



# TUBULAR STEEL INC.

ISO/TS 15949:2002 Registered  
 Certificate No.: 57461  
 IATF-Cert. No.: 0009733

285 Raleigh Avenue Scarborough,  
 Ontario M1K 1A5  
 Canada

## Certificate of Compliance

Certificate No: **MC-9590E-32047**

Customer: **Windsor Machine**  
 Part Number: **8U5A-9610A44-AD**  
 Customer P.O. No: **1095**  
 TSI Part No.: **T-RD0500-0000H50-079-0005**

Packing Slip No.: **022932**  
 Quantity: **1000**  
 Heat Number: **9590E**

Standard: **STM 15A HRPO**


Element	Material Chemistry		Material Mechanicals		Tube Mechanicals		
	Specifications	Results	Specifications	Results	Specifications	Results	
C	0.35 max.	0.06 (%)	Yield	N/A	Yield	275 min.	422 (MPa)
Mn	0.3 - 1	0.53 (%)	Tensile	N/A	Tensile	470 min.	494 (MPa)
P	0.04 max.	0.007 (%)	Elong.	N/A	Elong.	8 min.	10.15 (%)
S	0.04 max.	0.005 (%)	HRB	N/A	HRB	N/A	HRB
Si	0.35 max.	0.06 (%)					
Al	N/A	0.019 (%)					
Cu	N/A	0.05 (%)					
Ni	N/A	0.03 (%)					
Cr	N/A	0.02 (%)					
Mo	N/A	0.01 (%)					
Co or	N/A	0.006 (%)					
Ti or	N/A	0.001 (%)					
V	N/A	0.038 (%)					

Supplier: **Proactive - NAMASCO**

**Comments:**

This is to certify that the material/parts described within this certification and shipped to you for the above mentioned purchase order have been made in accordance to specifications, blue print and pertinent requirements. All chemical, physical and other test results required in the manufacture and/or fabrication process of this material/parts are on file and may be examined by you upon request. Test results apply to the samples tested.

Date: **February 14, 2007**

  
 Claudia Mitchell  
 Quality Engineer