COdiNOx™
Exhaust Gas Purification
for Greenhouses
200 kW - 40 MW

hugengineering.
A Company of the ElringKlinger Group
From Flue Gases to Pure Air

CO2 Fertilizer for Greenhouse Horticulture

CODINOX™ CO2 FERTILISATION

Locally and internationally, horticulturists do not want to miss the benefits of using the CODINOX™ installation. This flue gas cleaner converts CHP gas engine flue gases to almost pure air. The cleaned air can immediately be used for CO2 fertilisation in greenhouse horticulture. It is a sustainable solution that demonstrably increases production. The introduction of the CODINOX™ system in 1993 by Hanwel Environment & Energy was a world first. Continuing client-oriented developments have meant that we have been the world market leader in these systems for over 20 years.

INCREASE YOUR PRODUCTION LEVELS

Using a CODINOX™ flue gas cleaning installation offers you, the horticulturist, a considerable number of extra benefits compared to conventional CO2 dosing techniques.

A CHP using a CODINOX™ installation will result in:

• approx. 40% increase in production in your greenhouse
• considerably less heat produced per kg of CO2, resulting in less heat wastage
• substantial savings on energy costs without any adverse effects on the CO2 dosing
• more flexibility with regard to optimising your own energy needs

LOWER CO2 COSTS

CO2 costs take up a large portion of any firm’s annual overall costs. By fitting a CODINOX™ flue gas cleaning installation you will pay considerably less per kg of CO2 than if you were to use a CO2 dosing system. Even when you allow for the extra initial and other associated costs. Would you like to find out what you could save by using a CODINOX™ flue gas cleaning installation? We will do the math for you.

COMPACT AND COST-SAVING

The CODINOX all-in-one concept combines compact proportions with ‘plug and play’ convenience. All flue gas components are integrated in a single housing. This compact unit reduces engineering and transport costs, saves space and simplifies project planning. The high degree of prefabrication reduces assembly risks at the client’s premises and makes for a project that can easily be managed.

THE NOx-RAW MEASUREMENT PRINCIPLE: ANTICIPATION IS CONTROL

The NOx-Raw measurement principle anticipates changes in gas engine flue gas flow and reacts within milliseconds. This is a major breakthrough in process control and output stability, without sacrificing CO2 quality and availability. You benefit from greater flexibility in exploiting your resources as a result of the NOx-Raw measurement principle’s greater bandwidth.

CODINOX™ SYSTEM

Better techniques and accumulated knowledge mean that our installations meet and exceed the latest and most demanding horticultural requirements. You can feel secure in the knowledge that, wherever you are in the world, our team of specialists has the expertise and experience to ensure that your installation will comply with increasingly stringent, local environmental legislation. It is no coincidence that CODINOX™ installations are to be found in all leading, horticultural regions - worldwide.

Your Benefits with CODINOX™

- 40% more production
- Better quality
- Cleaner environment
- Lower costs
- More flexible energy manag.t tools

CODINOX™ WORLD-WIDE

Better techniques and accumulated knowledge mean that our installations meet and exceed the latest and most demanding horticultural requirements. You can feel secure in the knowledge that, wherever you are in the world, our team of specialists has
HUG EMISSION REDUCTION:
Competence, Compact and Cost-Saving

CODINOX™ ALL-IN-ONE SYNERGY THROUGH
CUSTOMER-ORIENTED INNOVATION

Many years of customer-oriented innovation has resulted in the COdiNOx™ all-in-one concept. This advanced system combines experience and feedback from the market with the most modern of techniques. The COdiNOx™ all-in-one concept is compact in size and uses the ‘plug-and-play principle’. This will mean savings on space and installation costs, and assembly and installation on location will reduce the level of possible risk. This will make your project much more manageable.

ABOUT HUG

With over 30 years of experience with stationary, mobile and marine applications, Hug Engineering has a unique level of know-how in the reduction of emissions.

This success is based on intensive, targeted R&D and a wide and flexible scope of supply in advanced emissions reduction systems – from standardized modules to customized systems, based on the customers’ specifications and applicable legislation, and supplied and installed according to their individual preferences.

COdiNOx products of Hug Engineering used to be exclusively distributed by Hanwel Environment & Energy. In 2016, Hug Engineering took over the Hanwel Group.