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## China NIL Research Center for Proficiency Testing

### China NIL Proficiency Testing Schemes (2023)

As a professional PT provider, NIL has been accredited by China National Accreditation Service Conformity Assessment (CNAS), and all PT schemes provided by NIL are operated in compliance with ISO/IEC 17043:2010 “Conformity assessment—General requirements for proficiency testing”. The international proficiency testing schemes for 2023 are listed in the following Table 1.

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**Table 1 NIL Proficiency Testing Schemes for 2023**

Chemical Analysis for Metal and Alloy						
Serial No.	Title	Test Object	Test Property	Expected Delivery Time	Fees (USD)	Select
NILPT-3545-1	Determination of C, Si, Mn, P and S in medium and low alloy steel	Medium and low alloy steel	C, Si, Mn, P, S	May., 2023	350+ carriage	<input type="checkbox"/> Discs <input type="checkbox"/> Chips
NILPT-3545-2	Determination of C, Si, Mn, P and S in medium and low alloy steel	Medium and low alloy steel	C, Si, Mn, P, S	Aug., 2023	350+ carriage	<input type="checkbox"/> Discs <input type="checkbox"/> Chips
NILPT-3545-3	Determination of C, Si, Mn, P and S in medium and low alloy steel	Medium and low alloy steel	C, Si, Mn, P, S	Oct., 2023	350+ carriage	<input type="checkbox"/> Discs <input type="checkbox"/> Chips
NILPT-3546-1	Determination of Cr, Ni, Cu, Mo and Al in medium and low alloy steel	Medium and low alloy steel	Cr, Ni, Cu, Mo, Al	May., 2023	350+ carriage	<input type="checkbox"/> Discs <input type="checkbox"/> Chips
NILPT-3546-2	Determination of Cr, Ni, Cu, Mo and Al in medium and low alloy steel	Medium and low alloy steel	Cr, Ni, Cu, Mo, Al	Aug., 2023	350+ carriage	<input type="checkbox"/> Discs <input type="checkbox"/> Chips
NILPT-3547-1	Determination of Cr, Ni, Cu, V and Ti in medium and low alloy steel by inductively coupled plasma atomic emission spectrometry	Medium and low alloy steel	Cr, Ni, Cu, V, Ti	May., 2023	300+ carriage	<input type="checkbox"/> Chips
NILPT-3547-2	Determination of Cr, Ni, Cu, V and Ti in medium and low alloy steel by inductively coupled plasma atomic emission spectrometry	Medium and low alloy steel	Cr, Ni, Cu, V, Ti	Aug., 2023	300+ carriage	<input type="checkbox"/> Chips
NILPT-3548-1	Determination of C, Si, Mn, P and S in medium and low alloy steel by spark atomic emission spectrometry	Medium and low alloy steel	C, Si, Mn, P, S	May., 2023	350+ carriage	<input type="checkbox"/> Discs
NILPT-3548-2	Determination of C, Si, Mn, P and S in medium and low alloy steel by spark atomic emission spectrometry	Medium and low alloy steel	C, Si, Mn, P, S	Aug., 2023	350+ carriage	<input type="checkbox"/> Discs
NILPT-3549-1	Determination of Cr, Ni, Cu, Mo and Al in medium and low alloy steel by spark atomic emission spectrometry	Medium and low alloy steel	Cr, Ni, Cu, Mo, Al	May., 2023	350+ carriage	<input type="checkbox"/> Discs
NILPT-3549-2	Determination of Cr, Ni, Cu, Mo and Al in medium and low alloy steel by spark atomic emission spectrometry	Medium and low alloy steel	Cr, Ni, Cu, Mo, Al	Aug., 2023	350+ carriage	<input type="checkbox"/> Discs



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Serial No.	Title	Test Object	Test Property	Expected Delivery Time	Fees (USD)	Select
NIL PT-3550-1	Determination of Si, Mn, P, Cr, Ni and Ti in stainless steel	Stainless steel	Si, Mn, P, Cr, Ni, Ti	May., 2023	350+ carriage	<input type="checkbox"/> Discs <input type="checkbox"/> Chips
NIL PT-3550-2	Determination of Si, Mn, P, Cr, Ni and Ti in stainless steel	Stainless steel	Si, Mn, P, Cr, Ni, Ti	Sep., 2023	350+ carriage	<input type="checkbox"/> Discs <input type="checkbox"/> Chips
NIL PT-3551-1	Determination of C, Si, Mn, P, S, Cr and Ni in stainless steel by spark atomic emission spectrometry	Stainless steel	C, Si, Mn, P, S, Cr, Ni	May., 2023	350+ carriage	<input type="checkbox"/> Discs
NIL PT-3551-2	Determination of C, Si, Mn, P, S, Cr and Ni in stainless steel by spark atomic emission spectrometry	Stainless steel	C, Si, Mn, P, S, Cr, Ni	Sep., 2023	350+ carriage	<input type="checkbox"/> Discs
NIL PT-3552	Determination of C, Si, Mn, P, S and Cr in bearing steel	Bearing steel	C, Si, Mn, P, S, Cr	Aug., 2023	350+ carriage	<input type="checkbox"/> Discs <input type="checkbox"/> Chips
NIL PT-3553	Determination of C, Si, P, S, Mo in ferromolybdenum	Ferromolybdenum	C, Si, P, S, Mo	Sep., 2023	350+ carriage	<input type="checkbox"/> Chips
NIL PT-3554-1	Determination of C and S content in steel	Steel	C, S	May., 2023	280+ carriage	<input type="checkbox"/> Chips
NIL PT-3554-2	Determination of C and S content in steel	Steel	C, S	Jul., 2023	280 + carriage	<input type="checkbox"/> Chips
NIL PT-3554-3	Determination of C and S content in steel	Steel	C, S	Oct., 2023	280+ carriage	<input type="checkbox"/> Chips
NIL PT-3555-1	Determination of O and N content in steel	Steel	O, N	Aug., 2023	280 + carriage	<input type="checkbox"/> Chips
NIL PT-3555-2	Determination of O and N content in steel	Steel	O, N	Oct., 2023	280+ carriage	<input type="checkbox"/> Chips
NIL PT-3556	Determination of H in steel	Steel	H	Oct., 2023	300 + carriage	<input type="checkbox"/> Chips
NIL PT-3557	Determination of Mo, Al, Ti, Nb in high-temperature alloy	High-Temperature Alloy	Mo, Al, Ti, Nb	Oct., 2023	400 + carriage	<input type="checkbox"/> Chips
NIL PT-3561	Determination of Si, Mn, P, Al and Ca in ferrosilicon	Ferrosilicon	Si, Mn, P, Al, Ca	Sep., 2023	300+ carriage	<input type="checkbox"/> Chips
NIL PT-3562	Determination of C, Si, Mn and P in ferromanganese	Ferromanganese	C, Si, Mn, P	Sep., 2023	300 + carriage	<input type="checkbox"/> Chips
NIL PT-3563	Determination of C, Si, Mn, P, S, Ni and Cr in ferronickel	Ferronickel	C, Si, Mn, P, S, Ni, Cr	Oct., 2023	300 + carriage	<input type="checkbox"/> Chips
NIL PT-3564	Determination of C, Si, Mn, P and Cr in low-carbon ferrochromium	Low-carbon ferrochromium	C, Si, Mn, P, Cr	Sep., 2023	300 + carriage	<input type="checkbox"/> Chips



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NIL PT-3565	Determination of Si, Mn, P and S in silicon manganese alloy	Silicon manganese alloy	Si, Mn, P, S	Oct., 2023	300+ carriage	<input type="checkbox"/> Chips
NIL PT-3566	Determination of V, C, Si, Mn, P, S and Al in ferrovanadium	Ferrovanadium	V, C, Si, Mn, P, S, Al	Oct., 2023	400+ carriage	<input type="checkbox"/> Chips
NIL PT-3569	Determination of Si, Fe, Cu, Mg and Zn in pure aluminum	Pure aluminum	Si, Fe, Cu, Mg, Zn	Oct., 2023	320 + carriage	<input type="checkbox"/> Discs <input type="checkbox"/> Chips
NIL PT-3570-1	Determination of Si, Fe, Cu, Mg and Mn in aluminum alloy	Aluminum alloy	Si, Fe, Cu, Mg, Mn	Jun., 2023	320+ carriage	<input type="checkbox"/> Discs <input type="checkbox"/> Chips
NIL PT-3570-2	Determination of Si, Fe, Cu, Mg and Mn in aluminum alloy	Aluminum alloy	Si, Fe, Cu, Mg, Mn	Sep., 2023	320 + carriage	<input type="checkbox"/> Discs <input type="checkbox"/> Chips
NIL PT-3571	Determination of Si, Fe, Cu, Cr, Ti and Zn in aluminum alloy by spark atomic emission spectrometry	Aluminum alloy	Si, Fe, Cu, Cr, Ti, Zn	Oct., 2023	320 + carriage	<input type="checkbox"/> Discs
NIL PT-3572	Determination of Cu, Mg, Fe and Al in zinc alloy	Zinc alloy	Cu, Mg, Fe, Al	Oct., 2023	320 + carriage	<input type="checkbox"/> Chips
NIL PT-3574	Determination of Sn, Fe, Ni, Pb and Cu in copper alloy	Copper alloy	Sn, Fe, Ni, Pb, Cu	Oct., 2023	320 + carriage	<input type="checkbox"/> Discs <input type="checkbox"/> Chips
NIL PT-3578	Determination of Fe, Al, V and Si in titanium alloy	Titanium alloy	Fe, Al, V, Si	Aug., 2023	500 + carriage	<input type="checkbox"/> Chips
NIL PT-3579	Determination of O, N, and H in titanium alloy	Titanium alloy	O, N, H	Oct., 2023	500 + carriage	<input type="checkbox"/> Grain
NIL PT-3580	Determination of Cr, Ni, Cu and Mo in titanium alloy	Titanium alloy	Cr, Ni, Cu, Mo	Aug., 2023	500+ carriage	<input type="checkbox"/> Chips
NIL PT-3581	Determination of Sn, Mn, Y and Zr in titanium alloy	Titanium alloy	Sn, Mn, Y, Zr	Aug., 2023	500 + carriage	<input type="checkbox"/> Chips
<b>Mineral and Metallurgical Material</b>						
Serial No.	Title	Test Object	Test Property	Expected Delivery Time	Fees (USD)	Select
NILPT-3589-1	Determination of TFe, SiO <sub>2</sub> , P and S in iron ore	Iron ore	TFe, SiO <sub>2</sub> , P, S	May., 2023	300 + carriage	<input type="checkbox"/>
NILPT-3589-2	Determination of TFe, SiO <sub>2</sub> , P and S in iron ore	Iron ore	TFe, SiO <sub>2</sub> , P, S	Aug., 2023	300 + carriage	<input type="checkbox"/>
NIL PT-3590	Determination of CaO, MgO and Al <sub>2</sub> O <sub>3</sub> in iron ore	Iron ore	CaO, MgO, Al <sub>2</sub> O <sub>3</sub>	Jun., 2023	300 + carriage	<input type="checkbox"/>
NIL PT-3591	Determination of TFe and FeO in iron ore	Iron ore	TFe, FeO	Aug., 2023	300 + carriage	<input type="checkbox"/>



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NIL PT-3592	Determination of K and Na in iron ore	Iron ore	K, Na	Aug., 2023	300 + carriage	<input type="checkbox"/>
NIL PT-3593	Determination of Ca, Si, Mn, Al, P, Mg and Ti in iron ore by X-ray fluorescence spectrometry	Iron ore	Ca, Si, Mn, Al, P, Mg, Ti	Aug., 2023	450 + carriage	<input type="checkbox"/>
NIL PT-3595	Determination of Mn and Ti in iron ore	Iron ore	Mn, Ti	Oct., 2023	300 + carriage	<input type="checkbox"/>
NIL PT-3596	Determination of TMn, TFe, SiO <sub>2</sub> and Al <sub>2</sub> O <sub>3</sub> in manganese ore	Manganese ore	TMn, TFe, SiO <sub>2</sub> , Al <sub>2</sub> O <sub>3</sub>	Aug., 2023	300 + carriage	<input type="checkbox"/>
NIL PT-3597	Determination of TiO <sub>2</sub> and Ni in manganese ore	Manganese ore	TiO <sub>2</sub> , Ni	Oct., 2023	300 + carriage	<input type="checkbox"/>
NIL PT-3598	Determination of CaF <sub>2</sub> , SiO <sub>2</sub> and TFe in fluorite	Fluorite	CaF <sub>2</sub> , SiO <sub>2</sub> , TFe	Aug., 2023	300 + carriage	<input type="checkbox"/>
NILPT-3599-1	Determination of SiO <sub>2</sub> , CaO, MgO, Fe <sub>2</sub> O <sub>3</sub> and Al <sub>2</sub> O <sub>3</sub> in limestone	Limestone	SiO <sub>2</sub> , CaO, MgO, Fe <sub>2</sub> O <sub>3</sub> , Al <sub>2</sub> O <sub>3</sub>	May., 2023	300 + carriage	<input type="checkbox"/>
NILPT-3599-2	Determination of SiO <sub>2</sub> , CaO, MgO, Fe <sub>2</sub> O <sub>3</sub> and Al <sub>2</sub> O <sub>3</sub> in limestone	Limestone	SiO <sub>2</sub> , CaO, MgO, Fe <sub>2</sub> O <sub>3</sub> , Al <sub>2</sub> O <sub>3</sub>	Aug., 2023	300 + carriage	<input type="checkbox"/>
NIL PT-3601	Determination of Ni, SiO <sub>2</sub> , TFe and MgO in nickel ore	Nickel ore	Ni, SiO <sub>2</sub> , TFe, MgO	Aug., 2023	300 + carriage	<input type="checkbox"/>
NIL PT-3602	Determination of Zn, Pb and Cu in zinc ore	Zinc ore	Zn, Pb, Cu	Aug., 2023	300 + carriage	<input type="checkbox"/>
NIL PT-3604	Determination of Zn, Cu, Pb and Cd in zinc concentrates	Zinc concentrates	Zn, Cu, Pb, Cd	Jun., 2023	300 + carriage	<input type="checkbox"/>
NIL PT-3605	Determination of Cu, S, Au and Ag in copper concentrates	Copper concentrates	Cu, S, Au, Ag	Jun., 2023	320 + carriage	<input type="checkbox"/>
NIL PT-3606	Determination of Pb, Cu, Zn and As in lead concentrates	Lead concentrates	Pb, Cu, Zn, As	Jun., 2023	300 + carriage	<input type="checkbox"/>



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NIL PT-3607	Determination of Cu, Pb, Zn and Fe in polymetallic ore	Polymetallic ore	Cu, Pb, Zn, Fe	Jun., 2023	300 + carriage	<input type="checkbox"/>
NIL PT-3609	Determination of Al <sub>2</sub> O <sub>3</sub> , SiO <sub>2</sub> , Fe <sub>2</sub> O <sub>3</sub> , CaO and TiO <sub>2</sub> in bauxite	Bauxite	Al <sub>2</sub> O <sub>3</sub> , SiO <sub>2</sub> , Fe <sub>2</sub> O <sub>3</sub> , CaO, TiO <sub>2</sub>	Jun., 2023	300 + carriage	<input type="checkbox"/>
NIL PT-3610	Determination of SiO <sub>2</sub> , CaO, MgO, Fe <sub>2</sub> O <sub>3</sub> and Al <sub>2</sub> O <sub>3</sub> in silicate rock	Silicate rock	SiO <sub>2</sub> , CaO, MgO, Fe <sub>2</sub> O <sub>3</sub> , Al <sub>2</sub> O <sub>3</sub>	Jun., 2023	300 + carriage	<input type="checkbox"/>
NIL PT-3611	Determination of Au and Ag in ore	Ore	Au, Ag	Jun., 2023	350 + carriage	<input type="checkbox"/>
NIL PT-3612	Determination of Fe, Al and Ca in metallurgical silicon	Metallurgical silicon	Fe, Al, Ca	Jun., 2023	300 + carriage	<input type="checkbox"/>
NIL PT-3614	Determination of SiO <sub>2</sub> , CaO, MgO, Al <sub>2</sub> O <sub>3</sub> and Fe <sub>2</sub> O <sub>3</sub> in high-alumina refractories	High-alumina refractories	SiO <sub>2</sub> , CaO, MgO, Al <sub>2</sub> O <sub>3</sub> , Fe <sub>2</sub> O <sub>3</sub>	Jun., 2023	300 + carriage	<input type="checkbox"/>
<b>Coal and Coke</b>						
Serial No.	Title	Test Object	Test Property	Expected Delivery Time	Fees (USD)	Select
NILPT-3617-1	Proximate analysis of coke	Coke	Sulphur, ash, volatile matter	May., 2023	300 + carriage	<input type="checkbox"/>
NILPT-3617-2	Proximate analysis of coke	Coke	Sulphur, ash, volatile matter	Aug., 2023	300 + carriage	<input type="checkbox"/>
NILPT-3618-1	Proximate analysis of coal	Coal	Sulphur, ash, volatile matter	May., 2023	300 + carriage	<input type="checkbox"/>
NILPT-3618-2	Proximate analysis of coal	Coal	Sulphur, ash, volatile matter	Aug., 2023	300 + carriage	<input type="checkbox"/>
NILPT-3619	Determination of calorific value of coal	Coal	Calorific value	Jun., 2023	300 + carriage	<input type="checkbox"/>



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Cement						
Serial No.	Title	Test Object	Test Property	Expected Delivery Time	Fees (USD)	Select
NIL PT-3633	Determination of loss on ignition, magnesium oxide, Calcium oxide and sulfur trioxide in cement	Cement	Loss on ignition, MgO, CaO,SO <sub>3</sub>	Aug., 2023	450+ carriage	<input type="checkbox"/>
NIL PT-3634	Determination of chloride ions in cement	Cement	Chloride ions	Aug., 2023	450+ carriage	<input type="checkbox"/>
Soil						
Serial No.	Title	Test Object	Test Property	Expected Delivery Time	Fees (USD)	Select
NILPT-3652-1	Determination of Pb and Cd in soil	Soil	Pb ,Cd	Jun., 2023	350 + carriage	<input type="checkbox"/>
NILPT-3652-2	Determination of Pb and Cd in soil	Soil	Pb ,Cd	Sep., 2023	350 + carriage	<input type="checkbox"/>
NILPT-3653-1	Determination of Ni, Cu and Zn in soil	Soil	Ni, Cu, Zn	Jun., 2023	350 + carriage	<input type="checkbox"/>
NILPT-3653-2	Determination of Ni, Cu and Zn in soil	Soil	Ni, Cu, Zn	Sep., 2023	350 + carriage	<input type="checkbox"/>
NILPT-3654-1	Determination of total Hg and total As in soil	Soil	Total Hg, Total As	Jun., 2023	350 + carriage	<input type="checkbox"/>
NILPT-3654-2	Determination of total Hg and total As in soil	Soil	Total Hg ,Total As	Sep., 2023	350 + carriage	<input type="checkbox"/>
NILPT-3655-1	Determination of total Cr in soil	Soil	Total Cr	Jun., 2023	350 + carriage	<input type="checkbox"/>
NILPT-3655-2	Determination of total Cr in soil	Soil	Total Cr	Sep., 2023	350 + carriage	<input type="checkbox"/>
NIL PT-3659	Determination of total P in soil	Soil	Total P	Sep., 2023	350 + carriage	<input type="checkbox"/>
NILPT-3669-1	Determination of pH in soil	Soil	pH at 25°C	Jun., 2023	350 + carriage	<input type="checkbox"/>
NILPT-3669-2	Determination of pH in soil	Soil	pH at 25°C	Sep., 2023	350 + carriage	<input type="checkbox"/>
Textile						
Serial No.	Title	Test Object	Test Property	Expected Delivery Time	Fees (USD)	Select



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NIL PT-3876	Determination of maximum force for textiles	Textile	Maximum force(strip method)	Aug., 2023	300 + carriage	<input type="checkbox"/>
NIL PT-3877	Determination of tear force using ballistic pendulum method for textiles	Textile	Tear force(ballistic pendulum method)	Aug., 2023	300 + carriage	<input type="checkbox"/>
NIL PT-3881	Determination of pH in textile	Textile	pH at 25°C	Sep., 2023	300 + carriage	<input type="checkbox"/>
NIL PT-3882	Determination of formaldehyde in textile (water extraction method)	Textile	Formaldehyde	Sep., 2023	300 + carriage	<input type="checkbox"/>
<b>RoHS</b>						
Serial No.	Title	Test Object	Test Property	Expected Delivery Time	Fees (USD)	Select
NIL PT-3901	Restricted substances in electronic and electrical products – Determination of Pb content in copper and copper alloys	Electronic and electrical products – copper and copper alloys	Pb	Jul., 2023	320 + carriage	<input type="checkbox"/>
NIL PT-3902	Restricted substances in electronic and electrical products – Determination of Pb and Cd content in aluminum and aluminum alloys	Electronic and electrical products – aluminum and aluminum alloys	Pb, Cd	Jul., 2023	320 + carriage	<input type="checkbox"/>
NIL PT-3903	Restricted substances in electronic and electrical products – Determination of Pb and Cd content in zinc and zinc alloys	Electronic and electrical products – zinc and zinc alloys	Pb, Cd	Jul., 2023	320 + carriage	<input type="checkbox"/>
NIL PT-3904	Restricted substances in electronic and electrical products – Determination of noxious substance content in ABS	Electronic and electrical products – ABS	Pb, Cd, Hg, Br	Sep., 2023	400 + carriage	<input type="checkbox"/>
NIL PT-3906	Restricted substances in electronic and electrical products – Determination of flame retardant content in plastic	Electronic and electrical products – plastic	BDE-209	Sep., 2023	400 + carriage	<input type="checkbox"/>





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Plastic						
Serial No.	Title	Test Object	Test Property	Expected Delivery Time	Fees (USD)	Select
NIL PT-3907	Determination of phthalate plasticizers in plastic toy	Plastic toy materials	DBP, DEHP, BBP, DINP, DIDP, DN OP	Sep., 2023	450 + carriage	<input type="checkbox"/>
NIL PT-3915	Determination of the melt mass-flow rate (MFR) of thermoplastics(ISO 1133-1)	Plastics	MFR	Aug., 2023	450 + carriage	<input type="checkbox"/>
NIL PT-3916	Determination of density of plastic (ISO 1183-1,method A-Immersion method)	Plastics	Density	Aug., 2023	450+ carriage	<input type="checkbox"/>
NIL PT-3921	Determination of vicat softening temperature of plastics (ISO 306)	Plastics	vicat softening temperature	Aug., 2023	550+ carriage	<input type="checkbox"/>
NIL PT-3923	Determination of tensile properties of plastic (ISO 527-1/-2)	Plastics	stress at yield, strength, stress at X% strain, strain at yield	Aug., 2023	550+ carriage	<input type="checkbox"/>
NIL PT-3924	Determination of charpy impact properties of plastic (ISO 179-1)	Plastics	Charpy notched impact strength	Aug., 2023	550+ carriage	<input type="checkbox"/>
Microstructure of metal Materials(Special for ISO Standard)						
Serial No.	Title	Test Object	Test Property	Expected Delivery Time	Fees (USD)	Select
NIL PT-3947	Determination of average grain size in metallic materials (only for Intercept Procedure)	Steel (Photo)	Grain size number	May., 2023	300+ carriage	<input type="checkbox"/>
NIL PT-3948	Determination of average grain size in metallic materials (only for Intercept Procedure)	Steel (Material object)	Grain size number	Sep., 2023	450+ carriage	<input type="checkbox"/>



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NILPT-3950	Determination of average grain size in aluminium alloy (only for Intercept Procedure)	Aluminium alloy (Photo)	Grain size number	Aug., 2023	300+ carriage	<input type="checkbox"/>
NILPT-3953	Determination of depth of decarburization of steels (only for ISO3887)	Steel (Material object)	Depth of total decarburization, Depth of complete decarburization	Jul., 2023	400+ carriage	<input type="checkbox"/>
NILPT-3966-1	Metal neutral salt spray tests (only for ISO 9227)	Steel	Weight loss	May., 2023	500+ carriage	<input type="checkbox"/>
NILPT-3966-2	Metal neutral salt spray tests (only for ISO 9227)	Steel	Weight loss	Sep., 2023	500+ carriage	<input type="checkbox"/>
<b>Mechanical Properties for Metal Materials (Special for ISO Standard)</b>						
Serial No.	Title	Test Object	Test Property	Expected Delivery Time	Fees (USD)	Select
NILPT-3979-1	Brinell hardness test for metallic materials (only for ISO 6506-1)	Steel	HBW 2.5/187.5	Jun., 2023	450+ carriage	<input type="checkbox"/>
NILPT-3979-2	Brinell hardness test for metallic materials (only for ISO 6506-1)	Steel	HBW 2.5/187.5	Oct., 2023	450+ carriage	<input type="checkbox"/>
NILPT-3980-1	Brinell hardness test for metallic materials (only for ISO 6506-1)	Steel	HBW 5/750	May., 2023	450+ carriage	<input type="checkbox"/>
NILPT-3980-2	Brinell hardness test for metallic materials (only for ISO 6506-1)	Steel	HBW 5/750	Sep., 2023	450+ carriage	<input type="checkbox"/>
NILPT-3981-1	Brinell hardness test for metallic materials (only for ISO 6506-1)	Steel	HBW 10/3000	May., 2023	450+ carriage	<input type="checkbox"/>
NILPT-3981-2	Brinell hardness test for metallic materials (only for ISO 6506-1)	Steel	HBW 10/3000	Sep., 2023	450+ carriage	<input type="checkbox"/>
NIL PT-3982	Rockwell hardness test for metallic materials (only for ISO 6508-1)	Steel	HRA	May., 2023	450+ carriage	<input type="checkbox"/>
NILPT-3983-1	Rockwell hardness test for metallic materials (only for ISO 6508-1)	Steel	HRB	May., 2023	450+ carriage	<input type="checkbox"/>
NILPT-3983-2	Rockwell hardness test for metallic materials (only for ISO 6508-1)	Steel	HRB	Sep.2023	450+ carriage	<input type="checkbox"/>



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NILPT-3984-1	Rockwell hardness test for metallic materials (only for ISO 6508-1)	Steel	HRC	May., 2023	450+ carriage	<input type="checkbox"/>
NILPT-3984-2	Rockwell hardness test for metallic materials (only for ISO 6508-1)	Steel	HRC	Jul., 2023	450+ carriage	<input type="checkbox"/>
NILPT-3984-3	Rockwell hardness test for metallic materials (only for ISO 6508-1)	Steel	HRC	Oct., 2023	450+ carriage	<input type="checkbox"/>
NIL PT-3985	Vickers hardness test for metallic materials (only for ISO 6507-1)	Steel	HV0.2	Oct., 2023	500+ carriage	<input type="checkbox"/>
NIL PT-3986	Vickers hardness test for metallic materials (only for ISO 6507-1)	Steel	HV5	Sep., 2023	450+ carriage	<input type="checkbox"/>
NILPT-3987-1	Vickers hardness test for metallic materials (only for ISO 6507-1)	Steel	HV10	May., 2023	450+ carriage	<input type="checkbox"/>
NILPT-3987-2	Vickers hardness test for metallic materials (only for ISO 6507-1)	Steel	HV10	Sep., 2023	450+ carriage	<input type="checkbox"/>
NIL PT-3988	Vickers hardness test for metallic materials (only for ISO 6507-1)	Steel	HV30	Sep., 2023	450+ carriage	<input type="checkbox"/>
NILPT-3990-1	Room temperature tensile test for metallic materials (Recommended testing machine: 100kN~300kN. Diameter of sample: Φ10mm, M16 normal screw threaded both ends. Matched chucking heads are required. only for ISO 6892-1 )	Steel	$R_m, R_{eL}, A, Z, R_{p0.2}$	Apr., 2023	600+ carriage	<input type="checkbox"/>
NILPT-3990-2	Room temperature tensile test for metallic materials (Recommended testing machine: 100kN~300kN. Diameter of sample: Φ10mm, M16 normal screw threaded both ends. Matched chucking heads are required. only for ISO 6892-1)	Steel	$R_m, R_{eL}, A, Z, R_{eH}, R_{p0.2}$	Oct., 2023	600+ carriage	<input type="checkbox"/>
NIL PT-3991	Room temperature tensile test for metallic materials (Recommended testing machine: 20kN~50kN. Diameter of sample: Φ5mm, M12	Steel	$R_m, R_{eL}, A, Z, R_{p0.2}$	Jun., 2023	600+ carriage	<input type="checkbox"/>



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	normal screw threaded both ends. Matched chucking heads are required. only for ISO 6892-1 )					
NIL PT-3992	Room temperature tensile test for metallic materials (Recommended testing machine: 50kN~100kN. Diameter of sample: Φ8mm, M14 normal screw threaded both ends. Matched chucking heads are required. only for ISO 6892-1 )	Steel	$R_m, R_{eL}, A, Z, R_{p0.2}$	Jul., 2023	600+ carriage	□
NIL PT-3993	Room temperature tensile test for metallic materials (Recommended testing machine: 300kN~1000kN. Diameter of sample: Φ20mm, Diameter of terminal end: Φ27mm. only for ISO 6892-1)	Steel	$R_m, R_{eL}, A, Z, R_{eH}, R_{p0.2}$	Sep., 2023	600+ carriage	□
NILPT-3646-1	Room temperature tensile test for hot rolled ribbed steel bars (Recommended testing machine: 300kN~1000kN. only for ISO 6892-1)	Hot rolled ribbed steel bars	$R_m, R_{eL}, A$	Apr., 2023	500+ carriage	□
NILPT-3646-2	Room temperature tensile test for hot rolled ribbed steel bars (Recommended testing machine: 300kN~1000kN. Only for ISO 6892-1)	Hot rolled ribbed steel bars	$R_m, R_{eL}, A$	Oct., 2023	500+ carriage	□
NIL PT-3995	Room temperature tensile test for cold-rolled plate of metallic materials (Recommended testing machine: 20kN~50kN. only for ISO 6892-1)	Steel-cold rolled plate	$R_m, A, R_{p0.2}$	Jun., 2023	550+ carriage	□
NILPT-3996-1	Room temperature tensile test for hot-rolled plate of metallic materials (Recommended testing machine: 100kN~300kN. only for ISO 6892-1)	Steel-hot rolled plate	$R_m, R_{eL}, A, R_{p0.2}$	Apr., 2023	550+ carriage	□
NILPT-3996-2	Room temperature tensile test for hot-rolled plate of metallic materials (Recommended testing machine: 100kN~300kN. only for ISO 6892-1)	Steel-hot rolled plate	$R_m, R_{eL}, A, R_{p0.2}$	Oct., 2023	550+ carriage	□



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NIL PT-3997	Room temperature tensile test for hot-rolled plate of metallic materials (Recommended testing machine: 300kN~1000kN. only for ISO 6892-1)	Steel-hot rolled plate	$R_m, R_{eL}, A, R_{p0.2}$	Aug., 2023	550+ carriage	<input type="checkbox"/>
NIL PT-4001	Room temperature tensile test for aluminum alloy sheet (Recommended testing machine: 20kN~100kN. only for ISO 6892-1)	Aluminum alloy	$R_m, R_{p0.2}, A$	Aug., 2023	550+ carriage	<input type="checkbox"/>
NIL PT-4002	Room temperature tensile test for aluminum alloy steel bars (Recommended testing machine: 50kN~100kN. only for ISO 6892-1)	Aluminum alloy bars	$R_m, A, Z, R_{p0.2}$	Sep., 2023	550+ carriage	<input type="checkbox"/>
NIL PT-4003	Charpy impact test for metallic materials (Striker R=2mm.U notch. Recommended testing machine: $\geq 150J$ . only for ISO 148-1)	Steel	Impact Absorbed Energy $KU_2$	Mar., 2023	550+ carriage	<input type="checkbox"/>
NIL PT-4004	Charpy impact test for metallic materials (Striker R=2mm. U notch. Recommended testing machine: $\geq 300J$ . only for ISO 148-1)	Steel	Impact Absorbed Energy $KU_2$	Oct., 2023	550+ carriage	<input type="checkbox"/>
NIL PT-4005	Low-temperature Charpy impact test for metallic materials (Striker R=2mm.V notch. Recommended testing machine: $\geq 150J$ . only for ISO 148-1)	Steel	Impact Absorbed Energy $KV_2$	Sep., 2023	550+ carriage	<input type="checkbox"/>
NIL PT-4006	Charpy impact test for metallic materials (Striker R=2mm. V notch. Recommended testing machine: $\geq 150J$ . only for ISO 148-1)	Steel	Impact Absorbed Energy $KV_2$	Apr., 2023	550+ carriage	<input type="checkbox"/>
NIL PT-4007	Charpy impact test for metallic materials (Striker R=2mm. V notch. Recommended testing machine: $\geq 300J$ . only for ISO 148-1)	Steel	Impact Absorbed Energy $KV_2$	Sep., 2023	550+ carriage	<input type="checkbox"/>
NIL PT-4008	Elevated temperature tensile test for metallic materials (Recommended testing machine:	Steel	$R_m, R_{p0.2}, A, Z$	Aug., 2023	600+ carriage	<input type="checkbox"/>



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	50kN~100kN.Diameter of sample: Φ5mm, M10 or M12 normal screw threaded both ends. Matched chucking heads are required. Temperature: ≥300℃. only for ISO 6892-2)					
<b>Mechanical Properties for Materials (Special for ASTM Standard)</b>						
Serial No.	Title	Test Object	Test Property	Expected Delivery Time	Fees (USD)	Select
NIL PT-4021	Room temperature tensile test for metallic materials (Recommended testing machine: 100kN~300kN. Diameter of sample: Φ12.5mm. only for ASTM E8/E8M)	Steel	tensile strength , lower yield strength, elongatio n after fracture, reduction of area	Sep., 2023	650+ carriage	<input type="checkbox"/>
NIL PT-4022	Room temperature tensile test for aluminum alloy sheet (Recommended testing machine: 50kN~100kN. only for ASTM B557)	Aluminum alloy	tensile strength , yield strength (offset =0.2%), elongatio n after fracture	Sep., 2023	650+ carriage	<input type="checkbox"/>
NIL PT-4023	Elevated temperature tensile test for metallic material (Recommended testing machine: 50kN~100kN. Diameter of sample: Φ6mm, M12 normal screw threaded both ends. Matched chucking heads are required. Temperature: ≥300℃. only for ASTM E21)	Steel	tensile strength , yield strength (offset =0.2%), elongatio n after fracture, reduction of area	Sep., 2023	650+ carriage	<input type="checkbox"/>



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NILPT-4024	Charpy impact test for metallic materials (Striker R=8mm. V notch. Recommended testing machine: $\geq 150J$ . only for ASTM E23)	Steel	Impact Absorbed Energy	Sep., 2023	600+ carriage	<input type="checkbox"/>
NIL PT-4025	Brinell hardness test for metallic materials (for ASTM E10)	Steel	HBW 10/3000	Oct., 2023	550+ carriage	<input type="checkbox"/>
NIL PT-4026	Rockwell hardness test for metallic materials (for ASTM E18)	Steel	HRC	Oct., 2023	550+ carriage	<input type="checkbox"/>
NIL PT-4027	Vickers hardness test for metallic materials (for ASTM E92)	Steel	HV10	Oct., 2023	600+ carriage	<input type="checkbox"/>
NIL PT-4028	Vickers hardness test for metallic materials (for ASTM E384)	Steel	HV0.5	Oct., 2023	600+ carriage	<input type="checkbox"/>
NIL PT-4029	High Cycle Fatigue Test (Only for ASTM E466)	Metallic materials	Life duration (Number of cycles)	Sep., 2023	1000+ carriage	<input type="checkbox"/>
<b>Microstructure of Metal Materials (Special for ASTM Standard)</b>						
Serial No.	Title	Test Object	Test Property	Expected Delivery Time	Fees (USD)	Select
NIL PT-4030	Determination of average grain size in metallic materials (Recommendation for Intercept Procedure. for ASTM E112)	Steel (Material object)	Grain size number	Sep., 2023	450+ carriage	<input type="checkbox"/>
NIL PT-4031	Determination of content of nonmetallic inclusions (only for ASTM E45)	Steel (Photo)	Inclusion Rate	Jul., 2023	300+ carriage	<input type="checkbox"/>
NIL PT-4032	Metal neutral salt spray tests (only for ASTM B117)	Steel	Weight loss	Jul., 2023	500+ carriage	<input type="checkbox"/>
<b>Non-Destructive Test for Metallic Material</b>						
Serial No.	Title	Test Object	Test Property	Expected Delivery Time	Fees (USD)	Select
NIL PT-4046	Non-Destructive testing of welds (Ultrasonic testing)	Steel Plate	Location of indication, length of indication	May., 2023	500+ carriage	<input type="checkbox"/>
NIL PT-4048	Non-Destructive testing of welds (X-Ray testing)	Steel Plate	length of indication	May., 2023	500+ carriage	<input type="checkbox"/>



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NIL PT-4051	Non-Destructive testing of welds (Magnetic testing)	Steel Plate	Display position, display length	May., 2023	500+ carriage	<input type="checkbox"/>
NIL PT-4052	Non-Destructive testing of welds (Penetrant testing)	Steel Plate	Display position, display length	May., 2023	500+ carriage	<input type="checkbox"/>

### Rubber and Leather

Serial No.	Title	Test Object	Test Property	Expected Delivery Time	Fees (USD)	Select
SIC -XJ2023019	Rubber and elastomer materials — Determination of N-nitrosamines	Rubber	N-nitrosamines	Apr., 2023	300+ carriage	<input type="checkbox"/>
SIC -PG2023001	Determination of Chromium (VI) Content in Leather	Leather	Chromium (VI)	Apr., 2023	300+ carriage	<input type="checkbox"/>
SIC -PG2023002	Determination of pH of Leather	Leather	pH	Apr., 2023	300+ carriage	<input type="checkbox"/>
SIC -PG2023003	Determination of Longitudinal Stiffness for Shanks of Footwear-	Shanks for Footwear	Longitudinal Stiffness	Apr., 2023	300+ carriage	<input type="checkbox"/>
SIC -PG2023004	Determination of Abrasion Resistance of Sole	Rubber	Abrasion Resistance of Sole	Apr., 2023	300+ carriage	<input type="checkbox"/>
SIC -XJ2023020	Determination of Abrasion Resistance of Rubber (Using a Rotating Cylindrical Drum Device)	Rubber	Abrasion Resistance of Rubber	Apr., 2023	300+ carriage	<input type="checkbox"/>
SIC -PG2023005	Determination of Formaldehyde Content in Leather	Leather	Formaldehyde	Apr., 2023	300+ carriage	<input type="checkbox"/>
SIC -PG2023006	Determination of Rockwell Hardness in Shanks for Footwear	Shanks for Footwear	Rockwell Hardness	Apr., 2023	300+ carriage	<input type="checkbox"/>
SIC -PG2023007	Determination of Heavy Metal Content in Leather	Leather	Total Cadmium Content; Total Lead Content	Apr., 2023	300+ carriage	<input type="checkbox"/>
SIC -PG2023008	Determination of Double Edge Tear Load for Leather	Leather	Double Edge Tear	Jul., 2023	300+ carriage	<input type="checkbox"/>
SIC -PG2023009	Tests for Colour Fastness — Colour Fastness to Cycles of to-and-fro Rubbing for Leather	Leather	Colour Fastness to Cycles of to- and-fro Rubbing	Jul., 2023	300+ carriage	<input type="checkbox"/>





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Serial No.	Title	Test Object	Test Property	Expected Delivery Time	Fees (USD)	Select
SIC -PG2023010	Determination of Banned Azo Colorants in Leather	Leather	Banned Azo Colorants	Jul., 2023	300+ carriage	<input type="checkbox"/>
SIC -PG2023011	Determination of Phthalates in Leather	Leather	Phthalates	Jul., 2023	300+ carriage	<input type="checkbox"/>
SIC -PG2023012	Determination of Upper Sole Adhesion for Footwear	Rubber	Adhesion	Jul., 2023	300+ carriage	<input type="checkbox"/>

**\*Note: For NIL PT-3545-1, NIL PT-3545-2, NIL PT-3545-3, NIL PT-3546-1, NIL PT-3546-2, NIL PT-3550-1, NIL PT-3550-2, NIL PT-3552, NIL PT-3569, NIL PT-3570-1, NIL PT-3570-2, NIL PT-3574, two kinds of samples (discs and chips) are available for different methods (chips sample is available for ICP-AES or Gravimetric Method etc., discs sample is available for XRF or spark-OES method etc.) . Please choose the kind of samples you would like to receive in the registration form.**



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### SOME USEFUL INFORMATION OF THE SCHEMES

#### \* How to participate our PT schemes

##### Method 1:

Log in the website to register, which is <http://www.nilpt.com>

##### Method 2:

Select the PT schemes in the table 1 and send the order to [nil@analysis.org.cn](mailto:nil@analysis.org.cn)

### Registration information of Laboratory

Name of Laboratory:

Postal Address & Zip Code:

Contact Person: Country:

E-mail:

Tel:

Fax:

**China NIL Research Center for Proficiency Testing**

**Address: No. 13 GaoliangqiaoXieJie, Haidian District, Beijing 100081, P. R. China**

**Contact Person: Ms. CHEN Jinghua, Ms. YAN Dongxia**

**Fax: +86 10 6218 1163; Phone: +86 10 6218 1064**

**E-mail: [nil@analysis.org.cn](mailto:nil@analysis.org.cn)**

**Website: <http://www.nilpt.com>**

#### \* Test samples (or specimens)

After NIL receives the orders and payments from the participants, test samples will be distributed along with “INSTRUCTIONS TO PARTICIPANTS”, “RESULT SHEET” and “ATC code” to the laboratories participating in the scheme. Some of the samples are prepared and tested for homogeneity by the Standard Material Research Center of CISRI (Central Iron & Steel Research Institute).

#### \* Testing method

The samples will be tested by the participant's preferred methods, which are generally used for providing formal reports. However, it is preferable to use international or national consensus standard methods. If a standard method is used, please provide its title name and serial number.

#### \* Registration fees

Registration fees should be paid as soon as the laboratory receives invoice from NIL. An invoice will be forwarded to the participating laboratory together with the samples.