

















MANUALE ISTRUZIONE

(EN).....pag. 5	(NL).....pag. 42	(FI).....pag. 79	(ET).....pag. 115
(IT).....pag. 10	(EL).....pag. 48	(DA).....pag. 84	(LV).....pag. 120
(FR).....pag. 15	(RO).....pag. 53	(NO).....pag. 89	(BG).....pag. 125
(ES).....pag. 20	(SV).....pag. 59	(SK).....pag. 94	(TR).....pag. 131
(DE).....pag. 26	(CS).....pag. 64	(SL).....pag. 99	(AR).....pag. 137
(RU).....pag. 31	(HR-SR).....pag. 69	(HU).....pag. 105	
(PT).....pag. 37	(PL).....pag. 74	(LT).....pag. 110	

(EN) EXPLANATION OF DANGER, MANDATORY AND PROHIBITION SIGNS.	(PL) OBJAŚNIENIA ZNAKÓW OSTRZEŻAWCZYCH, NAKAZU I ZAKAZU.
(IT) LEGENDA SEGNALI DI PERICOLO, D'OBBLIGO E DIVIETO.	(FI) VAROITUS, VELVOITUS, JA KIELTOMERKIT.
(FR) LÉGENDE SIGNAUX DE DANGER, D'OBLIGATION ET D'INTERDICTION.	(DA) OVERSIGT OVER FARE, PLIGT OG FORBUDSSIGNALER.
(ES) LEYENDA SEÑALES DE PELIGRO, DE OBLIGACIÓN Y PROHIBICIÓN.	(NO) SIGNALERINGS TEKST FOR FARE, FORPLIKTELSER OG FORBUD.
(DE) LEGENDE DER GEFAHREN-, GEBOTS- UND VERBOTSZEICHEN.	(SL) LEGENDA SIGNALOV ZA NEVARNOST, ZA PREDPISANO IN PREPOVEDANO.
(RU) ЛЕГЕНДА СИМВОЛОВ БЕЗОПАСНОСТИ, ОБЯЗАТЕЛЬНОСТИ И ЗАПРЕТА.	(SK) VYSVETLIVKY K SIGNÁLOM NEBEZPEČENSTVA, PŔÍKAZOM A ZÁKAZOM.
(PT) LEGENDA DOS SINAIS DE PERIGO, OBRIGAÇÃO E PROIBIDO.	(HU) A VESZÉLY, KÖTELEZTETSÉG ÉS TILTÁS JELZÉSÉINEK FELÍRATAI.
(NL) LEGENDE SIGNALEN VAN GEVAAR, VERPLICHTING EN VERBOD.	(LT) PAVOJAUS, PRIVALOMŪJŲ IR DRAUDŽIAMŪJŲ ŽENKLŲ PAAIŠKINIMAS.
(EL) ΛΕΞΑΝΤΑ ΣΗΜΑΤΩΝ ΚΙΝΔΥΝΟΥ, ΥΠΟΧΡΕΩΣΗΣ ΚΑΙ ΑΠΑΓΟΡΕΥΣΗΣ.	(ET) OHUD, KOHUSTUSED JA KEELUD.
(RO) LEGENDĂ INDICATOARE DE AVERTIZARE A PERICOLELOR, DE OBLIGARE ȘI DE INTERZICERE.	(LV) BĪSTĀMĪBU, PIENĀKUMU AN AIZLIEGUMA ZĪMJU PASKAIDROJUMI.
(SV) BILDTEXT SYMBOLER FÖR FARA, FÖRBUD OCH FÖRBUD.	(BG) ЛЕГЕНДА НА ЗНАЦИТЕ ЗА ОПАСНОСТ, ЗАДЪЛЖИТЕЛНИ И ЗА ЗАБРАНА.
(CS) VYSVĚTLIVKY K SIGNÁLŮM NEBEZPEČÍ, PŔÍKAZŮM A ZÁKAZŮM.	(TR) TEHLİKE, ZORUNLULUK VE YASAK İŞARETLERİNİN AÇIKLAMASI.
(HR-SR) LEGENDA OZNAKA OPASNOSTI, OBAVEZA I ZABRANA.	(AR) مفاتيح رموز الخطر والإلزام والحظر.

	(EN) DANGER OF ELECTRIC SHOCK - (IT) PERICOLO SHOCK ELETTRICO - (FR) RISQUE DE CHOC ÉLECTRIQUE - (ES) PELIGRO DESCARGA ELÉCTRICA - (DE) STROMSCHLÄGGEFAHR - (RU) ОПАСНОСТЬ ПОРАЖЕНИЯ ЭЛЕКТРИЧЕСКИМ ТОКОМ - (PT) PERIGO DE CHOQUE ELÉCTRICO - (NL) GEVAAR ELEKTROSHOCK - (EL) ΚΙΝΔΥΝΟΣ ΗΛΕΚΤΡΙΚΗΣ ΠΡΟΕΤΙΜΟΛΗΣ - (RO) PERICOL DE ELECTROCUTARE - (SV) FARA FÖR ELEKTRISK STÖT - (CS) NEBEZPEČÍ ZÁSAHU ELEKTRICKÝM PROUDEM - (HR-SR) OPASNOST STRUJNOG UDARA - (PL) NIEBEZPECZENSTWO SZOKU ELEKTRYCZNEGO - (FI) SÄHKÖISKUNN VAARA - (DA) FARE FOR ELEKTRISK STØD - (NO) FARE FOR ELEKTRISK STØT - (SL) NEVARNOST ELEKTRICNEGA UDARA - (SK) NEBEZPEČENSTVO ZÁSAHU ELEKTRICKÝM PRŔUDOM - (HU) ÁRAMTŪÉS VESZÉLYE - (LT) ELEKTROS SMŪGIO PAVOJUS - (ET) ELEKTRILŔOOGIONT - (LV) ELEKTROŠOKA BĪSTĀMĪBA - (BG) ОПАСНОСТ ОТ ТОКОВ УДАР - (TR) ELEKTRİK ÇARPMASI TEHLİKESİ - (AR) خطر الصدمة الكهربائية
	(EN) DANGER OF FUMES FROM PLASMA CUTTING - (IT) PERICOLO FUMI DI LAVORAZIONE - (FR) DANGER FUMÉES DE PROCESSUS - (ES) PELIGRO HUMOS DE ELABORACIÓN - (DE) BEIM ARBEITEN GEFAHR DURCH RAUCHGASE - (RU) ОПАСНОСТЬ ВЫДЕЛЕНИЯ ДЫМОВЫХ ГАЗОВ - (PT) PERIGO DE FUMOS DE PROCESSAMENTO - (NL) GEVAAR ROOK VAN BEWERKING - (EL) ΚΙΝΔΥΝΟΣ ΚΑΠΝΩΣ ΚΑΤΕΡΓΑΣΙΑΣ - (RO) PERICOL GAZE DE PRELUCRARE - (SV) FARA FÖR RÖK FRÅN BEARBETNING - (CS) NEBEZPEČÍ DÝMU POCHÁZEJÍCÍM Z PRACOVNÍ ČINNOSTI - (HR-SR) OPASNOST OD DIMA TIJEKOM RADA - (PL) NIEBEZPECZENSTWO POWSTAWANIA OPARÓW - (FI) TYÖSKENTELYSTÄ AIHEUTUVAN SAVUN VAARA - (DA) FARE PGA. DAMPE FRA BEARBEJDNINGEN - (NO) RISIKO FOR RØYK UNDER BEARBEIDELSEN - (SL) NEVARNOST NASTAJANJA DIMNIH HLAPOV MED DELOM - (SK) NEBEZPEČENSTVO DÝMOM VZNIKAJÚCICH PRI PRACOVNEJ ČINNOSTI - (HU) MUNKAVÉGZÉS KÖVETKEZTÉBEN KELETKEZETT FŪST VESZÉLYE - (LT) DŪMŲ PAVOJUS DARBO METU - (ET) KEEVITAMISEL SUITSU OHT - (LV) IZTVAIKUMU BĪSTĀMĪBA APSTRADES LAIKĀ - (BG) ОПАСНОСТ ОТ ПУШЕЦИ ПРИ ОБРАБОТКАТО - (TR) PLAZMA KESİMDEN KAYNAKLANAN DUMAN TEHLİKESİ - (AR) خطر أدخنة العمل
	(EN) DANGER OF EXPLOSION - (IT) PERICOLO ESPLOSIONE - (FR) RISQUE D'EXPLOSION - (ES) PELIGRO EXPLOSIÓN - (DE) EXPLOSIONSGEFAHR - (RU) ОПАСНОСТЬ ВЗРЫВА - (PT) PERIGO DE EXPLOSAO - (NL) GEVAAR ONTPLOFFING - (EL) ΚΙΝΔΥΝΟΣ ΕΚΡΗΞΗΣ - (RO) PERICOL DE EXPLOZIE - (SV) FARA FÖR EXPLOSION - (CS) NEBEZPEČÍ VÝBUCHU - (HR-SR) OPASNOST OD EKSPLOZIJE - (PL) NIEBEZPECZENSTWO WYBUCHU - (FI) RÄJÄHDYSVAARA - (DA) SPRENGFARE - (NO) FARE FOR EKSPLOSJON - (SL) NEVARNOST EKSPLOZIJE - (SK) NEBEZPEČENSTVO VÝBUCHU - (HU) ROBBANÁS VESZÉLYE - (LT) SPROGIMO PAVOJUS - (ET) PLAHVATUSOHT - (LV) SPRĀDZIENBĪSTĀMĪBA - (BG) ОПАСНОСТ ОТ ЕКСПЛОЗИЯ - (TR) PATLAMA TEHLİKESİ - (AR) خطر الانفجار
	(EN) WEARING PROTECTIVE CLOTHING IS COMPULSORY - (IT) OBBLIGO INDOSSARE INDUMENTI PROTETTIVI - (FR) PORT DES VÊTEMENTS DE PROTECTION OBLIGATOIRE - (ES) OBLIGACIÓN DE LLEVAR ROPA DE PROTECCIÓN - (DE) DAS TRAGEN VON SCHUTZKLEIDUNG IST PFLICHT - (RU) ОБЯЗАТЕЛЬНО НАДЕВАТЬ ЗАЩИТНУЮ ОДЕЖДУ - (PT) OBRIGATORIO O USO DE VESTUÁRIO DE PROTEÇÃO - (NL) VERPLICHT BESCHERMENDE KLEDIJ TE DRAGEN - (EL) ΥΠΟΧΡΕΩΣΗ ΝΑ ΦΟΡΑΤΕ ΠΡΟΣΤΑΤΕΥΤΙΚΑ ΕΝΔΥΜΑΤΑ - (RO) FOLOSIREA ÎMBRĂCĂMINTEI DE PROTECȚIE OBLIGATORIE - (SV) OBLIGATORISKT ATT BÄRA SKYDDSPPLAGG - (CS) POVINNÉ POUŽITÍ OCHRANNÝCH PROSTŘEDKŮ - (HR-SR) OBAVEZNO KORISTENJE ZAŠTITNE ODEJCE - (PL) NAKAZ NOSZENIA ODBIJEY OCHRONNEJ - (FI) SUOJAAVATETUKSEN KÄYTTÖ PAKOLLISTA - (DA) PLIGT TIL AT ANVENDE BESKYTTELSESTØJ - (NO) FORPLIKTELSE Å BRUKE VERNETØY - (SL) OBEZVNO OBLICITE ZAŠČITNA OBLAČILA - (SK) POVINNÉ POUŽITIE OCHRANNÝCH PROSTRIEDKOV - (HU) VÉDŐRŪHA HASZNÁLATA KÖTELEZŐ - (LT) PRIVALOMA DĖVĖTI APSAUGINĖ APRANGA - (ET) KOHUSTUSLIK KANDA KAITSERIIETUST - (LV) PIENĀKUMS ĢĒRBT AIZSARGTĒRĒPUS - (BG) ЗАДЪЛЖИТЕЛНО НОСЕНЕ НА ПРЕДПАЗНО ОБЛЕКЛО - (TR) KORUYUCU GIYSI GIYMEK ZORUNLUDUR - (AR) الإلتزام بارتداء الملابس الواقية
	(EN) WEARING PROTECTIVE GLOVES IS COMPULSORY - (IT) OBBLIGO INDOSSARE GUANTI PROTETTIVI - (FR) PORT DES GANTS DE PROTECTION OBLIGATOIRE - (ES) OBLIGACIÓN DE LLEVAR GUANTES DE PROTECCIÓN - (DE) DAS TRAGEN VON SCHUTZHANDSCHUHEN IST PFLICHT - (RU) ОБЯЗАТЕЛЬНО НАДЕВАТЬ ЗАЩИТНЫЕ ПЕРЧАТКИ - (PT) OBRIGATORIO O USO DE LUVAS DE SEGURANÇA - (NL) VERPLICHT BESCHERMENDE HANDSCHOENEN TE DRAGEN - (EL) ΥΠΟΧΡΕΩΣΗ ΝΑ ΦΟΡΑΤΕ ΠΡΟΣΤΑΤΕΥΤΙΚΑ ΓΑΝΤΙΑ - (RO) FOLOSIREA MĂNUȘILOR DE PROTECȚIE OBLIGATORIE - (SV) OBLIGATORISKT ATT BÄRA SKYDDSHANDSKAR - (CS) POVINNÉ POUŽITÍ OCHRANNÝCH RUKAVIC - (HR-SR) OBAVEZNO KORISTENJE ZAŠTITNIH RUKAVICA - (PL) NAKAZ NOSZENIA RĘKAWIC OCHRONNYCH - (FI) SUOJAKÄSINEIDEN KÄYTTÖ PAKOLLISTA - (DA) PLIGT TIL AT BRUGE BESKYTTELSEHANDSKER - (NO) FORPLIKTELSE Å BRUKE VERNEHANSKER - (SL) OBEZVNO NADENITE ZAŠČITNE ROKAVICE - (SK) POVINNÉ POUŽITIE OCHRANNÝCH RUKAVIC - (HU) VÉDŐKESZTYŰ HASZNÁLATA KÖTELEZŐ - (LT) PRIVALOMA MŪVĖTI APSAUGINĖS PIŘŠTINES - (ET) KOHUSTUSLIK KANDA KAITSERKINDAID - (LV) PIENĀKUMS ĢĒRBT AIZSARGCINDUS - (BG) ЗАДЪЛЖИТЕЛНО НОСЕНЕ НА ПРЕДПАЗНИ РЪКАВИЦИ - (TR) KORUYUCU ELDİVEN KULLANMAK ZORUNLUDUR - (AR) الإلتزام بارتداء القفازات الواقية

	<p>(EN) DANGER OF UV RADIATION FROM PLASMA CUTTING - (IT) PERICOLO RADIAZIONI ULTRAVIOLETTE DA LAVORAZIONE - (FR) DANGER RADIATIONS ULTRAVIOLETTES DE PROCESSUS - (ES) PELIGRO RADIACIONES ULTRAVIOLETAS DE ELABORACIÓN - (DE) BEIM ARBEITEN GEFÄHR DURCH UV-STRAHLUNG - (RU) ОПАСНОСТЬ УЛЬТРАФИОЛЕТОВЫХ ИЗЛУЧЕНИЙ - (PT) PERIGO DE RADIAÇÕES ULTRAVIOLETAS DE PROCESSAMENTO - (NL) GEVAAR ULTRAVIOLETSTRALEN VAN BEWERKING - (EL) ΚΙΝΔΥΝΟΣ ΥΠΕΡΙΘΙΩΣΗΣ ΑΚΤΙΝΩΝ ΑΠΟ ΚΑΤΕΡΓΑΣΙΑ - (RO) PERICOL RADIATII ULTRAVIOLETE REZULTATE ÎN URMA PRELUCRĂRII - (SV) FARA FÖR ULTRAVIOLETT STRÅLNING FRÅN BEARBETNING - (CS) NEBEZPEČÍ ULTRAFIALOVÉHO ZÁŘENÍ POČÁZEJÍCÍHO Z PRACOVNÍ ČINNOSTI - (HR-SR) OPASNOST OD ULTRALJUBICASTIH ZRAKA TIJEKOM RADA - (PL) NIEBEZPIECZYSTWO PROMIENIOWANIA NADFIOLETOWEGO PODCZAS CIĘCIA - (FI) TYÖSKENTELYSTÄ AIHEUTUVAN ULTRAVIOLETTISÄTEILYNIEN VAARA - (DA) FARE FOR ULTRAVIOLETTE STRÅLER FRA BEARBEJDNINGEN - (NO) RISIKO FOR ULTRAVIOLETTE STRÅLINGUNDERBEARBEIDELSEN - (SL) NEVARNOST ULTRAVIOLETNEGA SEVANJA MED DELOM - (SK) NEBEZPEČENSTVO ULTRAFIALOVÉHO ŽIARENIA VZNIKAJUČEHO PRI PRAVOCNÝ CHODI - (HU) MUNKAVÉGÉSZŐBŐL BEKÖVETKEZŐ ULTRAVIOLETA-SUGÁRZÁS VESZÉLYE - (LT) ULTRAVIOLETINIŲ SPINDULIŲ PAVOJUS DARBO METU - (ET) KEEVITAMISEL ERALDUVA ULTRAVIOLETTKIIRGUSE OHT - (LV) ULTRAVIOLETA IZSTAROJUMA BĪSTAMĪBA APSTRĀDES LAIKĀ - (BG) ОПАСНОСТ ОТ ОБЛЪЧВАНЕ С УЛТРАВИОЛЕТОВИ ЛЪЧИ ПРИ ОБРАБЪТВАНЕТО - (TR) PLAZMA KESİMDEN KAYNAKLANAN ULTRAVİOLET İŞİMA TEHLİKESİ - (AR) خطر التعرض للأشعة تحت البنفسجية الناتجة عن العمل</p>
	<p>(EN) DANGER OF FIRE - (IT) PERICOLO INCENDIO - (FR) RISQUE D'INCENDIE - (ES) PELIGRO DE INCENDIO - (DE) BRANDGEFAHR - (RU) ОПАСНОСТЬ ПОЖАРА - (PT) PERIGO DE INCÊNDIO - (NL) GEVAAR VOOR BRAND - (EL) ΚΙΝΔΥΝΟΣ ΠΥΡΚΑΓΙΑΣ - (RO) PERICOL DE INCENDIU - (SV) BRANDRISK - (CS) NEBEZPEČÍ POŽÁRU - (HR-SR) OPASNOST OD POŽARA - (PL) NIEBEZPIECZYSTWO POŻARU - (FI) TULIPALON VAARA - (DA) BRANDFARE - (NO) BRANNFARE - (SL) NEVARNOST POŽARA - (SK) NEBEZPEČENSTVO POŽIARU - (HU) TŰVESZÉLY - (LT) GAISRO PAVOJUS - (ET) TULEOHT - (LV) UGUNSGRĒKA BĪSTAMĪBA - (BG) ОПАСНОСТ ОТ ПОЖАР - (TR) YANGIN TEHLİKESİ - (AR) خطر التسبب في إندلاع حريق</p>
	<p>(EN) DANGER OF BURNS - (IT) PERICOLO DI USTIONI - (FR) RISQUE DE BRÛLURES - (ES) PELIGRO DE QUEMADURAS - (DE) VERBRENNUNGSGEFAHR - (RU) ОПАСНОСТЬ ОЖОГОВ - (PT) PERIGO DE QUEIMADURAS - (NL) GEVAAR VOOR BRANDWONDEN - (EL) ΚΙΝΔΥΝΟΣ ΕΓΚΑΥΜΑΤΩΝ - (RO) PERICOL DE ARSURI - (SV) RISK FÖR BRÄNNSKADA - (CS) NEBEZPEČÍ POPÁLENIN - (HR-SR) OPASNOST OD OPEKLINE - (PL) NIEBEZPIECZYSTWO OPARZEŃ - (FI) PALOVOIMMOJEN VAARA - (DA) FARE FOR FORBRÆNDINGER - (NO) FARE FOR FORBRENNINGER - (SL) NEVARNOST OPEKLIN - (SK) NEBEZPEČENSTVO POPÁLENIN - (HU) EGÉSI SERÜLÉS VESZÉLYE - (LT) NUSIDĖGINIMO PAVOJUS - (ET) PÕLETUSHAAVAE SAAMISE OHT - (LV) APDEGUMU GŪŠANAS BĪSTAMĪBA - (BG) ОПАСНОСТ ОТ ИЗГЪРЯНИЯ - (TR) YANGIN TEHLİKESİ - (AR) خطر التعرض لحوروق</p>
	<p>(EN) DANGER OF NON-IONISING RADIATION - (IT) PERICOLO RADIAZIONI NON IONIZZANTI - (FR) DANGER RADIATIONS NON IONISANTES - (ES) PELIGRO RADIACIONES NO IONIZANTES - (DE) GEFÄHR NICHT IONISIERENDER STRAHLUNGEN - (RU) ОПАСНОСТЬ НЕИОНИЗИРУЮЩЕЙ РАДИАЦИИ - (PT) PERIGODERADIAÇÕES NÃO IONIZANTES - (NL) GEVAAR NIETIONISERENDE STRALEN - (EL) ΚΙΝΔΥΝΟΣ ΜΗ ΙΟΝΙΖΟΝΤΩΝ ΑΚΤΙΝΟΒΟΛΙΩΝ - (RO) PERICOL DE RADIATII NEIONIZANTE - (SV) FARA FÖR ICKE JONISERANDE STRÅLER - (CS) NEBEZPEČÍ NEIONIZUJÍCÍHO ZÁŘENÍ - (HR-SR) OPASNOST NEJONIZIRAJUĆIH ZRAKA - (PL) ZAGROŻENIE PROMIENIOWANIEM NIEJONIZUJĄCYM - (FI) IONISOIMATTOMAN SÄTEILYN VAARA - (DA) FARE FOR IKKE-IONISERENDE STRÅLER - (NO) FARE FOR UJONISERT STRÅLING - (SL) NEVARNOST NEJONIZIRANEGA SEVANJA - (SK) NEBEZPEČENSTVO NEJONIZUJÚCEHO ŽIARENIA - (HU) NEM INOGEN SUGÁRZÁS VESZÉLYE - (LT) NEJONIZUOTO SPINDULIAVIMO PAVOJUS - (ET) MITTELEENERGIATUURKIIRGUSTE OHT - (LV) NEJONIZĒJOŠĀ IZSTAROJUMA BĪSTAMĪBA - (BG) ОПАСНОСТ ОТ НЕ ИОНИЗИРАНО ОБЛЪЧВАНЕ - (TR) İYONLAŞTIRICI OLMAYAN RADIASYON TEHLİKESİ - (AR) خطر التعرض للإشعاعات غير مؤينة</p>
	<p>(EN) GENERAL HAZARD - (IT) PERICOLO GENERICO - (FR) DANGER GÉNÉRIQUE - (ES) PELIGRO GENÉRICO - (DE) GEFÄHR ALLGEMEINER ART - (RU) ОБЩАЯ ОПАСНОСТЬ - (PT) PERIGO GERAL - (NL) ALGEMEEN GEVAAR - (EL) ΓΕΝΙΚΟΣ ΚΙΝΔΥΝΟΣ - (RO) PERICOL GENERAL - (SV) ALLMÅN FARA - (CS) VŠEOBECNĚ NEBEZPEČÍ - (HR-SR) OPĆA OPASNOST - (PL) OGÓLNE NIEBEZPIECZYSTWO - (FI) YLEINEN VAARA - (DA) ALMEN FARE - (NO) GENERISK FARE STRÅLING - (SL) SPOŠNA NEVARNOST - (SK) VŠEOBECNĚ NEBEZPEČENSTVO - (HU) ÁLTALÁNOS VESZÉLY - (LT) BENDRAS PAVOJUS - (ET) ÜLDINE OHT - (LV) VISPĀRĪGA BĪSTAMĪBA - (BG) ОБЩИ ОПАСНОСТИ - (TR) GENEL TEHLIKE - (AR) خطر عام</p>
	<p>(EN) DO NOT USE THE HANDLE TO HANG THE MACHINE - (IT) VIETATO UTILIZZARE LA MANIGLIA COME MEZZO DI SOSPENSIONE DELLA MACCHINA - (FR) INTERDIT D'UTILISER LA POIGNÉE COMME MOYEN DE SUSPENSION DE LA MACHINE - (ES) SE PROHIBE UTILIZAR LA MANILLA COMO MEDIO DE SUSPENSION DE MÁQUINA - (DE) ES IST UNTERSAGT, DEN GRIFF ALS MITTEL ZUM AUFHÄNGEN DER MASCHINE ZU BENUTZEN - (RU) ЗАПРЕЩЕНО ПОДВЕШИВАТЬ МАШИНЫ ЗА РУЧКУ - (PT) É PROIBIDO UTILIZAR A MANEJANTE COMO MEIO DE SUSPENSÃO DA MÁQUINA - (NL) DE HANDGREEP MAG NIET WORDEN GEBRUIKT OM HET MACHINE AAN OP TE HANGEN - (EL) ΑΠΑΓΟΡΕΥΕΤΑΙ Η ΧΡΗΣΗ ΤΗΣ ΧΕΙΡΟΛΑΒΗΣ ΞΑΝ ΜΕΣΟ ΑΝΥΨΩΣΗΣ ΤΗΣ ΜΗΧΑΝΗΣ ΞΥΖΕΥΧΕ - (RO) SE INTERZICE FOLOSIREA MĂNĂRII CA SĂ MUCLOC DE SUSȚINERE A MAȘINII - (SV) DET ÄR FÖRBJUDET ATT ANVÄNDA HANTAGET FÖR ATT HÄNGA UPP MASKINEN - (CS) JE ZAKÁZANO POUŽÍVAT RUKOJEJ JAKO PROSTŘEDEK K ZAVĚŠENÍ PŘÍSTROJE - (HR-SR) ZABRANJENO JE UPOTREBLJAVATI RUČKU ZA PODIZANJE STROJA - (PL) ZABRANIA SI UZYWANIA UCHWYTU JAKO ŚRODKA DO ZAWIESZANIA - (FI) ON KIELLETTYÄ KÄYTTÄÄ KÄSIKÄNNÄVÄÄ RIPUSTUS VÄLINEENÄ - (DA) DET ER FORBUDT AT HENGE HÅNDEBRET TIL AT HENGE MASKINEN - (NO) DET ER FORBUDT Å BRUKE HÅNDETAKET FOR Å HENGE MASKINEN OPP - (SL) ROČAJA NE SMETE UPORABLJATI ZA OBEŠANJE APARATA - (SK) JE ZAKÁZANÉ VEŠAŤ ZVÁRACÍ PŘÍSTROJ ZA RUKOVĚT - (HU) TILOS A GÉP A FOGANTYÚJÁNÁL FOGVA FELAKASZTANI - (LT) DRAUDZIAMA NAUDOTI RANKENA KAIP PRIEMONĖ APARATU SUSTABDYMUI - (ET) ON KEELATUD RIPUTADA masin KASUTADE SELLEKS KÄRPIDET - (LV) IR AIZLIEGTS IZMANTOT ROKTURI APARĀTĀ PIĒKĀRSĀNĀI - (BG) ЗАБРАНЕНО Е ДА СЕ ИЗПОЛЗВА РЪКОХВАТКАТА КАТО СРЕДСТВО ЗА ОКЪЧВАНЕ НА МАШИНАТА - (TR) KANAK MAKİNESİNİ SAPINDAN ASMAYIN - (AR) يحظر استخدام المقبض كوسيلة تعليق الآلة للحمار</p>
	<p>(EN) EYE PROTECTIONS MUST BE WORN - (IT) OBBLIGO DI INDOSSARE OCCHIALI PROTETTIVI - (FR) PORT DES LUNETTES DE PROTECTION OBLIGATOIRE - (ES) OBLIGACION DE USAR GAFAS DE PROTECCIÓN - (DE) DAS TRAGEN EINER SCHUTZBRILLE IST PFLICHT - (RU) ОБЯЗАННОСТЬ НОСИТЬ ЗАЩИТНЫЕ ОЧКИ - (PT) OBRIGAÇÃO DE VESTIR ÓCULOS DE PROTECÇÃO - (NL) VERPLICHT DRAGEN VAN BESCHERMENDE BRIL - (EL) ΥΠΟΧΡΕΩΣΗ ΝΑ ΦΟΡΑΤΕ ΠΡΟΣΤΡΕΥΤΙΚΑ ΓΥΑΛΙΑ - (RO) ESTE OBLIGATORIE PURTAREA OCHELARILOR DE PROTECȚIE - (SV) OBLIGATORISKT ATT ANVÄNDA SKYDDSGSLÅSÖGON - (CS) POVINNOST POUŽÍVÁNÍ OCHRANNÝCH BRYLÍ - (HR-SR) OBAVEZNA UPOTREBA ZAŠTITNIH NAČOČALA - (PL) NAKAZ NOSZENIA OKULARÓW OCHRONNYCH - (FI) SUOJALSIEN KÄYTTÖ PAKOLLISTA - (DA) PLIGTTIL AT ANVENDE BESKYTTELSESBRILLER - (NO) DET ER OBLIGATORISK Å HA PÅ SEG VERNEBRILLEN - (SL) OBVEZNA UPORABA ZAŠČITNIH OČAL - (SK) POVINNOST POUŽÍVANIA OCHRANNÝCH OKULIAROV - (HU) VÉDŐSZEMLÉGVÉG VISELETE KÖTELEZŐ - (LT) PRIVALOMA DIRBTI SU APSAUGINIAIS AKINIAMS - (ET) KOHUSTUS KANDA KAITSEPRILLE - (LV) PIENĀKUMS VILKT AIZSARGBRILLES - (BG) ЗАДЪЛЖИТЕЛНО ДА СЕ НОСЯТ ПРЕДПАЗНИ ОЧИЛА - (TR) KORUYUCU GÖZLÜK KULLANILMALDIR - (AR) الالتزام بارتداء نظارات واقية</p>
	<p>(EN) NO ENTRY FOR UNAUTHORISED PERSONNEL - (IT) DIVIETO DI ACCESSO ALLE PERSONE NON AUTORIZZATE - (FR) ACCÈS INTERDIT AUX PERSONNES NON AUTORISÉES - (ES) PROHIBIDO EL ACCESO A PERSONAS NO AUTORIZADAS - (DE) UNBEGUFENGTEN PERSONEN IST DER ZUTRITT VERBOTEN - (RU) ЗАПРЕТ ДЛЯ ДОСТУПА ПОСТРОЕННЫХ ЛИЦ - (PT) PROIBIÇÃO DE ACESSO ÀS PESSOAS NÃO AUTORIZADAS - (NL) TOEGANGSVERBOD VOOR NIET GEAUTORISEERDE PERSONEN - (EL) ΑΠΑΓΟΡΕΥΣΗ ΠΡΟΣΒΑΣΗΣ ΣΕ ΜΗ ΕΠΙΤΡΕΠΜΕΝΑ ΑΤΟΜΑ - (RO) ACCESUL PERSOANELOR NEAUTORIZATE ESTE INTERZIS - (SV) TILLTRÄDE FÖRBJUDET FÖR ICKE-AUKTORISERAD PERSONER - (CS) ZAKÁZANÝ VSTUP NEPOVOLANÝM OSOBU - (HR-SR) ZABRANJENA PRISTUPA NEOVLAŠTENIM OSOBAMA - (PL) ZAKAZ DOSTĘPU OSOBOM NIETUPRAWOZNYM - (FI) PÄÄSY KIELLETTY ASIANTOMILTA - (DA) ADGANG FORBUDT FOR UVEDKOMMENDE - (NO) PERSONER SOM IKKE ER AUTORISERTE MÅ IKKE HA ADGANG TIL APPARATEN - (SL) DOSTOP PREPOVEDAN NEPOOBLAŠČENIM OSEBAM - (SK) ZAKAZ NEOPRÁVNENÉHO PRÍSTUPU K OSOBU - (HU) FEL NEM JOGOSÍTVOT SZEMÉLYEK SZÁMÁRA TILOS A BELÉPÉS - (LT) PASALINIAMS JEITI DRAUDZIAMA - (ET) SELLEKS VOLITAMATA ISUKUTEL ON TÕBALAS VIIBIMINE KEELATUD - (LV) NEPIEDEROSĀM PERSONĀM IEEJA AIZLIEGTA - (BG) ЗАБРАНЕНО Е ДОСТЪПЪТ НА НЕУПЪТНОМОЩЕНИ ЛИЦА - (TR) YETKİLİ OLMAYAN KİŞİLER GİREMEZ - (AR) يحظر الدخول على الأشخاص الغير مصرح لهم</p>

	<p>(EN) WEARING A PROTECTIVE MASK IS COMPULSORY - (IT) OBBLIGO USARE MASCHERA PROTETTIVA - (FR) PORT DU MASQUE DE PROTECTION OBLIGATOIRE - (ES) OBLIGACION DE USAR MÁSCARA DE PROTECCIÓN - (DE) DER GEBRAUCH EINER SCHUTZMASKE IST PFLICHT - (RU) ОБЯЗАННОСТЬ ПОЛЬЗОВАТЬСЯ ЗАЩИТНОЙ МАСКОЙ - (PT) OBRIGATORIO O USO DE MÁSCARA DE PROTEÇÃO - (NL) VERPLICHT GEBRUIK VAN BESCHERMENDE MASKER - (EL) ΥΠΟΧΡΕΩΣΗ ΝΑ ΦΟΡΑΤΕ ΠΡΟΤΑΣΤΕΥΤΙΚΗ ΜΑΣΚΑ - (RO) FOLOSIREA MĂȘTI DE PROTECȚIE OBLIGATORIE - (SV) OBLIGATORISKT ATT BÅRA SKYDDSMASK - (CS) POVINNÉ POUŽITÍ OCHRANNOÉ ŠTÍTU - (HR-SR) OBAVEZNO KORISTENJE ZAŠTITNE MASCHE - (PL) NAKAZ UZYWANIA MASKI OCHRONNEJ - (FI) SUOJAMASKIN KÄYTTÖ PAKOLLISTA - (DA) PLIGTTIL AT ANVENDE BESKYTTELSESMASKE - (NO) FORPLIKTELSE Å BRUKE VERNEBRILLER - (SL) OBEZVEDNOST UPORABIZAŠČITNE MASKE - (SK) POVINNÉ POUŽITIE OCHRANNOÉ ŠTÍTU - (HU) VÉDŐMASZK HASZNÁLATA KÖTELEZŐ - (LT) PRIVALOMA UŽSIDĖTI APSAUGINČIAUKĖ - (ET) KOHUSTUSLIK KANDA KAITSEMASKI - (LV) PIENĀKUMS IZMANTOT AIZSARGMASKU - (BG) ЗАДЪЛЖИТЕЛНО ИЗПОЛЗВАНЕ НА ПРЕДПАЗНА ЗАВАРЪЧНА МАСКА - (TR) KORUYUCU MASKETAKMAK ZORUNLUDUR - (AR) الالتزام باستخدام قناع واق</p>
	<p>(EN) WEARING EAR PROTECTORS IS COMPULSORY - (IT) OBBLIGO PROTEZIONE DELL'UDITO - (FR) PROTECTION DE L'OUÏE OBLIGATOIRE - (ES) OBLIGACIÓN DE PROTECCIÓN DEL OÍDO - (DE) DAS TRAGEN VON GEHÖRSCHUTZ IST PFLICHT - (RU) ОБЯЗАННОСТЬ ЗАЩИЩАТЬ СЛУХ - (PT) OBRIGATORIO PROTEGER O OUVIDO - (NL) VERPLICHTE OORBESCHERMING - (EL) ΥΠΟΧΡΕΩΣΗ ΠΡΟΣΤΑΣΙΑΣ ΑΚΟΗΣ - (RO) PROTECȚIA AUZULUI OBLIGATORIE - (SV) OBLIGATORISKT ATT SKYDDA HÖRSELN - (CS) POVINNOST OCHRANY SLUCHU - (HR-SR) OBAVEZNA ZAŠTITA SLUHA - (PL) NAKAZ OCHRONY SŁUCHU - (FI) KUULOSUOJAUUS PAKOLLINEN - (DA) PLIGTTIL AT ANVENDE HØREVERN - (NO) FORPLIKTELSE Å BRUKE HØRSELVERN - (SL) OBEZVEDNOST UPORABA GLUŠNIKOV - (SK) POVINNÁ OCHRANA SLUCHU - (HU) HALLÁSVEDELEM KÖTELEZŐ - (LT) PRIVALOMOS APSAUGOS PRIEMONĖS KLASOS ORGANAMS - (ET) KOHUSTUS KANDA KUULMISKAITSEVAHENDID - (LV) PIENĀKUMS AIZSARGĀT DZIRDĒS ORGĀNUS - (BG) ЗАДЪЛЖИТЕЛНО ДА СЕ НОСЯТ ПРЕДПАЗНИ СРЕДСТВА ЗА СЛУХА - (TR) KORUYUCU KULAKLIK KULLANMAK ZORUNLUDUR - (AR) الزام بحماية الأذن</p>
	<p>(EN) USERS OF VITAL ELECTRICAL AND ELECTRONIC APPARATUS MUST NEVER USE THE MACHINE - (IT) VIETATO L'USO DELLA MACCHINA AI PORTATORI DI APPARECCHIATURE ELETTRICHE ED ELETTORNICHE VITALI - (FR) L'UTILISATION DE LA MACHINE EST DÉCONSEILLÉE AUX PORTEURS D'APPAREILS ÉLECTRIQUES OU ÉLECTRONIQUES MÉDICAUX - (ES) PROHIBIDO EL USO DE LA MÁQUINA A LOS PORTADORES DE APARATOS ELÉCTRICOS Y ELECTRÓNICOS VITALES - (DE) TRÄGERN LEBENSERHALTENDER ELEKTRISCHER UND ELEKTRONISCHER GERÄTE IST DER GEBRAUCH DER MASCHINE UNTERSAGT - (RU) ИСПОЛЬЗОВАНИЕ УСТАНОВОК ЗАПРЕЩЕНО ЛИЦАМ, ИСПОЛНЯЮЩИМ ЭЛЕКТРОННУЮ И ЭЛЕКТРОАППАРАТУРУ ОБЕСПЕЧЕНИЯ ЖИЗНЕДЕЯТЕЛЬНОСТИ - (PT) É PROIBIDO O USO DA MÁQUINA AOS PORTADORES DE APARELHAGENS ELÉCTRICAS E ELECTRÓNICAS VITAIS - (NL) HET GEBRUIK VAN DE MACHINE IS VERBODEN AAN DRAGERS VAN ELEKTRISCHE EN ELEKTRONISCHE VITALE APPARATUUR - (EL) ΑΠΑΓΟΡΕΥΕΤΑΙ Η ΧΡΗΣΗ ΤΟΥ ΜΗΧΑΝΗΜΑΤΟΣ ΣΕ ΑΤΟΜΑ ΠΟΥ ΦΕΡΟΥΝ ΗΛΕΚΤΡΙΚΕΣ ΚΑΙ ΗΛΕΚΤΡΟΝΙΚΕΣ ΣΥΣΚΕΥΕΣ ΖΩΤΙΚΗΣ ΣΗΜΑΣΙΑΣ - (RO) SE INTERZICE FOLOSIREA MAȘINI DE CĂTRE PERSOANELE PURTĂTOARE DE APARATE ELECTRICE ȘI ELECTRONICE VITALE - (SV) FÖRBJUDET FÖR ANVÄNDARE AV LIVSUPPHÅLLANDE ELEKTRISKA ELLER ELEKTRONISKA APPARATER ATT ANVÄNDA DENNA MASKIN - (CS) ZÁKAZ POUŽITÍ STROJE NOSITELŮM ELEKTRICKÝCH A ELEKTRONICKÝCH ŽIVOTNĚ DŮLEŽITÝCH ZAŘÍZENÍ - (HR-SR) ZABRANJENO JE UPOTREBLJAVATI STROJ OSOBAMA KOJE IMAJU UGRADENE VITALNE ELEKTRICNE ILI ELEKTRONICKE UREĐAJE - (PL) ZABRONIONE JEST UŻYWANIE URZĄDZENIA OSOBOM STOSUJĄCYM ELEKTRYCZNĄ I ELEKTRONICZNE URZĄDZENIA WSPOMAGAJĄCE FUNKCJE ŻYCIOWE - (FI) KONEEN KÄYTTÖKIELTO SÄHKÖNIIKKA JA ELEKTRONISTEN HENKILÖSUOJALAITTEIDEN KÄYTTÄJILLE - (DA) DET ER FORBUDT FOR PERSONER, DER ANVENDER LIVSVIGTIGT ELEKTRISK OG ELEKTRONISK APPARATUR, AT ANVENDE MASKINEN - (NO) DET ER FORBUDT FOR PERSONER SOM BRUKER LIVSVIKTIGE ELEKTRISKE ELLER ELEKTRONISKE APPARATER Å BRUKE MASKINEN - (SL) PREPOVEDANA UPORABA STROJA ZA UPORABNE ŽIVLJENJSKO POMENJNIH ELEKTRINIHN I ELEKTRONSKIH NAPRAV - (SK) ZÁKAZ POUŽÍVANIA STROJA OSOBÁM SO ŽIVOTNĚ DŮLEŽITÝMI ELEKTRICKÝMI A ELEKTRONICKÝMI ZARIADENAMI - (HU) TILOS A GÉP HASZNÁLATA MINDAZOK SZÁMÁRA, AKIK SZERVEZETEBEN ÉLETFENNTARTÓ ELEKTROMOS VAGY ELEKTRONIKUS KÉSZÜLÉK VAN BEÉPÍTVE - (LT) GRIEŽTAI DRAUDŽIAMA SU ĮRANGA DIRBTI ASMENIMS, BĖSINAUDOJANTIEMS GYVYBIŠIAI SVARBIAMS ELEKTRINIAMS AR ELEKTRONINIAMS PRIETAISAMS - (ET) SEADET EI TOHI KASUTADA ISIKUD, KES KASUTAVAD MEDITSINIILISI ELEKTRI-JA ELEKTRONIAK SEADMEIDME - (LV) ELEKTRISKO VAI ELEKTRONISKO MEDICĪNISKO IERĪCU LIETOTĀJIEM IR AIZLĒGTS IZMANTOT MAŠĪNU - (BG) ЗАБРАНЕНО Е ПОЛЗВАНЕТО НА МАШИНАТА ОТ ЛИЦА, НОСИТЕЛИ НА ЕЛЕКТРИЧЕСКИ И ЕЛЕКТРОННИ МЕДИЦИНСКИ УСТРОЙСТВА - (TR) HAYATI ELEKTRIKLI VE ELEKTRONIK SINAZ KULLANANLAR MAKİNEİY KULLANMAMALIDIR - (AR) يحظر استخدام الآلة لحاملي الأجهزة الكهربائية والالكترونية الحيوية</p>
	<p>(EN) PEOPLE WITH METAL PROSTHESES ARE NOT ALLOWED TO USE THE MACHINE - (IT) VIETATO L'USO DELLA MACCHINA AI PORTATORI DI PROTESI METALLICHE - (FR) UTILISATION INTERDITE DE LA MACHINE AUX PORTEURS DE PROTHÈSES MÉTALLIQUES - (ES) PROHIBIDO EL USO DE LA MÁQUINA A LOS PORTADORES DE PRÓTESIS METÁLICAS - (DE) TRÄGERN VON METALLPROTHESEN IST DER UMGANG MIT DER MASCHINE VERBOTEN - (RU) ИСПОЛЬЗОВАНИЕ МАШИНЫ ЗАПРЕЩАЕТСЯ ЛЮДЯМ, ИМЕЮЩИМ МЕТАЛЛИЧЕСКИЕ ПРОТЕЗЫ - (PT) PROIBIDO O USO DA MÁQUINA AOS PORTADORES DE PRÓTESIS METÁLICAS - (NL) HET GEBRUIK VAN DE MACHINE IS VERBODEN AAN DE DRAGERS VAN METALEN PROTHESEN - (EL) ΑΠΑΓΟΡΕΥΕΤΑΙ Η ΧΡΗΣΗ ΤΗΣ ΜΗΧΑΝΗΣ ΣΕ ΑΤΟΜΑ ΠΟΥ ΦΕΡΟΥΝ ΜΕΤΑΛΛΙΚΕΣ ΠΡΟΘΗΣΕΙΣ - (RO) SE INTERZICE FOLOSIREA MAȘINI DE CĂTRE PERSOANELE PURTĂTOARE DE PROTEZE METALICE - (SV) FÖRBJUDET FÖR PERSONER SOM BÅR METALLPROTES ATT ANVÄNDA MASKINEN - (CS) ZÁKAZ POUŽITÍ STROJE NOSITELŮM KOVOVÝCH PROTĚZ - (HR-SR) ZABRANJENA UPOTREBA STROJA OSOBAMA KOJE NOSE METALNE PROTEZE - (PL) ZAKAZ UZYWANIA URZĄDZENIA OSOBOM STOSUJĄCYM PROTEZY METALOWE - (FI) KONEEN KÄYTTÖ KIELLETTY METALLIPROTEESIN KANTAJILTA - (DA) DET ER FORBUDT FOR PERSONER MED METALPROTESER AT BENYTTJE MASKINEN - (NO) BRUK AV MASKINEN ER IKKE TILLATT FOR PERSONER MED METALLPROTESER - (SL) PREPOVEDANA UPORABA STROJA ZA NOSILCE KOVINSKIH PROTEZ - (SK) ZÁKAZ POUŽITIA STROJA OSOBÁM S KOVOVÝMI PROTEZAMI - (HU) TILOS A GÉP HASZNÁLATA FÉMPROTEZIS VESÉLŐ SZEMÉLYEK SZÁMÁRA - (LT) SU SUVIRINIMO APARATU DRAUDŽIAMA DIRBTI ASMENIMS, NAUDOJANTIEMS METALINIUS PROTEZUS - (ET) SEADET EI TOHI KASUTADA ISIKUD, KES KASUTAVAD METALLPROTEESE - (LV) CILVĒKIEM AR METĀLA PROTEZĒM IR AIZLĒGTS LIETOT IERĪCI - (BG) ЗАБРАНЕНО Е УПОТРЕБАТА НА МАШИНАТА ОТ НОСИТЕЛИ НА МЕТАЛНИ ПРОТЕЗИ - (TR) METAL PROTEZLİ İNSANLAR MAKİNEİY KULLANAMAZ - (AR) يحظر استخدام الآلة على مستخدمي أجهزة السمع المعدنية</p>
	<p>(EN) DO NOT WEAR OR CARRY METAL OBJECTS, WATCHES OR MAGNETISED CARDS - (IT) VIETATO INDOSSARE OGGETTI METALLICI, OROLOGI E SCHEDE MAGNETICHE - (FR) INTERDICTION DE PORTER DES OBJETS MÉTALLIQUES, MONTRES ET CARTES MAGNÉTIQUES - (ES) PROHIBIDO LLEVAR OBJETOS METÁLICOS, RELOJES, Y TARJETAS MAGNÉTICAS - (DE) DAS TRAGEN VON METALLOBJEKTEN, UHREN UND MAGNETKARTEN IST VERBOTEN - (RU) ЗАПРЕЩАЕТСЯ НОСИТЬ МЕТАЛЛИЧЕСКИЕ ПРЕДМЕТЫ, ЧАСЫ ИЛИ МАГНИТНЫЕ ПЛАТБЫ - (PT) PROIBIDO VESTIR OBJETOS METÁLICOS, RELÓGIOS E FICHAS MAGNÉTICAS - (NL) HET IS VERBODEN METALEN VOORWERPEN, UURWERKEN EN MAGNETISCHE FICHES TE DRAGEN - (EL) ΑΠΑΓΟΡΕΥΕΤΑΙ ΝΑ ΦΟΡΑΤΕ ΜΕΤΑΛΛΙΚΑ ΑΝΤΙΚΕΙΜΕΝΑ, ΡΟΛΟΓΙΑ ΚΑΙ ΜΑΓΝΗΤΙΚΕΣ ΠΛΑΚΕΤΕΣ - (RO) ESTE INTERZISĂ PURTAREA OBIECTELOR METALICE, A CEASURILOR ȘI A CARTELOR MAGNETICE - (SV) FÖRBJUDET ATT BÅRA METALLFÖREMÅL, KLOCKOR OCH MAGNETKORT - (CS) ZÁKAZ NOŠENÍ KOVOVÝCH PŘEDMĚTŮ, HODINEK A MAGNETICKÝCH KARET - (HR-SR) ZABRANJENO NOŠENJE METALNIH PREDMETA, SAUTOVA I MAGNETISKIH KARTI - (PL) ZAKAZ NOSZENIA PRZEDMIOTÓW METALOWYCH, ZEGARKÓW I KART MAGNETYCZNYCH - (FI) METALLISTEN ESINEIDEN, KELLOJEN JA MAGNEETTIKORTTIEN MUKANA PITÄMINEN KIELLETTY - (DA) FORBUD MOD AT BÆRE METALLENSTANDE, URE OG MAGNETISKE KORT - (NO) FORBUDT Å HA PÅ SEG METALLFORMÅL, KLOCKER OG MAGNETISKE KORT - (SL) PREPOVEDANO NOŠENJE KOVINSKIH PREDMETOV, UR IN MAGNETNIH KARTIC - (SK) ZÁKAZ NOSENIA KOVOVÝCH PREDMETOV, HODINIEK A MAGNETICKÝCH KARIET - (HU) TILOS TI METALINIÚ DAIKTŰ, LAIKRODZIU ÁR MAGNETINIÚ PLOKSTÉLIÚ - (LT) KEELATUD ON KANDA METALLESMEID, KELLASID JA MAGENTKAARTE - (LV) IR AIZLĒGTS VILKT METĀLA PRIEKŠMĒTUS, PULKSTĒNUS UN NĒMŪ LĪDZI MAGNĒTISKĀS KARTĒS - (BG) ЗАБРАНЕНО Е НОСЕНЕТО НА МЕТАЛНИ ПРЕДМЕТИ, ЧАСОВНИЦИ И МАГНИТНИ СХЕМИ - (TR) METAL NESNELEN, SAATLER YA DA MANYETIK KARTLARI KULLANMAYIN VEYA TAŞIMAYIN - (AR) يحظر استخدام أشياء معدنية، ساعات وبطاقات ممغنطة</p>



(EN) NOT TO BE USED BY UNAUTHORISED PERSONNEL - (IT) VIETATO L'USO ALLE PERSONE NON AUTORIZZATE - (FR) UTILISATION INTERDITE AU PERSONNEL NON AUTORISÉ - (ES) PROHIBIDO EL USO A PERSONAS NO AUTORIZADAS - (DE) DER GEBRAUCH DURCH UNBEFUGTE PERSONEN IST VERBOTEN - (RU) ИСПОЛЬЗОВАНИЕ ЗАПРЕЩАЕТСЯ ЛЮДЯМ, НЕ ИМЕЮЩИМ РАЗРЕШЕНИЯ - (PT) PROIBIDO O USO ÀS PESSOAS NÃO AUTORIZADAS - (NL) NIET GEBRUIK IS VERBODEN AAN NIET GEAUTORISEERDE PERSONEN - (EL) ΑΠΑΓΟΡΕΥΣΗ ΧΡΗΣΗΣ ΣΕ ΜΗ ΕΠΙΤΡΕΜΕΝΑ ΑΤΟΜΑ - (RO) FOLOSIREA DE CĂTRE PERSONELE NEAUTORIZATE ESTE INTERZISĂ - (SV) FÖRBUJDET FÖR ICKE AUKTORISERADE PERSONER ATT ANVÄNDA APPARATEN - (CS) ZÁKAZ POUŽITÍ NEPOVOLANÝM OSOBÁM - (HR-SR) ZABRANJENA UPOTREBA NEOVLAŠTENIM OSOBAMA - (PL) ZAKAZ UŻYWANIA OSOBOM NIEAUTORYZOWANYM - (FI) KÄYTTÖ KIELLETTY VALTUUTTAMATTOMILLA HENKILÖILTÄ - (DA) DET ER FORBUDT FOR UVEDKOMMENDE AT ANVENDE MASKINEN - (NO) BRUK ER IKKE TILLATT FOR UAUTORISERTE PERSONER - (SL) NEPOOBLAŠČENIM OSEBAM UPORABA PŘEPOVEDANA - (SK) ZKAZ POUŽITIA NEPOVOLANÝM OSOBÁM - (HU) TILOS A HASZNÁLATA A FEL NEM JOGOSÍTOTT SZEMÉLYEK SZÁMÁRA - (LT) PAŠALINIMAS NAUDOTIS DRAUDŽIAMA - (ET) SELLEKS VOLITAMATA ISIKUTEL ON SEADMIE KASUTAMINE KEELATUD - (LV) NEPIŅĻIŅĀRĀTĀM PERSONĀM IR AIZLIEGTS IZMANTOT APARĀTU - (BG) ЗАБРАНЕНО Е ПОЛЗВАНЕТО ОТ НЕУПЪЛНМОЩНИ ЛИЦА - (TR) YETKİSİZ PERSONEL TARAFINDAN KULLANILAMAZ - (AR) يحظر الاستخدام من قبل الأشخاص الغير مصرح لهم



(EN) Symbol indicating separation of electrical and electronic appliances for refuse collection. The user is not allowed to dispose of these appliances as solid, mixed urban refuse, and must do it through authorised refuse collection centres. - (IT) Simbolo che indica la raccolta separata delle apparecchiature elettriche ed elettroniche. L'utente ha l'obbligo di non smaltire questa apparecchiatura come rifiuto municipale solido misto, ma di rivolgersi ai centri di raccolta autorizzati. - (FR) Symbole indiquant la collecte différenciée des appareils électriques et électroniques. L'utilisateur ne peut éliminer ces appareils avec les déchets ménagers solides mixtes, mais doit s'adresser à un centre de collecte autorisé. - (ES) Símbolo que indica la recogida por separado de los aparatos eléctricos y electrónicos. El usuario tiene la obligación de no eliminar este aparato como desecho urbano sólido mixto, sino de dirigirse a los centros de recogida autorizados. - (DE) Symbol für die getrennte Erfassung elektrischer und elektronischer Geräte. Der Benutzer hat pflichtgemäß dafür zu sorgen, daß dieses Gerät nicht mit dem gemischt erfaßten festen Siedlungsabfall entsorgt wird. Stattdessen muß er eine der autorisierten Entsorgungsstellen einschalten. - (RU) Символ, указывающий на раздельный сбор электрического и электронного оборудования. Пользователь не имеет права выбрасывать данное оборудование в качестве смешанного твердого бытового отхода, а обязан обращаться в специализированные центры сбора отходов. - (PT) Símbolo que indica a reunião separada das aparelhagens eléctricas e electrónicas. O utente tem a obrigação de não eliminar esta aparelhagem como lixo municipal sólido misto, mas deve procurar os centros de recolha autorizados. - (NL) Symbool dat wijst op de gescheiden inzameling van elektrische en elektronische toestellen. De gebruiker is verplicht deze toestellen niet te lozen als gemengde vaste stadsafval, maar moet zich wenden tot de geautoriseerde ophaalcentra. - (EL) Σύμβολο που δείχνει τη διαφοροποιημένη συλλογή των ηλεκτρικών και ηλεκτρονικών συσκευών. Ο χρήστης υποχρεούται να μην διοχετεύει αυτή τη συσκευή σαν μικτό στερεό αστικό απόβλητο, αλλά να απευθύνεται σε ειδικευμένα κέντρα συλλογής. - (RO) Simbol ce indică depozitarea separată a aparatelor electrice și electronice. Utilizatorul este obligat să nu depoziteze acest aparat împreună cu deșeurile solide mixte ci să-l predea într-un centru de depozitare a deșeurilor autorizat. - (SV) Symbol som indikerar separat sorterering av elektriska och elektroniska apparater. Användaren får inte sortera denna anordning tillsammans med blandat fast hushållsavfall, utan måste vända sig till en auktoriserad insamlingsstation. - (CS) Symbol označující separovaný sběr elektrických a elektronických zařízení. Uživatel je povinen nezlikvidovat toto zařízení jako pevný smíšený komunální odpad, ale obrátit se s ním na autorizované sběrný. - (HR-SR) Simbol koji označava posebno sakupljanje električnih i elektronskih aparata. Korisnik ne smije odložiti ovaj aparat kao običan kruti otpad, već se mora obratiti ovlaštenim centrima za sakupljanje. - (PL) Symbol, który oznacza sortowanie odpadów aparatury elektrycznej i elektronicznej. Zabrania się likwidowania aparatury jako mieszanych odpadów miejskich stałych, obowiązkiem użytkownika jest skierowanie się do autoryzowanych ośrodków gromadzących odpady. - (FI) Symboli, joka ilmoittaa sähkö- ja elektroniikkalaitteiden erillisen keräyksen. Käyttäjän valtuutus on kääntää valtuutettujen keräyspisteiden puoleen eikä välittää laitetta kunnallisena sekajätteenä. - (DA) Symbol, der står for særlig indsamling af elektriske og elektroniske apparater. Brugeren har pligt til ikke at bortskaffe dette apparat som blandet, fast byaffald; der skal rettes henvendelse til et autoriseret indsamlingscenter. - (NO) Symbol som angir separat sortering av elektriske og elektroniske apparater. Brukeren må oppfylle forpliktelsen å ikke kaste bort dette apparatet sammen med vanlige hjemmeavfallet, uten henvende seg til autoriserte oppsamlingsressentraler. - (SL) Simbol, ki označuje ločeno zbiranje električnih in elektronskih aparatov. Uporabnik tega aparata ne sme zavreči kot navaden gospodinjiski trden odpadke, ampak se mora obrniti na pooblaščene centre za zbiranje. - (SK) Symbol označujúci separovaný zber elektrických a elektronických zariadení. Užívateľ nesmie likvidovať toto zariadenie ako pevný zmiešaný komunálny odpad, ale je povinný doručiť ho do autorizovaný zberní. - (HU) Jelölés, mely az elektromos és elektronikus felszerelések szelektív hulladékgyűjtését jelzi. A felhasználó köteles ezt a felszerelést nem a városi törmelék hulladékkal együttesen gyűjten, hanem erre engedéllyel rendelkező hulladékgyűjtő központhoz fordulni. - (LT) Simbolis, nurodantis atskirų nebenaudojamų elektrinių ir elektroninių prietaisų surinkimą. Vartotojas negali išmesti šių prietaisų kaip mišrių kietųjų komunalinių atliekų, bet privalo kreiptis į specializuotus atliekų surinkimo centrus. - (ET) Sümbol, mis tähistab elektril- ja elektroonikaseadmete eraldi kogumist. Kasutaja kohustuseks on pöörduda volitatud kogumiskeskuste poole ja mitte käsitleda seda aparati kui munitsipaalne segajäade. - (LV) Simbols, kas norāda uz to, ka utilizācija ir jāveic atsevišķi no citām elektriskajām un elektroniskajām ierīcēm. Lietotāja pienākums ir neizmest šo aparātu municipālajā cieto atkritumu izgāztuvē, bet nogādāt to pilnvarotajā atkritumu savākšanas centrā. - (BG) Символ, който означава разделно събиране на електрическата и електронна апаратура. Ползвателят се задължава да не изхвърля тази апаратура като смесен твърд отпадък в контейнерите за смет, поставени от общината, а трябва да се обърне към специализираните за това центрове - (TR) Atık toplama için elektrikli ve elektronik cihazların ayrılması belirlenmektedir. Kullanıcının bu cihazları katı, karışık kentsel atık olarak bertaraf etmesine izin verilmez, bertaraf yemli çöp toplama merkezlerince yapılmalıdır. - (AR) رمز يُشير إلى التجميع المنفصل للأجهزة الكهربائية والإلكترونية. يجب على المستخدم عدم التخلص من هذا الجهاز وكأنه نفايات البلدية الصلبة المختلطة، بل عليه التوجه إلى مراكز تجميع النفايات المصَّرح بها

INSTRUCTION MANUAL



WARNING! BEFORE USING THE PLASMA CUTTING SYSTEM READ THE INSTRUCTION MANUAL CAREFULLY!

PLASMA CUTTING SYSTEMS DESIGNED FOR PROFESSIONAL AND INDUSTRIAL USE

1. GENERAL SAFETY INSTRUCTIONS FOR PLASMA ARC CUTTING

The operator should be properly trained to use plasma cutting systems safely and should be informed about the risks related to arc welding procedures and associated techniques, about relevant safety measures and emergency procedures.

(Please refer to the applicable standard "EN 60974-9: Arc welding equipment. Part 9: Installation and Use).



- Prevent direct contact with the cutting circuit; the no-load voltage supplied by the plasma cutting system may be dangerous under certain circumstances.
- When the cutting circuit cables are being connected or checks and repairs are carried, out the cutting system should be switched off and disconnected from the power supply.
- Switch off the plasma cutting system and disconnect it from the power supply before replacing worn torch parts.
- Make the electrical connections and installation according to the health and safety standards and legislation in force.
- The plasma cutting system should be connected only and exclusively to a power supply network with the neutral lead connected to earth.
- Make sure that the power supply plug is correctly connected to the earth protection outlet.
- Do not use the plasma cutting system in damp or wet places or in the rain.
- Do not use cables with worn insulation or loosened connections.



- Do not cut on containers, receptacles or piping that contains or has contained inflammable liquids or gases.
- Do not work on materials cleaned with chlorinated solvents or in the vicinity of such substances.
- Do not cut on containers under pressure.
- Remove all flammable materials (e.g. wood, paper, cloth etc.) from the working area.
- Provide adequate ventilation or facilities for the removal of fumes produced by plasma cutting work; a systematic approach is needed in evaluating the exposure limits for fumes produced by cutting work, which will depend on their composition, concentration and the length of exposure itself.



- Ensure there is adequate electrical insulation with regard to the plasma cutting torch nozzle, the workpiece and any (accessible) earthed metal parts in the vicinity. This is normally achieved by wearing gloves, shoes, head coverings and clothing designed for this purpose and by using insulating platforms or mats.
- Always protect your eyes with the relative filters, which must comply with UNI EN 169 or UNI EN 379, mounted on masks or use helmets that comply with UNI EN 175. Use the relative fire-resistant clothing (compliant with UNI EN 11611) and welding gloves (compliant with UNI EN 12477) without exposing the skin to the ultraviolet and infrared rays produced by the arc; the protection must extend to other people who are near the arc by way of screens or non-reflective sheets.
- Noise levels: if particularly intensive cutting operations cause daily personal noise exposure (LEPd) of 85 dBA or more, suitable personal protection equipment must be worn (Tab. 1).



ELECTRIC AND MAGNETIC FIELDS CAN BE DANGEROUS

Electric current flowing through any conductor generates localised electric and magnetic fields (EMF). Cutting current creates an EMF around the cutting circuit and the cutting system.

Electromagnetic fields can interfere with certain electrical devices (e.g. pacemakers, breathing apparatuses, metal prostheses, etc.). Adequate safety measures must be taken for wearers of such equipment. For example, prohibit access to the use area of the plasma cutting system or assess the individual risk for operators.

This cutting system complies with the technical standards for products to be exclusively used in industrial environments for professional purposes. Compliance with the basic limits of human exposure to electromagnetic fields in domestic environments is not guaranteed.

All operators must follow the rules listed below, to reduce to a minimum exposure to EMF from the cutting circuit:

- keep cutting cables close to one another. Fasten them with adhesive tape, when possible;
- keep head and torso as far as possible from the cutting circuit;
- never wind the cutting cables around metal objects or body;
- do not weld with body in the middle of the cutting circuit;
- keep both cutting cables on the same side of body;
- connect the cutting current return cable as close as possible to where you intend to work;
- do not cut near the plasma cutting system;
- all operators should comply with the minimum distances required as indicated in the EMF data sheet;
- distance from the EMF source in the point over which exposure is less than 20% of the minimum permitted value: $d = 1.5 \text{ cm}$.



- Class A equipment:

This plasma cutting system conforms to the technical product standards for exclusive use in an industrial environment and for professional purposes. It does not assure compliance with electromagnetic compatibility in domestic dwellings and in premises directly connected to a low-voltage power supply system feeding buildings for domestic use.



EXTRA PRECAUTIONS

PLASMA CUTTING OPERATIONS

- In environments with heightened risk of electric shock;
- In confined spaces;
- In the presence of inflammable or explosive materials; MUST be evaluated in advance by an "Expert supervisor" and must always be carried out in the presence of others who have been taught how to intervene in emergencies. All protective technical measures MUST be taken as provided in 7.10; A.8; A.10 of the applicable standard EN 60974-9: Arc welding equipment. Part 9: Installation and Use".
- Cutting operations MUST BE PROHIBITED if the operator is supporting the weight of the power source (using slings for example).
- The operator MUST NEVER BE ALLOWED to carry out cutting operations if above ground level, unless safety platforms are used.
- **WARNING! USING THE PLASMA CUTTING SYSTEM SAFELY.** The safeguards provided by the manufacturer (interlocking system) can only be guaranteed to work properly if the torch model and corresponding power source as indicated in the "TECHNICAL DATA" are used.
- DO NOT USE non-original torches or consumable parts.
- DO NOT ATTEMPT TO USE THE POWER SOURCE with torches that are made for cutting or WELDING procedures but are not contemplated in this instruction manual.
- FAILURE TO COMPLY WITH THESE RULES may give rise to a SERIOUS safety hazard for the user and may also damage the apparatus.



RESIDUAL RISKS

- **TIPPING:** place the plasma cutting power source on a horizontal surface with adequate load-bearing capacity; otherwise (e.g. sloping or uneven floor etc.) the apparatus is in danger of tipping over.

- **IMPROPER USE: it is dangerous to use the plasma cutting system for any work other than that for which has been designed.**
- **Never lift the plasma cutting system without first disconnecting and removing all interconnection and power supply cables and piping.**
- **Do not use the handle to hang the plasma cutting system.**

2. INTRODUCTION AND GENERAL DESCRIPTION

Plasma cutting system with compressed air mono-phase, with fan. Used for fast cutting without deformation on steel, stainless steel, galvanized steel, aluminium, copper, brass etc.

The cutting cycle is started by a pilot arc, which is established between the mobile electrode and the nozzle/hood of the torch by the short circuit current between these two elements: this technology also enables, other than continuous cutting, cutting of grids and/or perforated sheet metal. Furthermore, adjustment of the current from the minimum to maximum allows you to ensure a high quality cut as the thickness and type of metal varies.

MAIN CHARACTERISTICS

- Torch voltage control device.
- Air pressure, torch short-circuit control device.
- Thermostatic safeguard.
- No air protection (where applicable).
- Overvoltage, undervoltage.
- Air pressure display (where applicable).
- Torch cooling command (where applicable).
- Internal air compressor (where planned).

STANDARD ACCESSORIES

- Plasma cutting torch.
- Fitting for compressed air connection (where applicable).
- Earth cable

OPTIONAL ACCESSORIES

- Spare electrodes-nozzles kit.
- High current powered cutting torch (where planned).
- Spare electrodes-nozzles kit for high current powered torch (where applicable).
- Gouging kit (where applicable).

3. TECHNICAL INFORMATION

DATA PLATE


The most important information regarding use and performance of the plasma cutting system is summarised on the rating plate and has the following meanings:

Fig. A

- 1- EUROPEAN standard of reference, for safety and construction of arc welding and plasma cutting machines.
- 2- manufacturer's name and address.
- 3- product model.
- 4- Symbol referring to the internal structure of the machine.
- 5- Symbol referring to plasma cutting procedure.
- 6- **S** symbol: indicates that cutting operations may be carried out in environments with heightened risk of electric shock (e.g. close to large metal masses).
- 7- Symbol indicating the main power supply:
1~: single phase alternating voltage
3~: 3-phase alternating voltage
- 8- Casing protection rating.
- 9- Technical specifications for main power supply:
 - U_1 : Alternating voltage and frequency of power supply to the machine (allowed limits $\pm 10\%$);
 - $I_{1\max}$: Maximum current absorbed by the line.
 - $I_{1\text{eff}}$: Effective current supplied
- 10- Performance of cutting circuit:
 - U_0 : maximum no-load voltage (open cutting circuit).
 - I_2/U_2 : Current and corresponding normalized voltage that the machine is able to supply during cutting.
 - **X** : Duty cycle: indicates the time for which the machine is able to supply the corresponding current (same column). It is expressed in %, based on a 10 min. cycle (e.g. 60% = 6 minutes work, 4 minutes pause; and so on).

If the usage factors (on the plate, referring to a 40°C environment) are exceeded the thermal cutout will trigger (the machine will remain in standby until its temperature returns within the allowed limits).

- **A/V-A/V** : indicates the range over which the cutting current may be adjusted (minimum - maximum) at the corresponding arc voltage.

- 11- Machine serial number (indispensable identification when asking for technical assistance, ordering spare parts or discovering the origin of the product).
- 12-  : Size of delayed action fuses to be provided to protect the power line.
- 13- Symbols referring to safety standards, the meaning of which is explained in chapter 1 "General safety instructions for plasma arc cutting".

Note: The data plate shown here is an example for explaining the meaning of the symbols and figures; the exact values of the technical specifications for your plasma cutting system must be read directly on the rating plate of the machine itself.

OTHER TECHNICAL INFORMATION:

- **POWER SOURCE: see table 1 (TAB.1)**
 - **TORCH: see table 2 (TAB.2)**
- The weight of the machine is given in table 1 (TAB. 1).**

4. DESCRIPTION OF THE PLASMA CUTTING SYSTEM

The machine consists essentially of power modules built on PCB's and optimised for maximum reliability and minimum maintenance.

(Fig. B)



- 1- Single phase power supply line, rectifier assembly and levelling capacitors.
- 2- Transistor (IGBT) switching bridge and drivers ; converts the rectified mains voltage into high frequency alternating voltage and adjusts the power according to the required cutting current/voltage.
- 3- High frequency transformer: the primary winding is powered by the voltage that has been converted by block 2; its function is to adapt voltage and current to the values required for the cutting procedure and at the same time to perform galvanic isolation of the cutting circuit from the main power supply.
- 4- Secondary rectifier bridge with levelling inductance: converts the alternating voltage/current supplied by the secondary winding into direct current/voltage with very low ripple.
- 5- Control and adjustment electronics: controls cutting current value instantaneously and compares it with the operator's setting; modulates IGBT driver control pulses that make the adjustment. Determines the dynamic current response during cutting and oversees the safety systems.

CONTROL, ADJUSTMENT AND CONNECTION DEVICES

Front panel (Fig. C)

- 1 - **Torch with direct or control panel connection.**
 - The torch button is the only control device that can be used to start and stop cutting operations.
 - When the button is released the cycle will cease instantaneously, whatever stage it is at, and only the cooling air (post-air) will be kept on.
 - **Accidental manoeuvres:** the cycle will only be allowed to start if the button is pressed for a preset minimum interval of time.
 - **Electrical safety:** button operation is disabled if the insulating nozzle-holder is NOT fitted to the head of the torch, or if it is not fitted correctly.
- 2 - **Return cable.**
- 3 - **Control panel.**

CONTROL PANEL (Fig. C1)

- 1 - **Adjustment knob:**
In any mode, it allows continuous current adjustment.
- 2 -  **Red led** signalling compressed air internal circuit inhibition (where planned).
When on, it indicates overheating of the electric motor windings on the air compressor.
- 3 -  **Yellow led** signalling a general or warning alarm of torch consumables.
When on and fixed, it indicates overheating of some power circuit components, or a malfunction on the inlet power supply voltage (over or undervoltage).
OVER or UNDERVOLTAGE: blocks the machine if the power supply voltage is out of range +/- 15% compared to the plate value.

Resetting is automatic (switching off the yellow led) after one of the malfunctions among those indicated above returns within the

permitted limits.

When the led is intermittent it indicates the consumables are malfunctioning and the causes can be:

- worn consumables;
- consumables assembled incorrectly or missing;
- faulty torch;
- air pressure too low or no air in torch.

Signalling disappears after a correct cutting cycle.



Metal continuous cutting mode.



Maintained arc cutting mode also when not transferred to the piece (cutting on perforated metal sheets or grids).



Gouging mode, suitable for use with the torch with GOUGING consumables (removal, modelling of metal by melting).

7 - Display leds for digital gauge air pressure



In real time, it indicates the measured pressure (optimal pressure central green leds, poor or excess pressure yellow leds).

8 - AIR key



Pressing this key, the air continues to exit the torch for a pre-established time of approx. 20 sec (allows cooling of the torch and/or air adjustment within the optimal range).

REAR PANEL (Fig. D)

- 1 - **Power cable.**
- 2 - **Main switch O - I**
I (ON) Generator ready for operation.
- 3 - **Manual pressure regulator** (plasma compressed air) with gauge, where applicable.
- 4 - **Pressure reducer knob** (where applicable).
- 5 - **Fitting** to couple to compressed air source (where applicable).

5. INSTALLATION



ATTENTION! CARRY OUT ALL THE INSTALLATION OPERATIONS WITH THE PLASMA CUTTING SYSTEM STRICTLY OFF AND DISCONNECTED FROM THE POWER MAINS.

THE ELECTRICAL CONNECTIONS MUST ONLY BE CARRIED OUT BY EXPERT OR QUALIFIED TECHNICIANS.

PREPARATION

Unpack the machine, assemble the detached parts contained in the packaging.

Assembling the return cable-earth clamp (Fig. E)

LIFTING MODE OF THE MACHINE

All the machines described in this manual must be suspended using the handle or the strap supplied if applicable for the model.

Strap assembly mode (FIG. F).

MACHINE POSITIONING

Identify the installation location of the machine so there are no obstacles on inlet and outlet opening of the cooling air; at the same time ensure no conductive dust, corrosive vapours, humidity, etc. are sucked in. Keep at least 250mm of free space around the machine.



ATTENTION! Position the machine on a flat surface of adequate capacity for the weight to avoid dangerous turning over or movements.

CUTTING CIRCUIT CONNECTIONS

Prepare a compressed air distribution line with a working pressure and minimum capacity indicated in table 2 (TAB. 2).

Assembly, connection of the pressure reducer (Fig. G).

IMPORTANT!


Do not exceed the maximum input pressure of 8 bar. Air containing large quantities of humidity or oil can cause excessive wear of consumable parts or damage the torch. If in doubt concerning the quality of the compressed air available, it is recommended to use an air dryer to be installed downstream of the inlet filter. Use a hose to connect the compressed air line to the machine, using the fitting supplied for assembly on the air intake filter.

Connecting the cutting current return cable.

Table 1 (TAB. 1) gives the recommended values for the return cable (in mm²) according to the maximum energy supplied by the machine.

Connect the cutting current return cable to the piece to be cut or the metal support bench taking the following precautions:

- Check that a good electric contact is established especially when cutting sheet metal with insulating, oxidised coatings etc.
- Connect the mass as close as possible to the cutting point.
- Do not use metal structures that are not part of the workpiece as a

- 4 -  **Yellow led** signalling voltage present in torch. When on, it indicates the cutting circuit is enabled (machine outlet energised):
Pilot Arc or Cutting Arc "ON".
Output is powered when the torch button is pressed and there is no alarm status.


The machine output is not powered in the following cases:

- when the torch button is NOT activated (standby status with low energy consumption);
- during POST AIR cooling phase;
- if the pilot arc is not transferred to the piece within a maximum of 2 seconds;
- if the cutting arc shuts off due to excessive piece torch distance;
- for excessive wear of the electrode or forced distancing of the torch from the piece;
- if a SAFETY system or an ALARM activates.

- 5 -  **Green led** signalling presence of mains voltage and auxiliary circuits powered.
The control and service circuits are powered.

CONTROL PANEL (Fig. C2)

- 1 - **Adjustment knob:**
In any mode, it allows continuous current adjustment.

- 2 -  **Yellow led** signalling a general or warning alarm of consumables.

When on and fixed, it indicates overheating of some power circuit components, or a malfunction on the inlet power supply voltage (over or undervoltage).


OVER or UNDERVOLTAGE: blocks the machine if the power supply voltage is out of range +/- 15% compared to the plate value.


Resetting is automatic (switching off the yellow led) after one of the malfunctions among those indicated above returns within the permitted limits.

When the led is intermittent it indicates the consumables are malfunctioning and the causes can be:

- worn consumables;
- consumables assembled incorrectly or missing;
- faulty torch;
- air pressure too low or no air in torch;

Signalling disappears after a correct cutting cycle.

- 3 -  **Yellow led** signalling air malfunction or no air. When on, it indicates a malfunction on the compressed air circuit. This condition is not necessarily due to internal sealing issues. It may regard connection or source of origin.

- 4 -  **Yellow led** signalling voltage present in torch. When on, it indicates the cutting circuit is enabled (machine outlet energised):
Pilot Arc or Cutting Arc "ON".
Output is powered when the torch button is pressed and there is no alarm status.

The machine output is not powered in the following cases:

- when the torch button is NOT activated (standby status with low energy consumption);
- during POST AIR cooling phase;
- if the pilot arc is not transferred to the piece within a maximum of 2 seconds;
- if the cutting arc shuts off due to excessive piece torch distance;
- excessive wear of the electrode or forced distancing of the torch from the piece;
- if a SAFETY system or an ALARM activates.

- 5 -  **Green led** signalling presence of mains voltage and auxiliary circuits powered.
The control and service circuits are powered.

- 6 - **MODE selecting knob**
Allows selection of the following operating modes:

cutting current return conductor; this can endanger safety and give unsatisfactory cutting results.

- Do not connect the mass on the section of the piece to be removed.

Connecting the plasma cutting torch (Fig. H) (where applicable).

Insert the male end of the torch in the central connector on the front panel of the machine, making sure the polarisation key is aligned. Fully tighten the locking ring nut clockwise to guarantee there are no leaks in the air and current flows.

In some models, the torch is supplied already connected to the current source.

IMPORTANT!

Before commencing cutting operations, check the consumable parts are assembled correctly, inspecting the torch head as indicated in the "TORCH MAINTENANCE" chapter.



ATTENTION!

USING THE PLASMA CUTTING SYSTEM SAFELY.

Only the torch model as envisaged, coupled with the corresponding power source as indicated in TAB. 2, are able to guarantee effective protection by the safety system provided by the manufacturer (interlocking system).


- DO NOT USE other makes of torch and related consumable parts.
- DO NOT ATTEMPT TO COUPLE THE POWER SOURCE with torches built for cutting or welding procedures that are not contemplated in these instructions.

Failure to comply with these rules may cause serious hazards, endangering the physical safety of the user and damaging the apparatus.

CONNECTION TO THE MAINS

- Before making any electrical connection, check the rating plate on the source of current corresponds to the mains voltage and frequency available in the installation location.

- The source of current must only be connected to a power supply system with neutral conductor connected to earth.
- To guarantee protection against indirect contact, use the differential switches type:

Type A () for mono-phase machines.

- In order to satisfy the requirements of the EN 61000-3-11 (Flicker) standard we recommend connecting the power source to interface points of the main power supply that have an impedance of less than $Z_{max} = 0.2 \text{ ohm}$.

- The plasma cutting system is not within the requirements of standard IEC/EN 61000-3-12.

If it is connected to a public power mains, the installation technician or user is responsible for checking the plasma cutting system can be connected (if necessary, consult the mains provider).

Plug and socket.

Connect a standard plug (3P + E) to the power supply cable with adequate capacity and use a mains socket equipped with fuses or an automatic switch; the specific earth lug must be connected to the earth conductor (yellow-green) of the power supply line.

Table 1 (TAB. 1) provides the recommended values in amperes of the line slow blow fuses chosen based on the maximum nominal current supplied by the source of current, and at the power supply nominal voltage.



fire).

ATTENTION! Failure to comply with the above rules renders the safety system (class I) ineffective, with resulting serious risks for people (e.g. electric shock) and for property (e.g. fire).

6. PLASMA CUTTING: PROCESS DESCRIPTION

The plasma arc and plasma cutting application principle.

Plasma is a gas heated to an extremely high temperature and ionised so that it becomes an electrical conductor.

This cutting procedure uses plasma to transfer the electric arc to the metal piece that is melted by the heat and separated.

The torch uses compressed air supplied by a single source, both for plasma gas and for cooling and protection gas.

Starting the pilot arc.

The cycle is started by a pilot current that flows between the electrode (polarity -) and the torch nozzle (polarity +) and by activation of the air flow which opens the short circuit of these two elements.

Then, approaching the torch to the piece to be cut, connected to the current source polarity (+), the pilot arc is transferred and creates a plasma arc between the electrode (-) and the piece itself (cutting arc). The pilot arc is excluded as soon as the cutting arc is established between the electrode and the piece.

The maintenance time of the pilot arc set in the factory is 2sec (4 seconds in GOUGING mode).

If the arc transfer to the piece is not carried out within this time, the cycle is automatically blocked, except maintenance of the cooling air.

To start the cycle again, release the torch button and press it again.

Preliminary procedures.

Before starting the cutting operations, check correct assembly of the consumable parts by inspecting the torch head, as indicated in the "TORCH MAINTENANCE" paragraph.

- Turn on the current supply and set the cutting current (Fig. C1-1 and C2-1) according to the thickness and type of metal material to be cut.
- Where planned, press the air button (Fig. C-2) to start the air flow.
- Adjust the air pressure to the pressure value required for the type of torch being used (TAB. 2).
- Turn the knob: pull upwards to release and turn to adjust the pressure to the value indicated in the TORCH TECHNICAL DATA.
- Read the required value on the pressure gauge and then press the knob to lock the setting.
- Allow the air flow to end spontaneously to make it easier to remove any condensate accumulated in the torch.

In the absence of the air button this adjustment phase should be carried out by pressing and releasing the torch button to allow air flow.

Cutting operation (Fig. I).

- Keeping the torch perpendicular to the material to cut, bring the nozzle of the torch in contact with the piece.
- Press the torch button, after approx. 1 second the pilot arc starts.
- If the distance is suitable, the pilot arc is immediately transferred to the piece giving rise to the cutting arc.
- Move the torch on the surface of the piece along the ideal cutting line at a regular pace.
- Adjust the cutting rate according to the thickness and selected current, checking that the arc exiting the lower surface of the piece is inclined by approx. 15° in relation to the vertical line, in the opposite direction to the operating direction.

Perforation (Fig. L).

To perform this operation or start cutting from the piece centre, start with the torch inclined at an angle and move it progressively to a vertical position.

- This procedure prevents the arc or smelted particles returns from ruining the nozzle hole which will rapidly compromise its performance.
- Perforation of pieces with a thickness of up to 25% of the maximum foreseen for the range of use can be performed directly.

Grid cutting procedure (where applicable).

This function may be useful to cut perforated sheet metal or grids.

Use the "select mode" knob (Fig. C-2) to select the grid cutting mode.

On completing the cutting cycle, keeping the torch button pressed, the pilot arc will restart automatically.

Only use this function when required to avoid unnecessary use of the electrode and nozzle.



ATTENTION! In this mode you are advised to use standard sized electrodes and nozzles. In particular conditions, using elongated electrodes and nozzles could cause interruption of the cutting arc.

7. MAINTENANCE



WARNING! BEFORE CARRYING OUT MAINTENANCE OPERATIONS, MAKE SURE THAT THE PLASMA CUTTING SYSTEM IS SWITCHED OFF AND DISCONNECTED FROM THE MAIN POWER SUPPLY.

ROUTINE MAINTENANCE

ROUTINE MAINTENANCE CAN BE CARRIED OUT BY THE OPERATOR.

TORCH (Fig. M)

Check the wear level of the torch parts used by the plasma arc regularly, depending on the level of use.

The replacement frequency of the consumables depends on various factors: as indicated in the paragraph "MOST COMMON CUTTING DEFECTS".

1 - Nozzle holder.

Unscrew it from the torch head by hand. Clean thoroughly or replace it if damaged (burns, deformation or cracks). Check the condition of the upper metal section (torch safety actuator).

2 - Nozzle / Hood.

Check the wear level of the plasma arc flow hole and the internal and external surfaces. Replace the nozzle if the hole has widened

compared to the original diameter or is deformed. If the surfaces are particularly oxidised, clean them with very fine sandpaper (FIG. N).

3- Air distributor ring / diffuser.

Check there are no burrs or cracks and that the airflow holes are not blocked. Replace immediately if damaged.

4- Electrode.

Replace the electrode when the depth of the crater that forms on the emission surface reaches about 1.5 mm (FIG. O).

5- Torch body, handgrip and cable.

Normally these components do not require any particular maintenance except periodic inspection and thorough cleaning without using solvents of any nature. If the insulation is damaged showing cracks or burns or the electric conductors are loose, the torch can no longer be used due to lack of conformity with the required safety conditions.

In this case, repairs (extraordinary maintenance) can not be performed on-site, as they must be performed by an authorised service centre capable of conducting the special tests after the repair. To maintain the torch in good working condition, some fundamental precautions must be taken:

- Do not bring the torch or cable in contact with hot or scorching parts.
- Do not apply excessive strain on the cable.
- Do not lay the cable on sharp corners, points or abrasive surfaces.
- Wind the cable into regular coils if it is longer than required.
- Do not allow any vehicle to drive over the cable and do not tread on it.



WARNING! Before carrying out any work on the torch leave it to cool for at least the complete "post air" time

- Except in special cases, we recommend changing the electrode and nozzle at the same time.
- Assemble the torch components in the correct order (the reverse of the order for dismantling).
- Make sure that the distributor ring is fitted the right way round.
- When re-assembling the nozzle holder, screw it down manually, forcing it slightly.
- Never ever fit the nozzle holder before you assemble the electrode, distributor ring and nozzle.
- Do not keep the pilot arc struck in air for no reason as this will increase electrode, diffuser and nozzle wear.
- Do not tighten the electrode too much as this could damage the torch.
- Prompt, correct inspection procedures for the consumable parts of the torch are essential for safe, correct operation of the cutting system.
- If the insulation is damaged, with breakages, cracks or burns etc., or if the electric leads are loose, the torch may not be used because it does not satisfy safety requirements. In this case repairs (extraordinary maintenance) cannot be done on the spot and the torch must be sent to an authorised service centre, which will be able to carry out the special tests needed after the repair has been done.

Compressed air filter (Fig. G).

- The filter has an automatic condensate exhaust that is activated every time it is disconnected from the compressed air supply.
- Inspect the filter regularly; if there is any water in the glass, try bleeding it manually pushing the exhaust fitting upwards.
- If the filter cartridge is particularly dirty, it must be replaced to avoid excessive load losses.

EXTRAORDINARY MAINTENANCE

EXTRAORDINARY MAINTENANCE OPERATIONS SHOULD BE CARRIED OUT ONLY AND EXCLUSIVELY BY SKILLED OR AUTHORISED ELECTRICAL-MECHANICAL TECHNICIANS AND IN COMPLIANCE WITH THE TECHNICAL STANDARD IEC/EN 60974-4.



WARNING! BEFORE REMOVING THE MACHINE PANELS AND WORKING INSIDE IT MAKE SURE THAT IT HAS BEEN SWITCHED OFF AND DISCONNECTED FROM THE MAIN POWER SUPPLY.

If checks are carried out inside the machine while it is live, this may cause serious electric shock due to direct contact with live parts.

- Inspect the inside of the machine regularly, with a frequency depending on the amount of use and dust in the environment, and remove dust that has deposited on the transformer, rectifier, inductance and resistors, using a jet of dry compressed air (max 10 bar).
- Do not direct the jet of compressed air onto the electronic boards; these can be cleaned with a very soft brush or suitable solvents.
- Take the opportunity to make sure the electrical connections are tight

and there is no damage to the wiring insulation.

- Make sure the compressed air circuit hoses and connections are intact and leak-free.
- When these operations have been completed, re-assemble the panels on the machine and tighten the fastening screws right down.
- Never ever carry out cutting operations with the machine open.
- After having carried out maintenance or repairs, restore the connections and wiring as they were before, making sure they do not come into contact with moving parts or parts that can reach high temperatures. Tie all the wires as they were before, being careful to keep the high voltage connections of the primary transformer separate from the low voltage ones of the secondary transformer.
- Use all the original washers and screws when closing the casing.

8. TROUBLESHOOTING

IF OPERATION IS UNSATISFACTORY, AND BEFORE CARRYING OUT MORE SYSTEMATIC CHECKS OR CONTACTING OUR SUPPORT CENTRE, CHECK:

- The led is not on, signalling intervention of the safety thermal switch for over or undervoltage or short circuit.
- Ensure you have observed the nominal duty cycle ratio; in the event of intervention of the thermostatic protection, wait for the machine to cool naturally, check the fan is working.
- Check the line voltage: if the value is too high or too low, the machine remains blocked.
- Check there is no short circuit on machine output: in this case, proceed to eliminate the problem.
- The cutting circuit connections are carried out correctly, particularly the earth cable clamp is actually connected to the piece and without inter-positioning insulating materials (e.g. paint).

MOST COMMONLY OCCURRING CUTTING DEFECTS

During cutting operations it is possible that defects occur, which are not normally caused by operating faults in the system but by other operational matters such as:

a - Insufficient penetration or excessive slag formation:

- Cutting rate too high.
- Over-inclined torch.
- Piece too thick or cutting current too low.
- In appropriate compressed air pressure-flow.
- Worn electrode and torch nozzle.
- Inappropriate nozzle-holder tip.

b - Arc transfer failure:

- Worn electrode.
- Poor contact of the return cable terminal clamp.

c - Interrupted cutting arc:

- Cutting rate too low.
- Torch-piece distance too high.
- Worn electrode.
- A safeguard has triggered.

d - Inclined cut (not perpendicular):

- Incorrect torch position.
- Asymmetric wear on nozzle hole and/or incorrect assembly of torch components.
- Inappropriate air pressure.

e - Excessive nozzle and electrode wear:

- Excessively low air pressure.
- Contaminated air (humidity, oil or other contaminants).
- Nozzle holder damaged.
- Excessive pilot arc start in air.
- Excessive speed with smelted particles return on the torch components.
- The average length of the cut.
- The air quality (presence of oil, humidity or other contaminants).
- Perforation of the metal or cut starting from the edge.
- The torch-piece distance is not appropriate when cutting.