



CASE STUDY

SICIM - Outdoor cabinet cooling in extreme environments.

Paywelders equipped with 4/4X DTS 3081 cooling units.

„This is an application that has been tested for several years in the most difficult weather conditions, a well-deserved success that once again underlines the robustness, efficiency and reliability of our outdoor air-conditioning solutions.“

Andrea Pavarani
Sales Area Manager
Pfannenberg Italia srl

The construction company SICIM was founded in Italy 1962 and is specialized in the installation of pipelines and relevant ancillary facilities for the transmission and distribution of oil, gas and water. It has an impressive fleet of machinery that can be mobilized anywhere around the globe.

The experience gained as result of operating for the most important international Oil & Gas Companies in all types of logistic, climatic and environmental conditions, has allowed SICIM to continuously modify and optimize all the relevant operating procedures and adapt them to the specific technical and contractual requirements.



Paywelder machines at work in a desert environment.

Application requirements

Thousands of SICIM machines, including pipe-layers, paywelders, excavators, bulldozers and drills, are used to perform demanding tasks in the implementation of global projects.

These machines operate under extremely harsh operating conditions, e.g. in deserts or in high mountains and are exposed to daily high temperatures, high humidity, salty environment, sand, etc.

The control cabinets installed on these machines must be effectively cooled and require a temperature control.

The solution

Due to the need for high reliability in critical outdoors installations, plus compact size to minimize vibrations and fit the small cabinet, SICIM has successfully applied the Pfannenberger 4/4X stainless steel cooling unit DTS 3081, 694 W.

The perfect and reliable functioning and the full satisfaction of the given requirements convinced the customer to standardize the solution on each and every paywelder in its fleet.

NEMA PROTECTION	12	3R/4	4/4x
Access to hazardous parts	•	•	•
Ingress of solid foreign objects (falling dirt)	•	•	•
Ingress of water (dripping and light splashing)	•	•	•
Ingress of water (rain, snow, and sleet)		•	•
Ingress of solid foreign objects (dust, lint, fibers, and flyings)	•	•	•
Oils and coolant seepage	•		
Ingress of water (hosedown and splashing water)		•	•
Corrosive agents			•
IP EQUIVALENT	IP 54	IP 56	IP 56



DTS 3081



Control cabinet and Pfannenberger cooling unit on a SICIM paywelder machine.

Facts at a glance

Task	Outdoor compact cabinet cooling for harsh environments.
Application	Paywelder machines for oil, gas and water pipes.
Solution	70 pcs DTS 3081 4/4X cooling units
Success factors	<ul style="list-style-type: none"> • efficiency and reliability in harsh environments • low maintenance • user friendly installation