



WE'RE
TURNING UP
THE HEAT

4000°
3800°
3600°
3400°
3200°
3000°
2800°
2600°
2400°
2200°
2000°
1800°
1600°
1400°
1200°
1000°



“NOW THAT’S A
HOT TIP!”SM

– George Benyak, Renowned Industry Expert

The INFERNO[®] by Harris sets the new standard in tips for the HVAC/R and plumbing industries. This revolutionary tip is hotter than hot and contractors will recognize the perfect flame every time they fire up the INFERNO. Choose the INFERNO by Harris and take comfort in knowing that you have the best tool to get the job done right.

WE SAW ROOM FOR IMPROVEMENT

Brazing and soldering tips have not changed much over the past decade. We talked to contractors and they told us they wanted something better – a truly hot tip they could trust to perform consistently. Following our extensive research, we got to work and created something special. The INFERNO by Harris is the result of unparalleled product development and engineering efforts. With the INFERNO, we created the first air-fuel tip that is worthy of the Harris name.

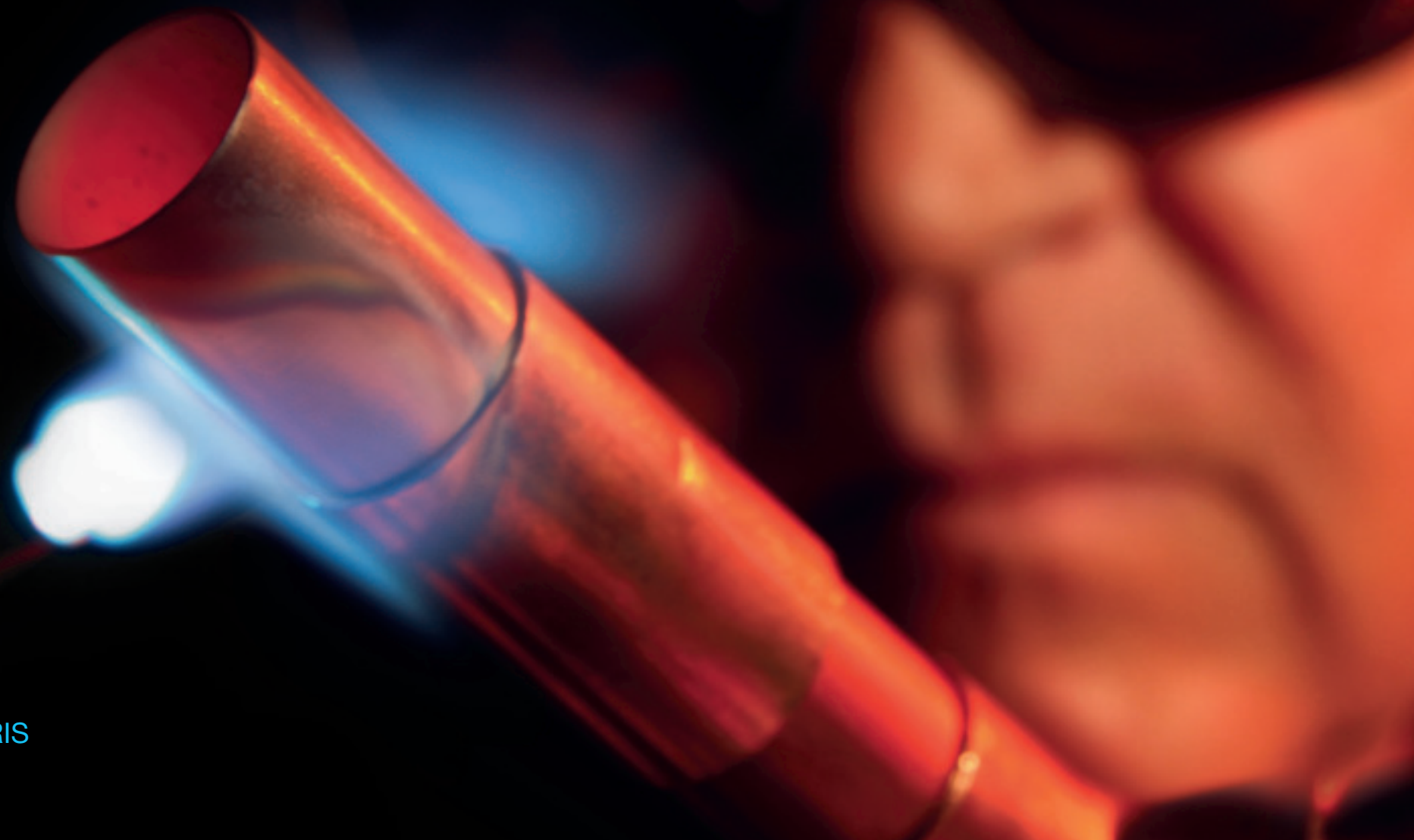
WE KNOW WHAT IT TAKES

HVAC/R and plumbing contractors deserve the best. Harris has always represented the highest quality, control and consistency in brazing and soldering tools, alloys, supplies, training and support. The Harris Products Group has a heritage of innovation that dates back to 1905. The INFERNO by Harris is another revolutionary product from a trusted industry leader.

WE’RE BETTER THAN THE REST

You can be sure that Harris won’t squander its outstanding reputation on sub-standard or “me too” tip offerings. Just fire up the INFERNO and you will see the difference. Inconsistent performance and flame “horns” are now a thing of the past. The INFERNO by Harris is the hottest, most consistent tip in the industry.

MORE HEAT, CONTROL AND CONSISTENCY – THE INFERNO BY HARRIS

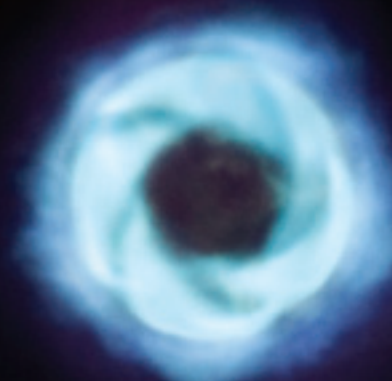


MORE HEAT, CONTROL AND CONSISTENCY

Contractors in heating, ventilation, air conditioning, plumbing and refrigeration know that when it comes to quality and performance, the heat, temperature consistency and flame need to be perfect every time. The equipment they choose and the brand they rely on need to deliver. We created the INFERNO to meet the rigorous needs of today's contractor.

SWIRL COMBUSTION TECHNOLOGY

The revolutionary INFERNO tip has a specially designed insert that delivers reliable swirl combustion performance every time. The swirl combustion of the INFERNO tip is unlike anything offered on the market. Contractors get a consistent, hotter flame that will engulf and wrap around the work piece for maximum efficiency.

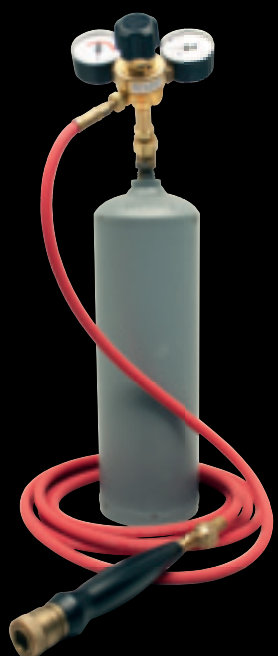


DURABLE, LONG-LIFE DESIGN

Tips take a beating, so the INFERNO is constructed from thick and strong 304 stainless steel tube stock. All INFERNO tips are crafted from industrial grade materials designed to stand up in the field. The INFERNO by Harris is a tip that is built to last.

YOUR GO-TO TIP

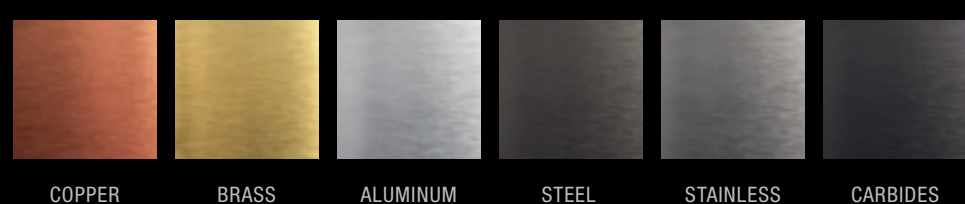
The INFERNO by Harris can deliver what projects in the field require – a hot, consistent and controllable flame with optimal safety for a job well done. Sure, professional contractors need to have air-fuel and oxy-fuel equipment choices at their disposal. But why be burdened with a complicated oxy-fuel setup when a high-performance air-fuel INFERNO tip is really the best tool for the job? Contractors can rely on the INFERNO by Harris for the hot, consistent and controllable flame they need.



EASY TO INTEGRATE

All INFERNO tips were designed to work and integrate with today's existing quick-connect air-fuel handles. This allows contractors to simply and quickly connect the INFERNO tip to their existing torch handle and they are ready to work. And, the INFERNO by Harris was designed to be compact and portable, meeting the real-world needs that contractors have.

INFERNO APPLICATIONS



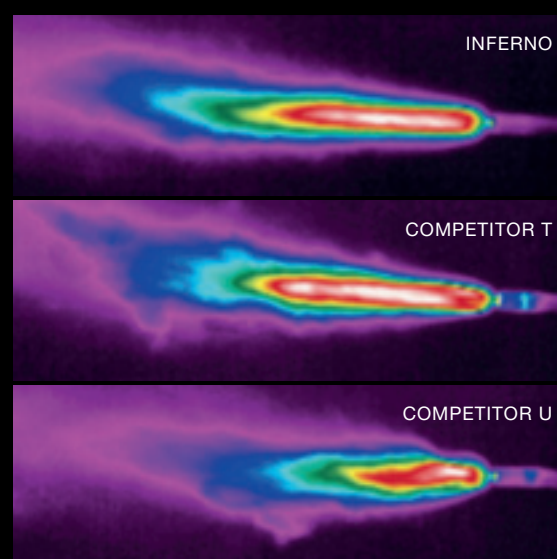
Applications in the field vary. Contractors will have confidence with the INFERNO by Harris that the right combination of tip and alloys needed to get the job done right are always available.

THE HOTTEST TIP, EVERYTIME

The technology behind the INFERNO is the result of exhaustive research and development followed by exacting standards in manufacturing. The lack of heat, inconsistency and "Horns" you might find in the flames of other brands are not found in the flame of the INFERNO by Harris. With INFERNO, you get a richer, hotter, more perfect burn.

PROOF POSITIVE – THE PERFECT FLAME

Using thermal photography techniques, the product development team at Harris evaluated the relative flame consistency and heat of the INFERNO tips. The team focused on developing a configuration in the design of the INFERNO tips that would produce the proper heat with reliable and repeatable flame performance.



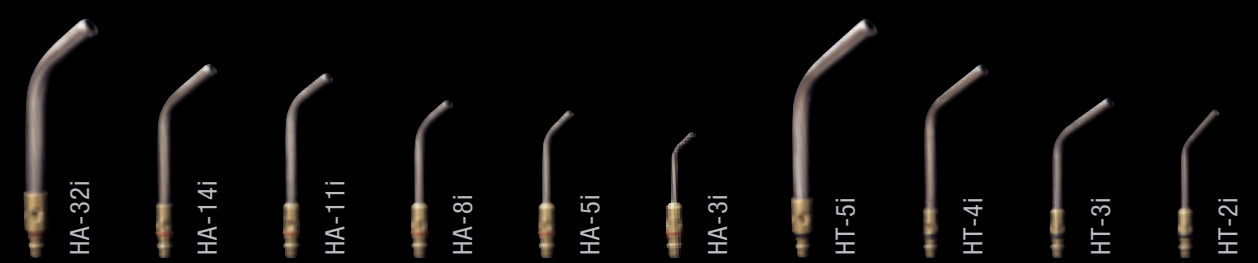
COOLER HOTTER

QUALITY, PRECISION MANUFACTURING

Engineers at Harris, in developing the INFERNO, understand that the heat contractors need starts with the precision of the tip orifice. To get the best flame, the team at Harris developed a unique manufacturing process that allows for consistent production of all INFERNO tip orifices. Our exacting manufacturing standards ensure the optimal delivery of fuel gas, resulting in the perfect flame. In addition, during the manufacturing process, every tip is tested twice, once to ensure the perfect orifice and once to ensure flame quality – this all adds up to making a truly great, hot tip.



TIPS FOR ANY BRAZING OR SOLDERING NEED

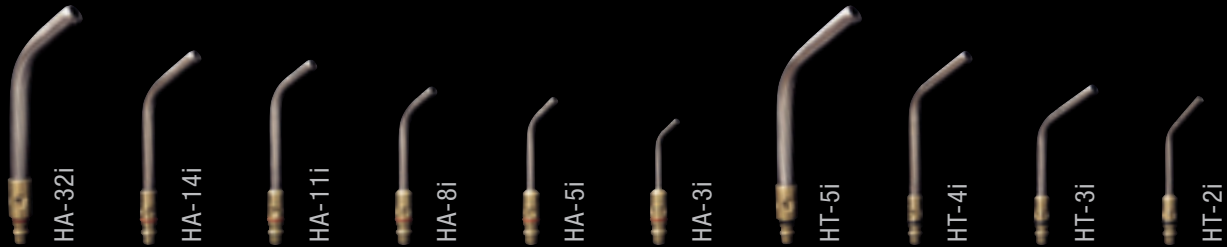


MODEL	TIP SIZE		GAS FLOW		SOFT SOLDER		BRAZING		PART #
	INCHES	MM	@14 PSI SCFH	(0.9 BAR) M3/HR	INCHES	MM	INCHES	MM	
HA-3i	1/4"	6.65	3.10	0.09	up to 1"	up to 25	up to 1/2"	up to 13	1601110
HA-5i	5/16"	7.87	5.80	0.16	3/4"-1 1/2"	19-38	1/4"-3/4"	6-19	1601111
HA-8i	3/8"	9.65	6.60	0.19	1"-2"	25-50	1/2"-1"	13-25	1601112
HA-11i	7/16"	11.18	9.80	0.28	1 1/4"-3"	32-75	7/8"-1 5/8"	22-41	1601113
HA-14i	1/2"	12.70	12.60	0.36	2"-3 1/2"	50-89	1"-2"	25-50	1601114
HA-32i	3/4"	19.05	27.50	0.78	4"-6"	102-152	1 1/2"-4"	38-102	1601115
HT-2i	5/16"	7.87	1.50	0.04	1/8"-1/4"	3-6	1/16"-1/4"	2-6	1601130
HT-3i	7/16"	11.18	3.10	0.09	1/4"-1"	6-25	1/8"-1/2"	3-13	1601131
HT-4i	1/2"	12.70	3.60	0.11	1/4"-1 1/2"	6-38	1/4"-3/4"	6-19	1601132
HT-5i	3/4"	19.05	11.50	0.33	1 1/2"-2 1/2"	38-64	1/2"-1 1/4"	13-32	1601133
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HT-5i	3/4"	19.05	11.50	0.33	1"-4"	25-102	1/2"-2"	13-50	1601133





Harris offers a full series of manual lighting INFERNO tips for all of your brazing and soldering needs.



ACETYLENE

PROPANE

PROPYLENE

	MODEL	TIP SIZE		GAS FLOW		SOFT SOLDER		BRAZING		PART #
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