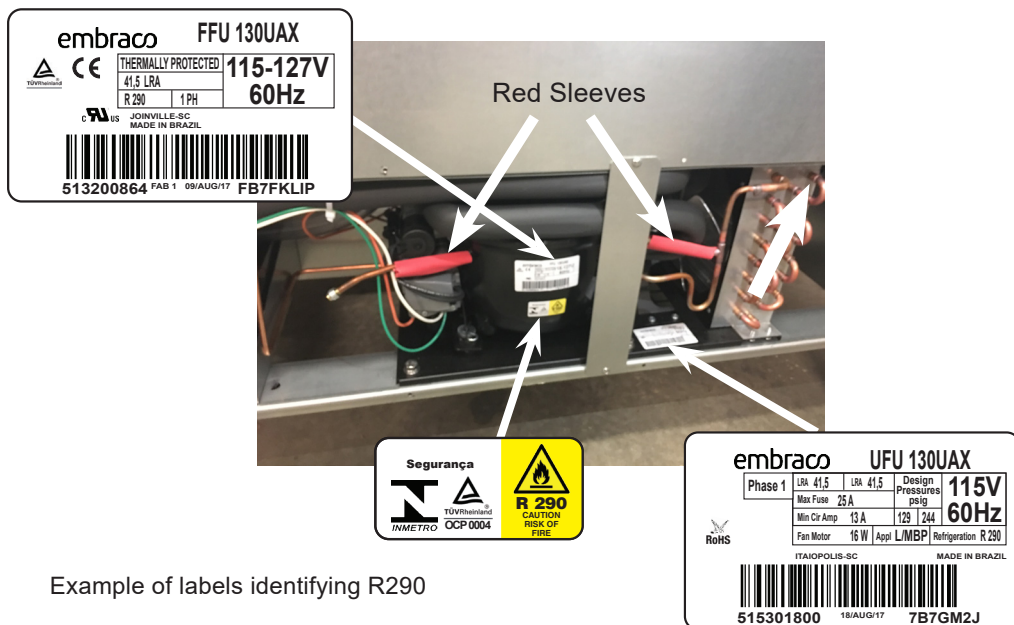
- All products containing **R290** or **R600a** must be clearly labeled.

continued on Page 2

Red and Blue Hoses

Standard refrigeration gauge manifold hoses may be used on **R290** and **R600a** systems.

However, the red and blue hoses are to be as short as reasonably possible.



Example of labels identifying R290

R290/R600a Recovery

continued from Page 1

Red Sleeves

- Red sleeves are installed on the process tubes on **R290** and **R600a** systems. These sleeves are to remain in place. If removed for service, they must be returned to their original position.

Training

Hoshizaki recommends servicing as outlined by RSES procedures.

- Refrigeration Service Engineering Society (RSES) offers an online course on **R290** and **R600a** refrigeration. There is a charge for this course: www.rses.org

Read the Hoshizaki Service Manual Before Any Repair

- Before starting any refrigeration repair, post the **Danger Propane** or **Danger Isobutane** placard on the front of the appliance.
- A Combustible Gas Leak Detector **MUST** be turned on prior to starting any work and remain on and near the work area for the duration of the servicing or repair.
- Power to the appliance being serviced **MUST** be disconnected.
- Service personnel should wear appropriate Personal Protective Equipment (PPE).
- When purging the system, **ONLY Oxygen Free Dry Nitrogen** should be used.
- Replacement refrigerant **MUST** be approved **Refrigerant Grade** of the proper type.
- A fully charged and recently serviced (within past year) Carbon Dioxide or Dry Powder Fire Extinguisher **MUST** be in the work area.
- Maintain good ventilation in the area at **ALL** times and eliminate **ALL** ignition sources in the area.
- R290/R600a MUST** be removed from the system, via the **R290/R600a Recovery Process** (piercing valve), before cutting into the system with tubing cutters. Use **CAUTION** as there may be residual **R290/R600a** still in the system.
- Solder joints **MUST NOT** be heated (touched with a flame) to remove a component, such as a compressor or filter dryer, from an **R290/R600a System**.
- You **MUST** use tubing cutters to cut connections to remove a compressor or other component in an **R290/R600a System**.

Publications:

- Hydrocarbon Refrigerants: A Study Guide for Service Technicians**, published 2012 by RSES
ISBN-13: 978-1-61607-180-6
- Hoshizaki Service Manuals** available for all refrigeration products



Scan the QR Code to look up manuals:

