

CLEAN TECHNOLOGY LABORATORY

We test to ISO 16232



Rust Season

Can it get any worse? Can you lessen its impact?

Well the short answer is "yes" and "yes" – things people do can make your annual "Rust Season" worse (as if it wasn't already bad enough) and things people do can also lessen its impact. This is true whether we are talking about "red rust" (iron oxide) or "white rust" (aluminum oxide.) I'll go out on a limb and guess you aren't reading this hoping to make it worse but rather hoping to lessen its impact.

Part temperature drops markedly when parts are shipped moderate to long distances during cold weather conditions OR spend a cold night or weekend on the truck. Then they are brought rapidly from the cold into the heated facility. IF the packaging is opened immediately (by Receiving, etc.) or if packaging design simply allows that heated air to hit those cold parts then they either frost up (if very cold) or via condensation water droplets form on/in the parts. Premature rust is nearly certain because the Rust Preventative gets diluted and washed partially or fully away.

So how do you stop that from happening?

You stop it from happening by ensuring parts that, during shipment, have gotten 5-10+ degrees Fahrenheit colder than the facility they will next be stored in are, "by intentional design," only allowed to return to ambient temperature (the temperature of the surrounding environment) very slowly – so slowly that they do not either frost up (after which the frost thaws all over them) or have water droplets condense upon them or in them nor condense on other surfaces within the micro-climate of the packaging compartment they are in. This can be accomplished many ways so I will not elaborate extensively on how to do it but rather trust the ingenuity of your team to determine the best cost effective approach to apply the "only slow temperature change" principle to your shipments both sent and received. When you conscientiously ensure that no warm air rushes in on cold parts – instead innovatively ensuring parts you ship or receive take hours to very slowly come up to ambient temperature then "by design" the parts won't frost up nor be covered with condensation caused water droplets nor get "rained on" by droplets condensed upon packaging surfaces above them. You will intentionally lessen the impact of rust season.

Jack Griffes	Laborator	y Operation:	s Manager	We test to	ISO	16232
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If you are wishing you had read this days or weeks earlier - pick up your phone and call <u>Bill Ong</u> (517) 905-5313 and ask about <u>Production Rust Removal</u> or Equipment