



HARP

INTERNATIONAL



ARE YOU READY

FOR THE F-GAS REGULATIONS?

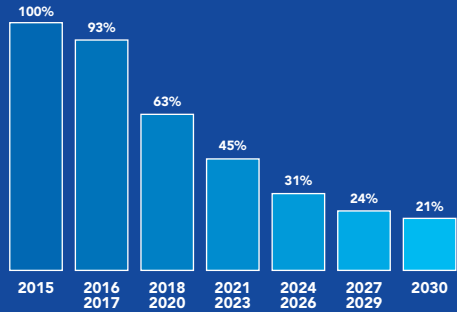
HARP, YOUR TAILOR MADE SOLUTION

ARE YOU READY FOR THE F-GAS REGULATIONS?

HFC bans from 2020

- Use of HFC refrigerants with a GWP above 2500 in new stationary refrigeration equipment, except if operating below -50°C .
- Use of HFC refrigerants with a GWP of 2500 or more for service and maintenance of refrigeration equipment where the charge size is greater than 40 Tonnes CO_2 equivalent, except if operating below -50°C .

EU HFC PHASE DOWN STEPS



% HFC placing on the market of HFCs (Tonnes CO_2 equivalent)



R-404A is the most widely used gas in the EU in stationary refrigeration systems, commonly used in low-temperature commercial systems such as those used in supermarkets.

With a GWP of 3922, R-404A can no longer be used to service and maintain refrigeration equipment where the charge size is greater than 40 Tonnes of CO_2 equivalent (approximately 10kgs of R-404A).

Therefore a solution is needed to replace this refrigerant whilst continuing to deliver the required cooling reliably and efficiently.

➔ Reclaimed **R-404A** can still be used for service and maintenance until 2030.

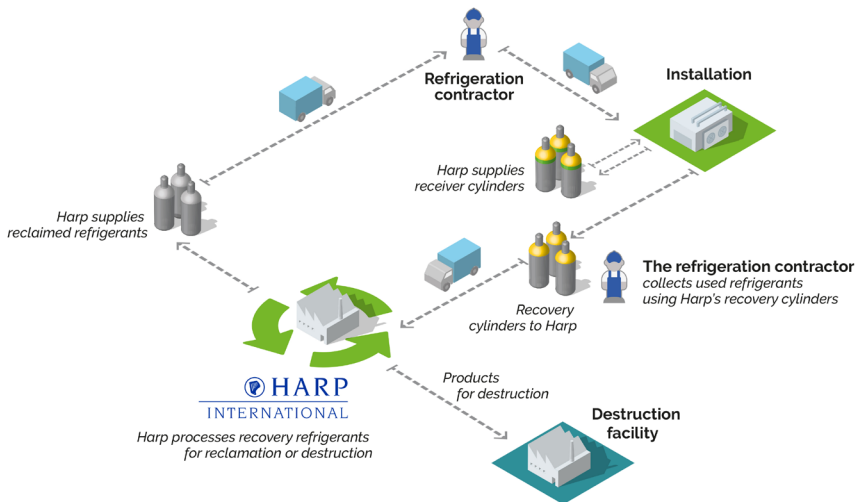
EXISTING EQUIPMENT

Now that the F-Gas ban on servicing larger systems with virgin refrigerants with GWP of 2500 or above has come into force, **reclaimed R-404A refrigerant is the best option** for customers still requiring higher-GWP refrigerants.

DISCOVER OUR SERENITY PACK

- R-449A (Opteon™ XP40) & R-448A supply
- Reclaimed R-404A
- Analysis & reclamation
- Reclaimed R-404A banking
- Filling and nationwide delivery

THE RECLAMATION PROCESS



➔ REFRIGERANT RECLAMATION is the reprocessing of a recovered fluorinated greenhouse gas in order to match the equivalent performance of a virgin substance.

NEW EQUIPMENT DESIGNS

THE FULL RANGE OF **NEXT-GENERATION, LOW-GWP** REFRIGERANTS

Opteon™ XL20 (R-454C) and Opteon™ XL40 (R-454A) are mildly flammable refrigerants with low Global Warming Potential (GWP) for replacement of R-404A in new equipment designs.

→ APPLICATIONS

- Supermarket refrigeration systems including:
 - Distributed systems
 - Walk-in coolers & freezers
 - Food preparation rooms
- Condensing units (e.g. in food service)
- Cold stores
- Self-contained systems



Authorized Distributor
of The Chemours Company



THE COMPLETE WORLDWIDE REFRIGERANT SOLUTION

Founded in 1991, **HARP INTERNATIONAL** offers complete refrigerant solutions for the refrigeration & air conditioning industries both in Europe and overseas.



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