

**Details:**

980Oils Products	RANDOCUT 612
Applications	Metal Forming Lubricants
Customer /Location	U.S. Pipe/ Samutprakarn, Thailand
Previous Lube/Fluids	Local Lubricants Oil
Materials	Steel and Galvanize
Process/Machines	Forming / Inductotherm
Customer Requirements	Quality and Cost Improvement

**Issue/Problems :**

- Have rust inside pipe
- Rework and down grade of steel pipe



**Solutions :**

- 1) Test add Additive W104 (Corrosion Inhibitor) for minimize rust inside pipe
- 2) Check IP287 of emulsion and report.
- 3) Add Additive in the formulation become RANDOCUT 612

Report check IP287

Test Criteria	Test Method	Unit	Specification	Result
Appearance	Visual/Photos			White Emulsion
pH	pH Meter		8.50 - 10.50	8.91
Concentration (wt%)	Refractometer	%	4.00 - 6.00	2.90
TDS	TDS Meter		-	661
Conductivity	Conductivity Meter		-	1900
Temperature	Temp. Meter	°C	-	42.33
Bacteria	Dip Slide	cfu/ml	<10 <sup>2</sup>	NC
Rust test	IP287			

**Summary :**

- The rust inside pipe can be stop by Additive W104 (Corrosion Inhibitor) and develop to be Randocut 612 product supply to customer. The customer NO rework and down grade products.
- The customers satisfy the rust protection of RANDOCUT 612 expand to many tanks of black steel and galvanize steel pipe production lines. Also we supply RANDOCUT 560B (Semi-Synthetic) for leak test system with special corrosion inhibitors.

