OFFICIAL PROGRAM - POSTER

IFHTSE

18th IFHTSE CONGRESS

International Federation for Heat Treatment and Surface Engineering

July 26th - 30th, 2010

Hotel Intercontinental | Rio de Janeiro | Brazil

July 26th - Monday

3:20 pm ~ 4:20 pm

DIFFUSION PROCESSES	
Interdiffusion phenomena of zirconia-nitride layers in coated AISI 310 steel	Bernardo Jose A. Gomez
Comparison of corrosion resistance of a Fe-Mn-Al alloy boronized by pack or salt bath process	Stênio Cristaldo Heck
Plasma nitriding of a precipitation hardening stainless steel to improve erosion and corrosion resistance	Amado Cabo

EQUIPMENTS	
Development of a system to creep tests in controlled atmosphere	Danieli Aparecida Pereira Reis

MATERIALS CHARACTERIZATION	
Heating Rate effects on grain size, texture and Magnetic Properties of 1% Si Non-oriented Electrical Steel	Jun Li
Bainite formation at low tempratures in a high C-Si steel and its mechanical behavior	José Alberto da Cruz Junior
Mechanical And Microstructural Characterization of Welded Joints of Ferritic Stainless Steel AISI 444	Pedro Duarte Antunes
Effect of the thermo-mechanical processing characteristics on the recrystallization of the CuZn34 brass	Wellington Lopes

July 27th - Tuesday

10:10 am ~ 10:40 am

MATERIALS CHARACTERIZATION	
On the application of non-destructive eddy current method for quality control of heat treated parts	Mehrdad Kashefi Torbati
Influence of Soaking Temperature on the Phase Transformation Temperatures and Microstructure of Nb Microalloyed Low-Carbon Steels containing Mn and Si	Luiz Heleno Pereira Gaio
Anisotropic dimensional change of SKD11 tool steel during hardening and tempering heat treatment	Ki Jung Hong
Chemical caracterization of 4140 steel implanted by nitro-gen ions	Ely Dannier V. Niño

SURFACE HARDENING	
Low Temperature Al and Cr Dual Coatings on SNCM439 Steel	J.K.Chen
Effect of temperature and pressure on wear properties of ion nitrided AISI 316 and 409 stainless steels	Frederico Augusto Pires Fernandes
The influence of plasma nitriding on the fatigue behavior of austenitic stainless steel types AISI 316 and AISI 304	Rogério varavallo
A new economical powder-like wire for surfacing of metastable metal, self-strengthening during wearing	Yan Cheiliakh

July 28th - Wednesday

10:10 am ~ 10:40 am

CORROSION	
Research on Corrosion-Resistance of High Velocity Arc Spray Coatings on Surface of Steel Structure in Splash Zone Environment	Wei Shicheng

SURFACE HARDENING	
Study on Performances of N-Al2O3/Ni-Co Coatings Prepared by Electro-brush Plating for Substituting Hard Chromium Coating	WANG Xiao-He
Laser surfacing and heat treatment of Ni-Co-Mo Maraging steel	Zoran Bergant
Influence of shot peened aluminium alloy 7075-T651 on fatigue and corrosion resistance	Uroš Zupanc

MODELING AND SIMULATION	
Carburization study in a Fe-Ni alloy	Sandra Simonetti

MATERIALS CHARACTERIZATION	
Morphology and phase formation during the solidification of AlCuSi Ternary eutectic system	Carina Morando
Evaluation of Plasma Transferred Arc Fe-Al alloyed coatings	João Felipe Sippel
Modification of Ni-Al intermetallic coatings processed by PTA with chromium carbides	Diogo Henrique Sepel Yano
Effect of rapid transformation annealing on microstructure evolution of a dual phase steel	Jun Li

July 28th - Wednesday

3:40 pm ~ 4:20 pm

TRIBOLOGY	
Wear behavior of niobium carbide coated AISI 52100 steel	Frederico Augusto Pires Fernandes
Wear evaluation of an AISI 1020 steel coated with PEEK	Ricardo Gomes Pereira

NEW MATERIALS	
Heat treatments of Fe-Mn-Si based alloys and related shape memory phenomena	Ana Velia Druker
Creation and technologies of strengthening of new multifunc-tional economical (NICKEL FREE) metastable alloys which self-organizing at exploitation	Oleksandr Cheiliakh
Preparation and degradation orgnic of TiO2 coated on light ceramic surface	Ju chunhua

THERMAL SPRAY	
Creep behavior of titanium alloy with zirconia plasma sprayed coating	Danieli Aparecida Pereira Reis
Metallic coating adhesion obtained through thermal spraying testing	Rogério Varavallo
Progress of nondestructive detection technology on remanufacturing coatings	Hai-dou Wang

July 29th - Thursday

10:10 am ~ 10:40 am

PLASMA TECHNOLOGY	
Influence of the ion nitriding temperature in the wear resistance of AISI H13 tool steel	Stênio Cristaldo Heck
Effect of gas pressure on active screen plasma nitriding response	Akio NISHIMOTO
Plasma species influence on the properties of oxinitrided surface titanium	Clodomiro Alves Junior
Joining of M42 P/M HSS to 45 Steel by Spark Plasma Sintering Technique	Xu jinfu
Study of surface properties of titanium alloy TI-6AL-4V with double-glow plasma non-hydrogen carburizing	Zhengxian Li

QUENCHANTS AND QUENCHING TECHNOLOGY	
Study of oxidation of palm oil with different amounts of antioxidants, for use in quenching treatments	Gabriela Belinato
Heat transfer coefficient characterization of vegetable oils	Ester Carvalho de Souza
Metallurgical influence on quench distortion of SAE 52100 long cylinders	C. Hakan Gür

RESIDUAL STRESSES	
Influence of heat treatments on the Impact strength for welded constructions	MOUSSA ZAOUI

July 29th - Thursday

3:40 pm ~ 4:20 pm

PVD AND CVD	
Influence of nanostructured coatings on surface finish of AISI 1047 steel	Renato Françoso de Avila
Effects of N2 partial pressure and bias voltage on mechanical properties of (Ti,Al)N films by reactive magnetron sputtering	Tao Zhou
CVD of alternated microcrystalline (MCD) and nanocrystalline (NCD) diamond films on WC-TIC-CO substrates	Raonei Alves Campos
Increase Of Adhesion Force Of Superhard Boron Nitride Coatings To Cemented Nanocarbides Using Interfacial Layers	Maciej Jan Kupczyk
Evaluation of crack resistance of Al/Ti added quaternary CrN-based hard coatings	Xuebo Xu
Effects of Negative Bias Pulse on the Characteristics of Carbon Films Prepared by Plasma-based Ion Implantation	Wang Yujiang
Influence of structure on brittleness of boron nitride coatings deposited on cemented nanocarbides	Maciej Jan Kupczyk

CRYOGENICS	
Influence of Deep Cryogenic at Abrasive Wear Resistance in ASTM 743 CA6NM	Alexander Franco Hernandez
Effect of austenitization temperature at aisi d2 steel cryogenically treated	Cosme Roberto Moreira da Silva