

Smlouva kupní

Smluvní strany

P.O.S. Factory s.r.o., sociální podnik

Sídlo: Praha 3 - Žižkov, Jilmová 2685/10, PSČ 13000

IČ: 28524527

DIČ: CZ28524527

Bankovní spojení: UniCredit Bank Czech Republic and Slovakia, a. s., č. ú. 2107672666/2700

Jednatel: Karel Březina, jednatel společnosti

Společnost zapsaná v obchodním rejstříku vedeném u rejstříkového soudu v Praze, v oddílu C, vložka 147900

(dále jen „Prodávající“)

a

ASTRON print, s.r.o.

Jednatel: Ing. Tomáš Novák, jednatel společnosti

Sídlo: Praha 9 - Letňany, Veselská 699, PSČ 199 00

IČ: 26155222

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Společnost zapsaná v obchodním rejstříku vedeném u rejstříkového soudu v Praze, v oddílu C, vložka 75173.

(dále jen „Kupující“)

1. PŘEDMĚT KOUPE

Prodávající se na základě této smlouvy zavazuje dodat kupujícímu následující technologie:

Archový tiskařský stroj s automatizačními komponenty a příslušenství nevýrobních zařízení

jehož přesná specifikace je uvedena v příloze č. 1 této smlouvy (dále jen „zařízení“) včetně příslušenství dle dohodnuté specifikace. Prodávající zaručuje, že zařízení bude nové a bude mít vlastnosti popsané v příloze č. 1.

Součástí dodávky zařízení je její montáž v prostorách stávající výrobní haly a uvedení pracoviště do provozu včetně nezbytných rozvodů energií v rámci dodávaného zařízení tak, aby celé dodané zařízení bylo plně funkční. Přípojné body včetně stavebních úprav budou připraveny kupujícím dle montážních podmínek prodávajícího. V rámci realizace dodávky uchazeč předloží technickou specifikaci pro montážní připravenost nabízeného plnění tak, aby zadavatel byl schopen před vlastní dodávkou zařízení připravit a zajistit případné prostory, které umožní provozování a dodržení všech norem s provozem spjaté. V technické specifikaci musí být definovány veškeré požadavky zařízení jako například přípojné body, prostorové řešení, klimatické podmínky a požadavky na plnění případných norem práce nebo zdraví, tak aby zařízení bylo možné zprovoznit.

Předmět dodávky zahrnuje rovněž:

- dopravu zboží na místo plnění,
- manuál k montáži, obsluze a údržbě zboží v českém jazyce,
- montáž pracoviště včetně rozvodů energií na přípojné body včetně energií a médií,
- kompletní projektová a technická dokumentace,
- prohlášení o shodě
- školení min. 10 zaměstnanců v rozsahu 30 pracovních dnů odborného technika v provozu zařízení tisku

2. CENA PŘEDMĚTU KOUPE

	Cena v Kč bez DPH	DPH v Kč	Cena v Kč s DPH
I. VÝROBNÍ TECHNOLOGIE: ARCHOVÝ TISKAŘSKÝ STROJ	18 900 000,00	3 969 000,00	22 869 000,00

II. NEVÝROBNÍ TECHNOLOGIE: AUTOMATIZAČNÍ KOMPONENTY K VÝROBNÍ TECHNOLOGII	38 450 000,00	8 074 500,00	46 524 500,00
CELKOVÁ CENA ZAKÁZKY	57 350 000,00	12 043 500,00	69 393 500,00

V uvedené celkové ceně jsou započítány veškeré náklady na balení, pojištění, dopravu na místo dodání, clo, montáže, instalace včetně spotřebního materiálu potřebného k instalaci, uvedení zařízení do provozu, otestování zařízení, zaškolení obsluhy, odvoz a likvidace odpadů. Součástí dodávky jsou i doklady a průvodní dokumentace, tj. návod k obsluze a údržbě, katalog náhradních dílů. Tyto služby zajistí výhradně prodávající na základě této smlouvy. Po dohodě obou stran může tyto činnosti zajišťovat i třetí strana, např. pracovník výrobce.

Kupující se zavazuje zajistit součinnost při vykládce a nastěhování zařízení. Součinností se rozumí zejména přístup do provozovny, součinnost zaměstnanců, poskytnutí běžných manipulačních prostředků. Kupující se zavazuje v místě realizace zajistit odpovídající prostor a podmínky pro vyložení jednotlivých částí zařízení jeřábem na rovnou, dostatečně nosnou podlahu / rampu s bezbariérovým přístupem k místu instalace zařízení. Bezbariérovým přístupem se rozumí rovná podlaha umožňující transport částí zařízení a příslušenství na transportních vozících, paletových vozících a vysokozdvizných vozících. Předání místa realizace proběhne nejpozději do 31.5./2019.

3. PLATEBNÍ PODMÍNKY

Dohodnutou celkovou kupní cenu zařízení včetně DPH se kupující zavazuje uhradit následujícím způsobem:

- 85 % z celkové kupní ceny bude zapláceno nejpozději k datu zahájení instalace zařízení,
- zbývající částka po podepsání předávacího protokolu zařízení a protokolu o zaškolení obsluhy.

Na tyto částky bude prodávajícím vystavena faktura se lhůtou splatnosti 30 dní od data vystavení.

Smluvní pokuta za prodlení prodávajícího při dodávce zařízení činí 0,5 % ze smluvní ceny za každý den prodlení.

Smluvní pokuta za prodlení kupujícího s úhradou faktur činí 0,05 % z dlužné částky za každý den prodlení.

4. DODACÍ LHŮTA A MÍSTO PLNĚNÍ

Zřízení bude dodáno do provozovny kupujícího (adresa provozovny: Janovská 15178/39b, Jablonec nad Nisou, 466 04), kde bude nainstalováno a zprovozněno.

Prodávající se zavazuje dodat, nainstalovat a zprovoznit zařízení nejpozději do 30.9.2019-

Prodávající se zavazuje zajistit a uhradit dopravu a vykládku a umístění zařízení na místo určení.

Prodávající se zavazuje uhradit a pojišťit vykládku zařízení z dopravního prostředku a nastěhování předmětu koupě na místo určení, tj. do provozovny kupujícího, včetně připojení k potřebným sítím a médiím (elektřina, PC síť, stlačený vzduch, voda..). Požadavky na přípojné body musí sdělit kupujícímu v dostatečném předstihu.

V případě, že Proávající bude v prodlení s plněním svých závazků v takovém rozsahu, že bude ohroženo čerpání dotace na pořízení zařízení podle této smlouvy a i přes upozornění nezjedná účinnou nápravu, je kupující oprávněn od této smlouvy odstoupit a požadovat po prodávajícím smluvní pokutu ve výši 50 % celkové dohodnuté kupní ceny vč. DPH. Tato smluvní pokuta se sjednává zejména s ohledem na skutečnost, že na zařízení dodávané podle této smlouvy má prodávající v úmyslu čerpat dotaci a odstoupením od smlouvy by taková možnost zanikla a dále s ohledem na rozsah nákladů vynaložených na celý projekt, jehož realizace by tím byla ohrožena. Tímto ustanovením není dotčena povinnost prodávajícího k náhradě škody a ušlého zisku tak, jak je popsán v této smlouvě.

5. INSTALACE ZAŘÍZENÍ E A ZAŠKOLENÍ OBSLUHY

Instalaci zařízení zajistí prodávající na základě výzvy kupujícího a připravenosti stroje k instalaci. Připravenosti stroje k instalaci se rozumí zejména jeho umístění na budoucím pracovišti.

Jako potvrzení o ukončení instalace se prodávající zavazuje vykonat zkoušky dle metodiky výrobce zařízení se splněním obecně uznávaných kritérií (norem) pro kvalitu a stabilitu a přesnost produkce.

Úspěšné vykonání zkoušek (tj. splnění kritérií tiskové zkoušky) bude oběma stranami písemně potvrzeno na Protokolech o provedených tiskových zkouškách, které dodá prodávající.

Během instalace jednotlivých strojů až do okamžiku podepsání Protokolu o provedené zkoušce a předávajícího protokolu bude vždy provoz zařízení řízen instruktorem prodávajícího. Datem ukončení instalace se rozumí datum

podpisu Protokolu o provedené zkoušce. Po podpisu Protokolu o provedené zkoušce se kupující zavazuje podepsat Předávací protokol zařízení.

Po podpisu Předávacího protokolu stroje kupujícím se prodávající zavazuje neprodleně zahájit nepřerušované školení min. 10 zaměstnanců v rozsahu 30 pracovních dnů a to v každý pracovní den od 8 do 17 hod. Jmenný seznam pracovníků kupujícího, kteří se zúčastní školení obsluhy stroje podle tohoto odstavce, se kupující zavazuje předat prodávajícímu písemně, nejpozději v den úspěšného ukončení instalace.

V době školení obsluhy kupujícího smí být stroj provozován pouze za přítomnosti instruktora prodávajícího s tím, že podmínky provozu (tj. zejména spotřební materiály) budou odpovídat požadavkům a specifikacím prodávajícího. Po ukončení školení obsluhy stroje podepiší obě strany protokol o zaškolení obsluhy, ve kterém budou uvedena jména s podpisy zaškolených osob a případně komentáře.

Za škody způsobené neodbornými zásahy nebo zásahy nevyškolených osob v průběhu školení obsluhy, nenese prodávající žádnou odpovědnost.

Smluvní strany se dohodly, že instalace a záruční servis na zařízení bude prováděn výhradně servisními technikami prodávajícího anebo prodávajícím písemně pověřenými smluvními externími technikami s dostatečnou kvalifikací.

6. VADY ZBOŽÍ A ZÁRUČNÍ DOBA

Na zařízení se vztahuje záruka za jakost v délce 36 měsíců od data uvedení do provozu, stvrzeném podepsáním předávajícího protokolu. Záruka se vztahuje i na díly označované výrobcem jako spotřební materiál. Záruka bude, po dobu jejího trvání, kryt všechny výrobní vady, a to bez ohledu na počet polštěných archů. Záruka zahrnuje:

- roční i měsíční preventivní údržby dle servisního manuálu výrobce
- veškeré spotřební materiály, vyjma tiskových barev, olejů a provozních kapalin.
- sortiment rychlopotřebitelných dílů a součástek s časově omezenou životností v potřebném počtu tak, aby byl pokryt provoz v celé době trvání záruky bez dalších nákladů.

Poskytnutá záruka se nevztahuje na díl nebo část zařízení:

- a) které bylo upraveno, změněno nebo přizpůsobeno bez předchozího souhlasu prodávajícího;
- b) se kterým bylo neodborně zacházeno nebo se používalo způsobem jiným než v souladu s příslušnou dokumentací;
- c) které bylo instalováno nebo opravováno jakoukoli třetí stranou způsobem, který nebyl v souladu s pokyny výrobce zařízení; toto ustanovení se nevztahuje na zásahy prováděné kupujícím v souladu s uživatelskou příručkou nebo zásahů, na které byl kupující vyškolen prodávajícím;
- d) na kterém nebyla prováděna pravidelná údržba v souladu s výrobcem zařízení stanovenými podmínkami, které jsou uvedeny v dokumentaci k zařízení předané kupujícímu;
- e) které bylo poškozeno při přepravě nebo manipulaci
- f) které bylo poškozeno vlivem nevhodných provozních podmínek nebo neodpovídající předinstalační přípravy.

Jakákoliv z výše uvedených skutečností nebude mít za následek omezení nebo zrušení celkové záruky na zařízení. Případné reklamace budou vyřizovat výhradně zaměstnanci prodávajícího.

Prodávající bude kupujícímu poskytovat zdarma upgrady software dodaného k zařízení po celou dobu záruční lhůty.

7. SERVISNÍ PODMÍNKY V ZÁRUČNÍ A POZÁRUČNÍ DOBĚ

Servis se provádí na základě nahlášení poruchy telefonem, elektronickou poštou nebo osobně a následně písemně objednávkou.

Pokud nelze závadu odstranit po telefonické konzultaci, dostaví se technik prodávajícího vždy do 4 pracovních hodin po nahlášení závady. Proávající se zavazuje dodávat k zařízení náhradní díly pro potřeby záručního servisu a dle objednávek kupujícího v záruční i pozáruční době a to vždy do 24 hodin po objednání, a min. po dobu 5ti let po skončení záruční doby. Při nedodržení této lhůty se sjednává smluvní pokuta ve výši 1% z ceny předmětného zařízení za každý den prodlení s dodávkou a instalací náhradního dílu. Stejná smluvní pokuta se sjednává, nezprovozní – li prodávající zařízení do 48 hodin od okamžiku nahlášení závady. Smluvní pokuta se nebude účtovat, poskytne – li prodávající v místě provozovny kupujícího adekvátní náhradní zařízení.

Servis v pozáruční době bude garantován po dobu na 5 let od vypršení záruční doby, která zahrnuje cestovné, náklady technika a další náklady spojené s výjezdem.

	Cena v Kč bez DPH	DPH v Kč	Cena v Kč s DPH
CENA SERVISNÍ SLUŽBY GARANTOVANÁ 5 LET OD SKONČENÍ ZÁRUKY V Kč/HOD.	900,00	189,00	1 089,00

8. ZÁVĚREČNÁ USTANOVENÍ

Nebezpečí škody na zařízení přechází na kupujícího v okamžiku ukončení instalace zařízení. Škoda na zařízení, která vznikne po přechodu jejího nebezpečí na kupujícího, nemá vliv na jeho povinnost zaplatit kupní cenu (nejde-li o vadu zařízení, která podléhá režimu záruky za jakost).

Prodávající se zavazuje pojistit zařízení proti všem běžným rizikům do okamžiku přechodu rizika na kupujícího na pojistnou hodnotu odpovídající kupní ceně zařízení dle této smlouvy.

Prodávající prohlašuje, že má sjednáno pojištění proti škodám způsobeným jeho zaměstnanci, které je platné po celou dobu provádění stěhování, instalace, zprovoznění, školení obsluhy a výkonech servisu.

Vlastnictví zařízení přechází z prodávajícího na kupujícího v okamžiku ukončení instalace a podpisem předávacího protokolu.

Prodávající se zavazuje spolupůsobit a poskytnout veškerou potřebnou součinnost při výkonu finanční kontroly dle § 2 e) zákona č. 320/2001 Sb. Dodavatel se dále zavazuje archivovat veškeré doklady po dobu 10 let (deseti let).

S ohledem na skutečnost, že prodávajícímu je známo, že na pořízení předmětu plnění bude kupující čerpat dotaci, která byla schválena 5.11.2018, obě strany tímto činí nesporným, že za případný ušlý zisk, který se prodávající zavazuje nahradit, bude považována i částka, o kterou bude schválená dotace krácena (či neposkytnuta) v důsledku nesplnění povinností prodávajícího bez ohledu na jeho zavinění nebo okolnosti vylučující jeho odpovědnost ve smyslu § 2913 odst. 2 občanského zákoníku.

Pozbude-li některé z ustanovení této smlouvy platnosti, zůstávají všechna ostatní tímto nedotčena. Neúčinné ustanovení se nahradí takovým, které odpovídá nebo bude co nejbližší původnímu záměru v ekonomickém smyslu.

Prodávající prohlašuje, že na sebe přebírá nebezpečí změny okolností ve smyslu § 1765 odst. 2 občanského zákoníku.

Smlouva je vypracována ve dvou vyhotoveních, z nichž každá strana obdrží jedno vyhotovení.

Smlouva nabývá platnosti dnem podpisu smluvními stranami. Při odlišném datu podpisu jednotlivých smluvních stran platí jako závazné pro plnění lhůt v této smlouvě pozdější datum.

Jakákoliv změna této smlouvy je platná jen v písemné formě a po podpisu obou smluvních stran.

V Praze dne: 15.7.2019

V Praze dne: 15.7.2019

Příloha č. 1. Technická specifikace

P.O.S. FACTORY, s.r.o.

Praha 3 - Žižkov, Jilmová 2685/10
Tel.: 296 361 443
IČ: 28524527, DIČ: CZ28524527



Technická specifikace dodávky



Podoba rozpočtu dle ZD	Název technologie	Parametry/pops	počet ks	jednotkové cena	cena celkem bez DPH
Archivní tiskový stroj	Digitální tiskový stroj Inca Oneet X3	Rozměry tiskového stroje: Výška tiskového stroje: 12,5 m; šířka 4,4 m; výška 2,2 m Max. velikost tisku: 6 500 kg Max. velikost tisku: 1.600 x 3.180 mm Max. velikost archu: 1.600 x 3.180 mm Min. velikost archu: 1.000 x 1.000 mm Produktivita: 900 m2/hod Podkládání materiálů: plénové PVC, PVC desky, lepenka, polyetylen, papír, syntetický papír, bannerový materiál, visící polypropylen, polykarbonát Barvený prostor: CMYK, rozšíření o světlo azurovou a světlo purpurovou (6 barev) UV lampy: 2 ultrafialové (UV) zdroje světla jsou umístěny uvnitř hlavního trytu, aby usadily inkoust ihned po tisku všech barev. Tyto lampy jsou chlazený vodou, aby byla zajištěna optimální teplota pro provoz. Pro chlazení systému lampy se používá externí chladící. UV sušení: Splňují kvalitativní standardy ISO 12847-2 Offset Standard. UV barvy: Uvijet LM - inkoust byl navržen tak, aby splňoval: - Článek 3 nařízení ES 1995/2004 - Legislativa plněná pro tiskové barvy pro papír a lepenku. Nemá bránit tomu, aby finální balení splňovalo požadavky nařízení - bezpečnost, chuť, vůně. - Nařízení ES o SVF 2003/2006 - Správné výrobní praxe pro materiály a předměty určené pro styk s potravinami (zejména odlišy na tiskové barvy) - Směrnice EuPIA - kompletní pokyny pro správnou výrobu tisk. použití materiálů a nálož migrace a prevence migrace - Švýcarské nařízení SN č. 817.023.21 - Nestlé Pokyny k balení inkoustů 08-2016	1	18 000 000	18 000 000
		Doplňování inkoustů: Stroj umožňuje doplňování inkoustů během provozu bez nutnosti přerušení tisku. Nabízená konfigurace obsahuje také tlačítko Bar kód, pomocí které se automaticky načítají zásobníky s inkoustem - tímto způsobem se dají sledovat barva inkoustu, jejich výměna, vyhodnocování spotřeby, identifikace případných problémů při použití rozdílných barv inkoustu, případných reklamních barevnosti apod.			
		Doplňování inkoustů: Čistění tiskových hlav - dva zvláštní druhy čistění hlav. 1. motor - je vyžadován v určitém časovém intervalu minimálně vždy po 9 hodinách, interval může být snížen podle UV světla akumulovaného na UV senzorech, 2. suché - používá se pro obnovu funkce vypařičů nebo vychýlených trysek. Volbu hlav určených k vyčištění provádí operátor a proces čistění je účte proveden automaticky. Zabudování sliznic: Sliznice, která je používána operátorem k demontáži automatického vyhodnocení funkčnosti tiskových hlav. Na základě vyhodnocení SW je spouštěna vymazání nefunkčních trysek nebo čistění. Sliznice jsou účte automaticky vyhodnocovány testovací tisk sliznic k nastavení souřadnic jednotlivých barev, mechanického nastavení tiskových hlav atd. UV senzor: - na spodní straně carriage jsou instalovány UV senzory monitorující množství UV světla dopadajícího na spodní stranu carriage a tím zároveň na tiskové hlavy. Akumulované množství UV světla rozhoduje o časovém intervalu mezi vyžadovanými čistěními tiskových hlav. To zajišťuje udržet optimální výkon a životnost tiskových hlav.			
		Zařízení pro čištění stroje: Zabezpečí do přepravních obalů u výrobce, nakládku, transport, výměnu, manipulaci v prostorách zákazník, usazení na finální pozici, kompletní zprovoznění, školení obsluhy. Štěrnutí obsluhy 10 zaměstnanců v rozsahu 30 pracovních dnů.	1	900 000,00	900 000

Naládění/vykládání	Automatická robotická ruka ABB vč. speciálních naládacích desek	Robotický systém naládění a vykládání: Robot umožňuje naládění z jednoho místa (stolu) naládat na vícečetné místo na tiskovém stole. Při výrobě umožňuje naládat podtlakovaný materiál na jedno místo (stůl) s možností vykládky také na vykládku místa robot vykládá podtlakovaný materiál na dopravní pás - automatické nepojení na „inspekční stůl“, „tiskový stůl“, výše nebo vykládky na dopravní pás - automatické nepojení na navazující výrobní workflow. Požadavkem zákazník (programovací, výrobní a testovací práce v rozsahu max. 1000 hod).	2	9 900 000,00	19 800 000,00
	Výška stolu substrátu v naládění/výšce stolu potiskového substrátu	1 800 mm	1	1 250 000,00	1 250 000,00
	Manipulace s materiálem:	Naládění/vykládání místo umožňuje naládat a vykládat materiál na palety (možnost standardní EURO palety a větší, atypické rozměry).	1	1 250 000,00	1 250 000,00
	Instalace vč. dopravy, spotřebního materiálu na rozjezd stroje a připojení na potiskové média a zajištění obsluhy	Zajištění do přepravních obalů u výrobce, naládění, transport, vykládka, manipulace v prostorách zákazníka, usazení na finální posád, kompletní zprovoznění, školení obsluhy 10 zaměstnanců v rozsahu 30 pracovních dnů.	2	250 000,00	500 000,00
Naládění	Kompresor Kaser na sáčekový vzduch	Naladění 21s jako záloha pro případ výpadku. Srobový kompresor Kaser s integrovanou sušičkou ASK 34 T / 11 včetně příslušenství a	1	300 000,00	300 000,00
	Instalace rozvodu stlačeného vzduchu	3,2m x 1,5m x 2mm	1	14 100 000,00	34 100 000,00
	Stůl:	20 kg při ručním provozu a plné rychlosti			
	Max. hmotnost substrátu:	80 kg při ručním provozu a snížené rychlosti			
Naládění	25-ti zónový výškový stůl:	10 kg pomocí automatické manipulace			
	Ochrana tiskárny pomocí monitorování úrovně vakua na stole:	Zónový výškový stůl redukuje potřebu nastavení stolu. To zásadně snižuje čas potřebný pro nastavení stroje pro tisk nákladových záložek. Vakuumové zóny jsou navedené ovládané a funkce „auto zone“ umožňuje snadnou správu ovládacím. Často používané formáty mohou být automaticky nastrojeny a uloženy v uživatelsky spravované databázi.	1	14 100 000,00	34 100 000,00
	Víceúrovňová ochrana tiskárny před poškozením tiskových hlav/vazidel včetně ziskání potiskovaného média:	Monitor úrovně vakua na stole, který zastaví tisk, pokud je úroveň vakua příliš nízká pro bezpečné určení tiskového média na stole. To pomáhá předejít možnému poškození tiskových hlav/vazidel při tisku potiskovaných materiálů nebo médií, která nejsou dokonale plochá.			
	Instalace vč. dopravy, spotřebního materiálu na rozjezd stroje a připojení na potiskové média a zajištění obsluhy	Naládění stůl obsahuje speciální ochranný válec, který kontroluje tloušťku potiskovaného materiálu, zabíráje naladění dvojitou archu do tiskárny a zároveň stůl i potencionální nebezpečí na potiskovaném materiálu před vstupem materiálu do tiskárny. Dalšími stupni ochrany před poškozením tiskových jednotek a tiskového vozíku jsou dva páry mechanických detektorů, které zajišťují ochranu tiskových hlav před poškozením během tisku. Každá přídržka, která předispozice nastavenou výšku média, výškové detektor a okamžitě přeruší pohyb stolu a „zjedne“ se stolem do nejbližší polohy.	1	750 000,00	750 000,00
Naládění	Výškový rozjezd stroje a připojení na potiskové média a zajištění obsluhy	Zajištění do přepravních obalů u výrobce, naládění, transport, vykládka, manipulace v prostorách zákazníka, usazení na finální posád, kompletní zprovoznění, školení obsluhy 10 zaměstnanců v rozsahu 30 pracovních dnů.	1	250 000,00	250 000,00
	Manipulace na místě	sklad, pronájem jeřábu	1	50 000,00	50 000,00

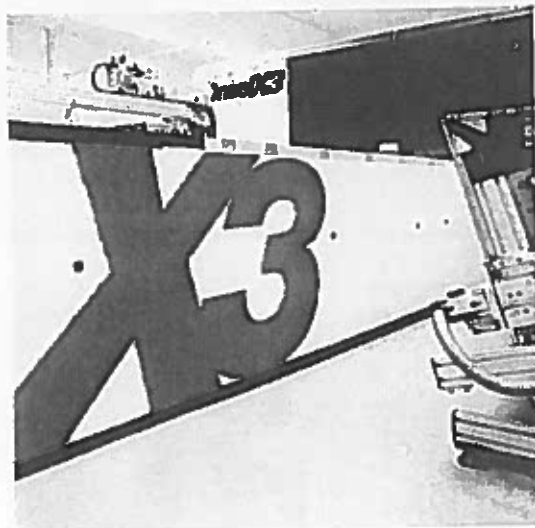
Řídicí pult	Řídicí počítač, který umožňuje ovládnutí z jednoho místa, a to formou velkoplošné obrazovky pro zobrazení všech procesů. Dodávka obsahuje velkový počítačový hardware.	Řídicí SW, kalibrace - nástroje umožňující integraci Onset X3 do stávající výroby MIS (Management Information System) a řešení pracovních postupů s cílem snížit náklady a zvýšit efektivitu. Součástí SW řešení je sada nástrojů Inca Connect. Umožňuje mimo jiné vzdálené sledování stavu stroje a účely, substrátů, dokončení a tiskové fronty. To zlepšuje využití stroje tím, že umožňuje vzdálené nastavování (úkol a tiskových front což znamená, že tiskárna má větší up-time (Vlastní tisk není zahrnován nastavování, které může probíhat nezávisle). Součástí sady Inca Connect je i modul IncaViewer, který umožňuje sled dat za účelem měření produkčního času, počtu zakázek, počtu průjezdů tiskárnou, měření tiskové plochy, spotřeby inkoustu, měření odpadu tiskového materiálu a poskytuje přesná data pro kalkulaci tiskových nákladů. SW tedy umožňuje report výkonu či průjezdů a časové využití stroje. Pomocí zabudovaného skeneru jsou automaticky vyhodnocovány testující tisky sloužící k nastavování kvality součástí jednotlivých barev.	1	1 200 000,00	1 200 000,00	
		Instalace SW a školení obsluhy	Instalace SW, školení obsluhy 10 zaměstnanců v rozsahu 30 pracovních dnů.	1	50 000,00	50 000,00
Technologie automatizace procesů	RIP server Onyx pro Onset printer	SW zajišťuje: - zpracování standardních tiskových dat (PDF) - vyřazení stran nebo kopií na tiskový arch - umožňuje nastavení parametrů stroje pomocí .xml či JDF z MIS systému zadavatele, obsahuje „HOT folders“ pro definování či opakující se zakázky. Umožňuje automatickou úpravu barevnosti dle potiskovaného substrátu pomocí ICC profilů či úpravou množství barev (UCR, PCR). - systém umožňuje nastavování a vyhodnocování kvality tisku pomocí kalibrační barevnosti a možnost úprav barevnosti tiskové úlohy (pomocí naměřených dat), zároveň umožňuje stanovení a udržení výchozích tiskových hodnot stroje pro jednotlivé substráty (lineartize)	1	300 000,00	300 000,00	
		Instalace SW a školení obsluhy	Instalace SW, školení obsluhy 10 zaměstnanců v rozsahu 30 pracovních dnů.	1	100 000,00	100 000,00
		Instalace vč. dopravy, spotřebního materiálu na rozjezd stroje a připojení na potřebné média a zaškolení obsluhy				57 350 000



Inca Onset X3 UV Flatbed Printer

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4. Commercial Offer & Payment Terms
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1. Introduction

The Inca Onset X3 is a high productivity dedicated UV inkjet flatbed printer from the industry standard Inca Onset series, with world-leading technology and intelligent control systems. The printer produces up to 725m²/h, delivering outstanding print quality, reliability and cost savings.

Features include:

- o Choice of print finish in gloss and satin
- o Piezo drop-on-demand inkjet technology
- o Fujifilm Dimatix printheads with a choice of 14 or 27pl drop size
- o Fujifilm Uvjet UV cured inks
- o 6-colour expanded colour option with light cyan and light magenta (optional white & orange)
- o Full Width array, single head per position
- o Maximum print size (1.6 × 3.18m)
- o Substrate thickness up to (50mm)
- o Proven Onset scalable architecture
- o Laser exclusion zone for operator safety
- o I Nozzle technology
- o 25 zone vacuum print bed
- o Mechanical substrate height detectors
- o Printhead sensor protection from reflected UV light
- o Reporter Pro & Print Run Controller software*
- o Internet-based troubleshooting
- o Remote access diagnostics
- o Requires Internet access from network

*Software options are activated and supplied free of charge for a period of 12 months from date of installation, thereafter, use of these features will be chargeable.

(1) See Pre-installation Guide for chiller procurement specification (SP000022 EU countries, SP000021 North America)

Workplace Safety

- o Laser exclusion zone for operator safety
- o Fixed, locked guards
- o Hard-wired emergency stop circuit

Compliance

- o This equipment is CE marked
- o This equipment is CSA certified (onsite inspection required)

2. Main Components

All main components are housed within the printer; the only freestanding items are the operator console, vacuum table foot switch and chiller. Fixed panels that are secured in place with lockable latches to enclose the equipment.

Printer

The printer consists of a main frame supported on vibration isolation footings, ensuring best in class drop placement accuracy, and a housing containing the full bed print array assembly for the UV curing system utilizing a moving bed design.

Main Frame

The main frame consists of a substantial metal framework constructed from steel plates and extruded tubing that is securely welded together forming a solid foundation. In addition to supporting the vacuum table, the main frame houses the controller for the table vacuum, full bed print array, print carriage motion system, table vacuum pump, printhead vacuum controller, UV lamp power supply, printer PC and head cleaning system.

Full Bed Print Array Gantry

Cooling fans fitted within the gantry minimise any build-up of heat. Filters, fitted to the fans, collect ink mist. The design allows full access to the table between prints for loading operations.

Zoned Vacuum Table System

Substrates are held securely in position on the vacuum table by an applied vacuum. The 25 zone vacuum table fitted to the Onset X3 enables the operator to select which zones to use. The operator can also select whether the material is moving using manual or $\frac{1}{4}$ semi auto. The function of the zoned vacuum bed is to minimise the amount of bed masking and thus increase productivity. However, masking must still be applied to any open area within the zones being used to maintain good substrate hold-down. Substrates over 3mm thickness should be masked to reduce UV light bounce.

Vacuum Application

The vacuum applied to the table is generated by a vacuum pump fitted under the table towards the middle of the main frame. The vacuum is applied and released by the footswitch to allow substrate loading and unloading (in manual mode only).

Table Design

The table is of an aluminium honeycomb design to facilitate the application of a vacuum delivered to the table from the on-board vacuum pump, as well as allowing a momentary injection of air to release the vacuum prior to unloading.

Eleven pneumatically operated pins fitted to the table allow for accurate alignment and positioning of substrate when loading. The pins are raised for alignment and positioning and retracted during printing 8 across the length, 2 to the operators right (zero point) and one to the left. When using automation, substrate alignment is done on the lay table which also has a complement of lay pins.

The footswitch is used to raise and retract the pins and switch the vacuum on and off. This is only possible when the gantry is in the home position.

I Nozzle

The function of the I (Intelligent) nozzle mapping software is to maintain print quality, even if the printheads have missing or deviated print nozzles that would otherwise be seen as very visible print defects. The operator runs Inca Automatic Nozzle Mapping routine, which prints and analyses the Printhead Test Pattern. This automatically maps and logs missing or deviated nozzles which data is then used during the print process to automatically substitute another nozzle to print the drops that would have been printed by the now mapped nozzles.

Mechanical Substrate Height Detectors

The Onset X3 system now comprises 4 separate mechanical height detectors. Situated outside the UV system back and front, and between the UV and print carriage back and front, they protect the UV lamps and the print carriage.

The mechanical substrate height detector (MSHD) now comprise a series of metal flaps that activate a trip switch if the impact force is sufficient.

UV Sensors

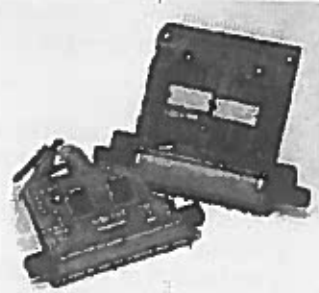
The addition of the sensors provides information to determine when a clean is required. The sensors monitor the reflected UV light around the print carriage and when a pre-determined amount of UV exposure has been received by any one of the sensors, a clean cycle is made once the current image has finished printing. This feature will provide intelligent cleaning frequencies based on the type of substrate being used.

3. Uvjet Ink System & Printheads

Fujifilm Dimatix Printheads

Ink and printheads work together like fuel and engines. Where Onset is concerned it's even better. Ink and printheads are tailored to each other, being made by Fujifilm Speciality Ink Systems and Dimatix, fellow members of the Fujifilm family. That means all ink and printhead issues and challenges are managed collaboratively.

Dimatix printheads have proven their reliability in full production for many years. Manufacturing tolerances are tight. Quality control is exemplary.



4. Productivity Pack

The Onset X Series Productivity Pack is available as an option for new machines and also as a retro-fit to existing 54000 series machines. The pack consists of four key elements, designed to improve productivity and print quality.

- Productivity is increased by reducing setup times as masking can be eliminated.
- Print quality is improved by increasing the flatness of the surface to be printed.

Table Skins

The Table Skin is a thin sheet of steel (measuring 3.2 m x 1.6 m x 2 mm) with a matrix of holes, which when fitted to the top of the 25 zone vacuum table - see Figure 1, helps eliminate the need for masking to maintain table vacuum. Two variants are available:

The standard through-hole skin (with 2 mm diameter through-holes), when operated in conjunction with Fast Shutters and Side Shutters, masking is only required on uncovered areas of 'open' zones to maintain vacuum where there is a need.

The funnel hole skin (with 2 mm - 0.6 mm diameter tapered holes) supports zero masking, allowing printing to be performed with up to 25% of the 'open' zone areas uncovered - see Figure 2. The funnel hole skin is the most versatile solution for customers using mixed materials.

Key Benefits

- Manual masking may not be required to ensure substrates are held firmly on the table.
- Reduction in set-up times in 90% of typical substrate size cases.
- Increased productivity.

Side Shutters

Pairs of Side Shutters are fitted under both UV lamps and can be manually positioned to shield the table from UV light on either side of the image, to reduce UV bounce and table masking for substrates that have a thickness of at least 3 mm. The shutters are water-cooled to help dissipate the absorbed energy.

The principle of operation is illustrated in the figures below. Figure 1 represents a pair of shutters fitted to one lamp - in this

Figure 1 Arrangement of Table Vacuum Zones

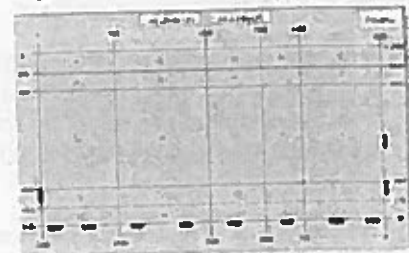


Figure 2 Unmasked Areas - Funnel Hole Table Skin

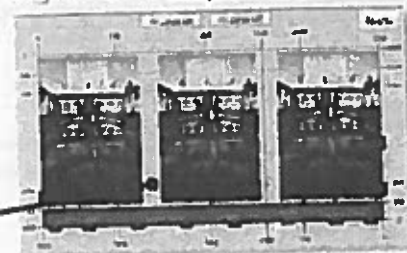


Figure 1

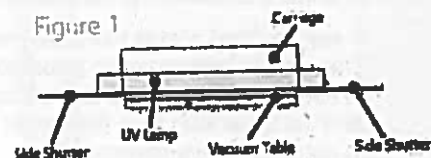


Figure 2



configuration, no UV side protection is offered as the shutters are in the open position. Figure 2 shows how one side shutter should be positioned in order to negate the need for the masking to match the size and position of the substrate.

Key Benefits

- Eliminate the need to add masking across the table (for substrates $\geq 3\text{mm}$ thick) to avoid UV bounce, i.e. curing of ink on printheads.
- Reduced set up times.
- Increased productivity.

Fast Shutters

Fast Shutters eliminates the need to mask along the table length (to protect from UV bounce*) when printing on substrate with a thickness of 3mm or greater - previously a gap of less than 3mm between the substrate and masking material was required. Servo motors fitted to the UV lamp assemblies can operate the shutters up to 10 times faster than the standard configuration, providing opening and closing times as fast as 0.3 seconds.

The principle of operation is illustrated opposite. UV light cures the ink as the substrate passes - see Figure 1. When the image has passed, the shutters close - see Figure 2. The increase in operating speed significantly reduces the risk of UV bounce as the shutters are closed around the lamp in a fraction of the time previously necessary. Closing the lamp quickly minimises the curing of ink on the nozzle plates and optimises printhead life-expectancy.

Figure 1

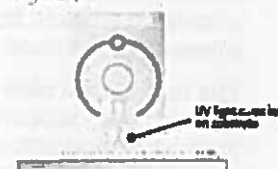
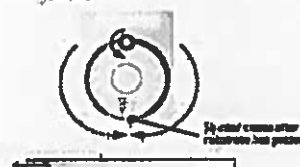


Figure 2



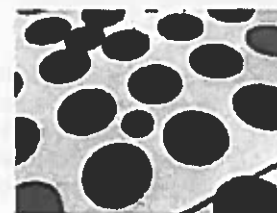
Key Benefits

- Eliminates the need to add masking along the table (for substrates of 3mm and higher) to avoid UV bounce, that is, curing of ink on printheads.
- Reduced set-up times.
- Increased productivity.
- Time saved from masking up to 10 minutes per hour.

Print-a-Shim

Print-a-Shim is a pattern of raised dots printed onto the vacuum table to improve the flatness of the table skin laid on top. Print quality is improved as the placement of each ink drop is more accurately controlled as a result of a more consistent printhead-to-substrate distance.

A sensor fitted above the table maps the surface contours of the table. This data is processed to generate an array of dots of varying thicknesses of ink to compensate for the contours of the table. The shim is printed and the table skin then fitted over the top. The table is then remapped to confirm the improvement.



Automation

Automation is also speed up to 6 seconds per cycle

Is the Productivity Pack included in this offer? YES

(Included as standard for machines with 10 channels or more, or £51k field upgrade)

5. Printhead Protection

Inca are confident that new Onset machines will maintain the print quality at which they were first sold with a minimal need for new printheads. However, for peace of mind, Inca are prepared to offer customers a *Printhead Protection Scheme* with new machines which will cover printhead replacement in the event a printhead does need replacing*.

There are a variety of modes offered on the various Onset models and the print mode selected needs to suit the type of work being produced. This will be demonstrated to the customer as part of the sales process and final machine acceptance. Data shows that customers are able to maintain these modes over time and that this print quality will be achievable 12 months after purchase and can be used to determine ROI on the machine.**

What does this mean for the end customer?

An Onset printhead is offered as a free of charge replacement part if it has failed through normal wear and tear and will be fitted by an Inca approved engineer under the terms of the customer's service contract.

Extended Service - Years 2 & 3

The Inca Printhead Protection Scheme can only be offered with a Level 2 or Level 3 Inca supported service contract. This scheme cannot be broken down to just cover printheads. An appropriate service contract must be taken to access the Printhead Protection Scheme in years 2 & 3.

*Subject to terms and conditions.

**Subject to the machine being run by trained operators performing the recommended daily and weekly maintenance.

Is Printhead Protection included in this offer?

Yes if taken in conjunction with year 2 & 3 Service Contract

6. Inca Warranty Terms

Parts Warranty for new Flatbed Products

Inca warrants that the Product¹ will be free from defects in material and workmanship under normal use and service for an Initial Period which is defined for all Products as the shorter of a period of 12 calendar months after acceptance at a customer site or a period of 375 days after delivery to the customer site.

Inca's obligation is limited to the repair or replacement (using reconditioned parts where appropriate) of parts received by Inca within 30 days of removal from the printer, transportation charges prepaid, and when examination thereof shall disclose them, to Inca's satisfaction, to have been defective.

This warranty does not apply to Printheads², Consumables³, any parts subjected to misuse or abuse, damaged or lost in transport, or which have been opened, disassembled, repaired or altered by anyone other than Inca engineers or approved third-party agents.

Any Product or part repaired or replaced under Inca's warranty obligation shall, in accordance with the foregoing conditions, be warranted for the unexpired portion of the machine warranty period.

Unless otherwise specifically agreed to in writing by Inca, the obligation of Inca is limited, in the case of material breach of the warranties set forth above, to the prompt ex-works replacement of parts with conforming parts, normally through crediting the purchaser for the cost of the replacement purchased.

Warranty of Printheads

Unless covered under a printhead protection scheme it is the responsibility of the user to maintain Printheads and ink filters in accordance with Inca recommended maintenance procedures, and to ensure that Inca approved engineers have access to the machine to carry out preventive maintenance. Inca recommend maintenance procedures may change from time to time in the interests of improving printer reliability. Failure to follow current maintenance procedures or the use of unapproved inks or solvents is likely to cause deterioration and subsequent failure of the Printheads and invalidate this warranty.

Where repair at the customer site is not possible, customers will be required to purchase replacement Printhead assemblies if they carry no spares. Printheads may be repaired at zero or reduced cost, or credits may be applied against purchased replacements, depending on the nature of the failure and condition of the returned Printheads.

Warranty claims are normally processed within 30 days of receipt at Inca and will only be considered when the returned unit is accompanied with details of the Ink batch number in use at time of failure and, where possible, a Printhead test print⁴. If a replacement Printhead assembly is provided under warranty, it may be a factory reconditioned assembly. Replacements or repairs provided under warranty are covered for the remainder of the unexpired warranty period of the Product or the unexpired warranty period of the Printhead assembly if the failed unit had been fitted after expiry of the Product warranty Initial Period.

During the Initial Period, Inca warrants that Printheads are supplied free from manufacturing defects and provides warranty for premature failure of seals and electronics, but makes no warranty on performance for the Initial Period, as this is largely within the control of the user.

¹ Product is defined as the new flatbed printer supplied by Inca, and includes all Spyder and Onset family machines.

² Printheads are defined as active jetting components of the Product, normally handled in the form of Printhead assemblies containing multiple printheads, electronics and ink supply components

³ Consumables are defined as parts which are designed or are expected to be replaced periodically e.g. filters, hoses, seals, UV lamps.

⁴ The test print used must include 'tick marks'.

Parts Warranty for new Flatbed Products – continued

Normal specification includes up to 1% of nozzles missing or with imperfections and will not be covered by warranty. However, where large scale blocked and seriously deviated nozzles occur within 10 days of installation and print quality remains impaired after nozzle mapping, Inca will offer to replace or repair the Printhead, assuming there has been no misuse or nozzle plate damage or if there is an expectation of premature failure through a manufacturing defect or damage caused by an Inca representative.

On older style products without nozzle mapping, nozzle defects within 10 days of spares fitment will be judged by how they impact print quality such that individual defects are more likely to be judged as significant.

Change to jetting performance through internal clogging of Printheads in use is not a manufacturing defect and is therefore not covered by the Product warranty. Damage caused by contact with substrate is also not covered.

New Printheads

New Printheads sold as spares carry the same warranty as Printheads fitted in the Initial Period. If, at the time of installation of a New Printhead or Printhead assembly an 'RMA Request & Warranty Registration Form' (SF0019) is sent to the Inca Customer Support department, then 6 months warranty shall be provided from the installation date rather than the shipment date. If Inca does not receive this data within 14 days of installation, the shipment date will be used as the start of the warranty period even if a report is subsequently received.

Spare Parts (supplied beyond first year warranty period)

Inca warrants that new and factory reconditioned parts supplied as spares are free of manufacturing defects and will provide a 6 month warranty for premature failure from the date the Spare Part is fitted to a Printer. If after fitting a Spare Part it fails within the 6 month warranty period, an 'RMA Request & Warranty Registration Form' (SF0019) should be sent to the Inca Customer Support department along with evidence of the date the part was originally fitted. If Inca does not receive this information within 14 days after the failure date, the shipment date will be used as the start date of the warranty period even if a report is subsequently received.

Onset X3

Onset X takes the Scalable Architecture Concept of Future-Proof Technology Even Further

Capable of printing at a blistering 900 m²/hr (equivalent to 180 full-bed sheets/hr), the Onset X3 sits at the pinnacle of productivity. 27-picolitre printheads, the Onset X3 sits at the pinnacle of productivity.

inca
inca.digital.com

One Platform, Infinite Potential - Capable of printing at a blistering 900 m²/hr (equivalent to 180 full-bed sheets/hr), the Onset X3 sits at the pinnacle of productivity. With Onset X3, users of analogue screen printing lines can take the digital route, confident they can print long runs of high-quality print with superb consistency and reliability. The 14 channels feature three sets of CMYK plus the choice of white (W) or orange (O).

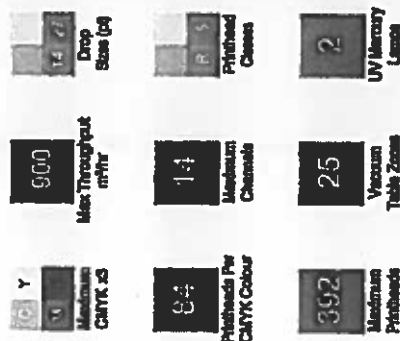
Fujifilm Dimatrix Printheads - Depending on whether applications are focused on quality or speed, one of two printhead classes can be selected, offering the option of 14-picolitre (R Class) and 27-picolitre (S Class) drop sizes. While retooling printheads (R8R Class) have a 40-picolitre drop size.

Choice of Handling Options - Users can specify different levels of automation. In the semi-automatic option, the substrate is loaded by the operator but automatically removed. Three-quarter automation involves the operator pre-aligning the substrate on a lay table before the handling system automatically places it and removes it. There are two fully-automated systems available allowing stack-to-stack printing for longer production runs.

25-Zone 'No-Masking' Vacuum Solution - Especially significant is the new design 25-zone vacuum table, featuring a powerful new vacuum system and choice of skin design depending on the user's needs. This solution completely eliminates the need for bed masking when printing on substrates up to 3 mm thick, whatever the substrate size, and greatly reduces set-up times for POS substrates and increases throughput of short-run, fast-turnaround print.

New GUI - For the Onset X Series, Inca has developed a new GUI to provide a powerful yet simple-to-use printer and job management tool. It is easy to finalize and initiate jobs, save settings, create print queues and manage and optimize every stage of the print process. Improved off-machine job set-up means jobs arrive at the printer with more predefined parameters - substrates, print speed, quality mode, gloss level, etc. - already specified.

Standard Colour Configurations



- Maximum print area 3.21 m x 1.8 m (428.8 in x 208.8 in)
- Maximum substrate thickness 30 mm (2 1/4 in) manual mode, 18 mm (0.71 in) automatic handling
- Maximum substrate weight 20 kg (44 lb) easy/speed in manual mode at full speed, 80 kg (175 lb) easy/speed in manual mode at reduced speed, 10 kg (22 lb) easy/speed with automatic handling

- Operator console including touch-screen, keyboard and mouse
- Automatic banding options
 - Autoheader with manual key table
 - Autoheader with automatic feeder and alignment table
- 2-DV cutting jumps
- 4-directional 14-directional printing
- Enkeling²
 - Installation kit, operator manual and customer training

- 2 Reduced to 40 mm when pilot added and while skin was fixed.
HP bacteria, software and training is not included with machine

While every reasonable effort has been made to ensure the accuracy and appropriateness of the content of this document, Icon Digital Futures Limited can not be held responsible for any errors, omissions or consequential loss/injury however caused. The information supplied is subject to change without notice due to ongoing design developments. A user may differ in detail from that described.

Media			
Max-Print Size	3.27m x 1.8m (108.6in x 68.9in)		
Max Substrate Thickness	20 mm ¹ (2in) nominal max. 18 mm (0.71in) with automatic handling		
Types ²	Form PVC, PVC sheets, keyboard, corrugated cardboard, display board/aluminium, corrugated-cardboard, polycarbonate, paper, synthetic paper, banner material, corrugated polypropylene, polycarbonate		
1	Reduced to 48 mm when joint-white and table size are fixed		
2	Like not adhesive. Check specification and test performance of media before printing		
Printing Technology			
Print-Engine	64 per-CHMYK colour	Technology	Photoelectric DOD output
Configurations	3 x CHMYK or 3 x CMYK plus a choice of W and O		
Apparent Resolution	up to 1000 dpi	Maximum Table	25-zone operator controlled
Printing			
Productivity ³	Up to 800 m ² /hr in exposure mode with ½ automatic handling		
Handling	Manual handling with option of semi, ¼ or full automatic handling		
Minimum Substrate Weight	280kg (440lb) at full table-speed manual operation 600kg (1760lb) at reduced table-speed manual operation 101kg (220lb) using automatic handling		
• Based on an approximate 8 second load and unload time.			
Inks and Curing			
Ink	FLUORAL UV-curable Inks	Colours	Cyan, yellow, magenta, black, white and orange
Curing	Dual mercury lamps	Outdoor Durability	Up to 2 years UV with fade and water resistance
RIP (not included with machine)			
Software Options	ColorCATS® Production Server, Caldera Graphics® or Windows Software		
Input Formats	Most popular graphic file formats including PostScript, EPS, TIFF PSD, PDF, and JPC. HP® table printing, graining and double sided		
Environment		Temperature	Humidity
		20-30°C (68-86°F Ambient)	45-80% RH (non-condensing)

Note: Print quality can be affected by table humidity (RH). When below 45% RH, printing on some plastics may cause the table and substrate to become brittle. When above 80% RH, moisture will increase film adhesion below 45% RH.

The following information is for your information only. It is not intended to be used as a basis for any action. It is not intended to be used as a basis for any action. It is not intended to be used as a basis for any action.

Overview

Inca ReporterPro is a user-friendly software tool that provides all of your management team the ability to monitor your Inca printer(s) and access a range of useful production statistics. The software provides an accurate picture of overall efficiency, allowing your managers to fine tune production schedules, check job costs and generate internal management reports.

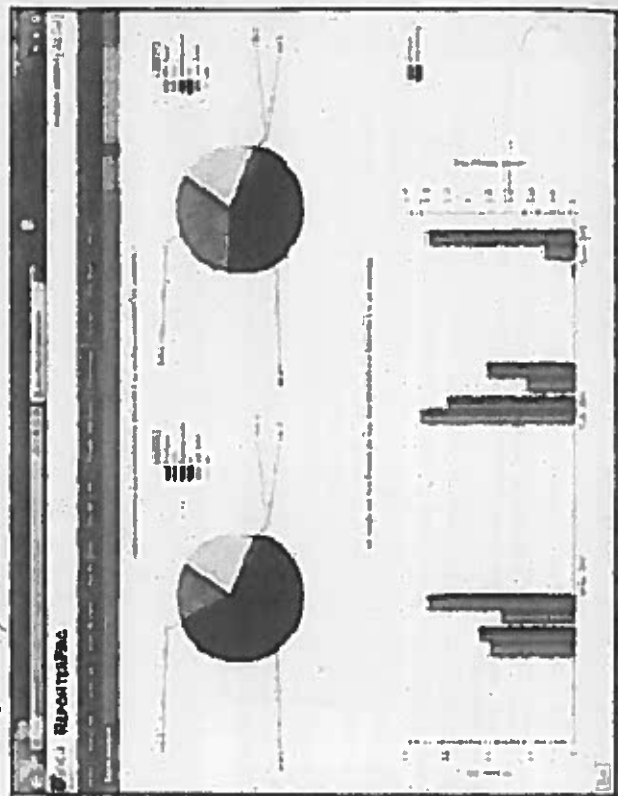
Inca ReporterPro provides job, customer and machine production data, either dynamically or at pre-set intervals. Users can search on multiple criteria such as file name, job number and customer name to produce comprehensive reports. The software can be installed on a net box, which we can supply, or your IT team can link it to a SQL server on your network.

Inca ReporterPro has an intuitive browser-based user interface. A customizable dashboard allows you to regularly refresh your data at intervals which are useful to you (every 5 minutes if you wish) and monitor progress on your Inca printers from your desk.

Data Reported

- Ink usage
- Print size and substrate thickness
- Job start and finish times
- Number of rejected prints
- Machine utilization

Inca ReporterPro Dashboard



Installation Options
Inca ReporterPro is available either pre-configured on a Net Box or configured to run on an existing SQL server database.

- Pre-configured Net Box
Supplied with all the pre-configured hardware and software, this is the most convenient solution for customers with limited IT resources.
- Customer's SQL Server
Inca ReporterPro can be configured to use an existing SQL database to take advantage of a system already in place.

For Further Information...
Please refer to SR0178 Inca ReporterPro - Installation Options.

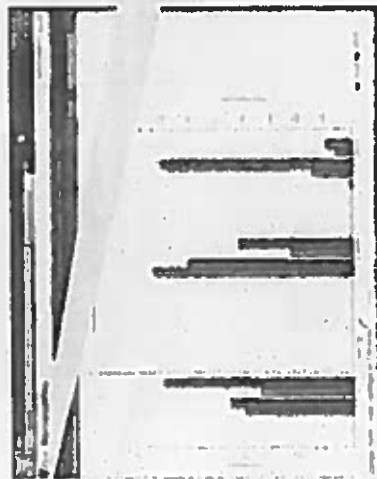
Query Data and Jobs

The system can be tailored to deliver specific data such as machine up time, productivity (e.g. number of sheets printed) and quantity of ink used per job. Users can easily generate production reports for a single machine focusing on a specific time-frame, or they can examine data relating to jobs for a single customer that are printed on a number of different Inca printers. The information can be used to improve the accuracy of job estimating and assist with production planning.

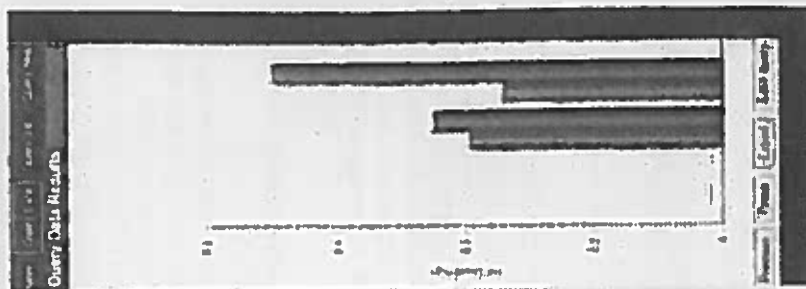
The data available from Inca ReporterPro illustrates how each of your Inca printers is being utilized and you can compare the performance.



Query Job - Ink Usage and Time Printing

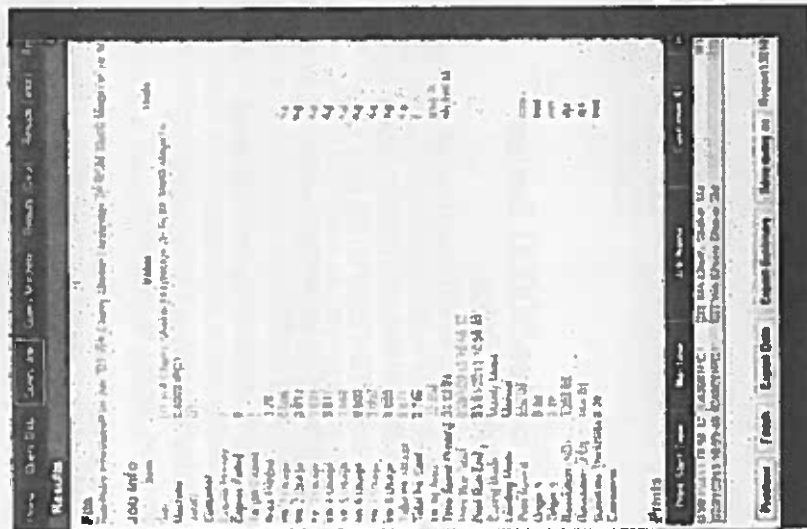


Query Data - Ink Usage and Time Printing



Data Export

The data can be extracted as a CSV file and imported into other software programmes, such as Microsoft® Excel®, or possibly to your MIS.



OnsetX

Technical Specification

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Onset X Series/50000 Series Productivity Packs

The Onset X Series and 50000 Series Productivity Packs are available as options for new X Series machines and also as a retro-fit to existing X Series and 50000 Series machines. Compatible machines are listed on the back page.

The pack consists of four key elements, designed to improve productivity and print quality.

- Productivity is increased by reducing setup times as masking can be eliminated.
- Print quality is improved by increasing the flatness of the surface to be printed.

Key Elements

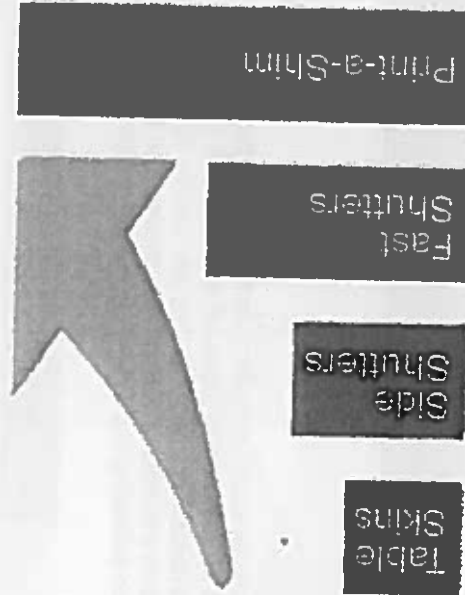


Table Skins

A thin sheet of aluminium with a matrix of holes fitted to the top of the vacuum table, helps eliminate the need for masking to maintain table vacuum. Excluding very porous or non-flat media such as corrugated board.



Side Shutters

Adjustable shutters positioned under the UV lamps to block out light either side of the image, reducing UV bounces and table masking for substrates of 3mm thick or over.



Fast Shutters

Servo-driven shutters operate up to 10 times faster and eliminate the need for masking along table length for substrates up to 13mm thick.



Print-a-Shim*

A pattern of raised dots printed onto the vacuum table but under the table skin to improve table flatness, consistency of printhead to substrate distance and print quality.

* Patent pending at time of publication. Not an option for machines using LM or OL beds



Key Benefits

- Manual masking may not be required to ensure substrates are held firmly on the table.
- Reduction in set-up times in 80% of typical substrate size cases*
- Increased productivity

* In a recent survey, 80% of typical substrate sizes can be printed with zero masking.

Table Skins

The Table Skin is a thin sheet of aluminium (measuring 3.2m' x 1.6 m x 2 mm) with a matrix of holes, which when fitted to the top of the 25-zone vacuum table (see Figure 1) helps eliminate the need for masking to maintain table vacuum. Two variants are available:

The standard skin (with 2mm diameter through-holes), when operated in conjunction with Fast Shutters and Side Shutters, masking is only required on uncovered areas of 'open' zones to maintain vacuum where there is a need.

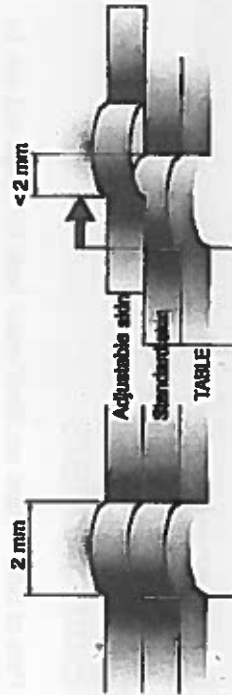
When fitted the maximum substrate thickness is 48 mm.

The adjustable table skin is a second through-hole skin fitted on top of the standard skin. This can be moved relative to the underlying skin by rotating a pair of cam adjusters so that the holes in both skins can be purposely misaligned to reduce the effective hole size - see Figure 2. With porous or warped substrates the holes can be set to full size for maximum hold-down power.

With flat and non-porous substrates the hole size can be reduced to limit or eliminate the need for masking - see Figure 3.

When fitted the maximum substrate thickness is 46 mm.

Figure 2



- 1 3.14m for 50000 Series.
- 2 16-zone for 50000 Series

CONFIDENTIAL | 060224 - Onset X (A 50000) Series Productivity Packs | Issue 3 | 2 Sep 2016 |

Figure 1
Arrangement of Table Vacuum Zones

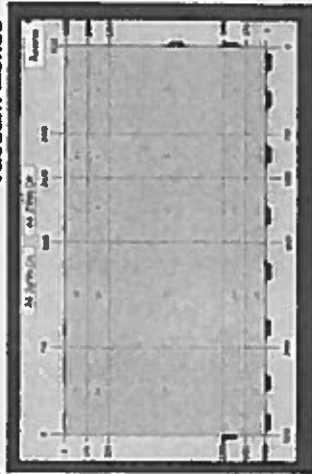
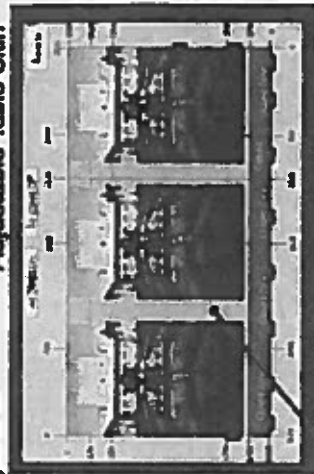


Figure 3
Unmasked Areas Adjustable Table Skin



'Open' (green) areas left unmasked
(Maximum open area is 800mm for substrate over 3mm thick)

Side Shutters

Pairs of Side Shutters are fitted under both UV lamps and can be manually positioned to shield the table from UV light on either side of the image, to reduce UV bounce and table masking. The shutters are water-cooled to help dissipate the absorbed energy.

Principle of Operation

The principle of operation is illustrated in the figures below. Figure 1 represents a pair of shutters fitted to one lamp - in this configuration, no UV side protection is offered as the shutters are in the open position. Figure 2 shows how one side shutter should be positioned in order to negate the need for the masking to match the size and position of the substrate.

Key Benefits

- Eliminate the need to add masking across the table to avoid UV bounce, i.e. curing of ink on printheads.
- Reduced set up times.
- Increased productivity.

Figure 1



Figure 2



Figure 3

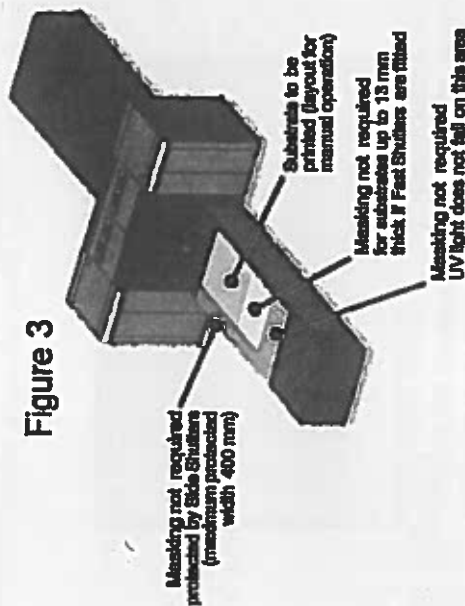


Figure 3 shows how the substrate may be laid on the table.



Key Benefits

- For substrates up to 13mm thick - eliminates the need to add masking (in combination with Side Shutters), as shown on the previous page, to avoid UV bounce, that is, curing of ink on printheads.
- Reduced set-up times.
- Increased productivity.
- Time saved from masking up to 10 minutes per hour.

Fast Shutters

Fast Shutters eliminate the need to mask along the table length (to protect from UV bounce) when printing on substrates with a thickness between 3 and 13mm - previously a gap of less than 3mm between the substrate and masking material was required. Servo motors fitted to the UV lamp assemblies can operate the shutters up to 10 times faster than the standard configuration, providing opening and closing times as fast as 0.3 seconds.

Principle of Operation

The principle of operation is illustrated opposite. UV light cures the ink as the substrate passes - see Figure 1. When the image has passed, the shutters close - see Figure 2. The increase in operating speed significantly reduces the risk of UV bounce as the shutters are closed around the lamp in a fraction of the time previously necessary. Closing the lamp quickly minimises the curing of ink on the nozzle plates and optimises printhead life-expectancy.

Figure 1

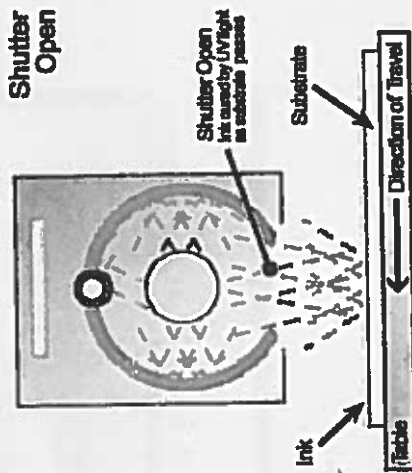
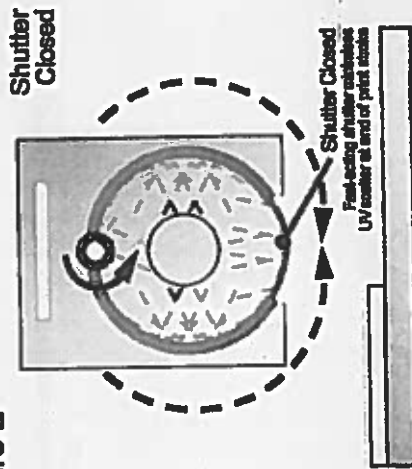


Figure 2



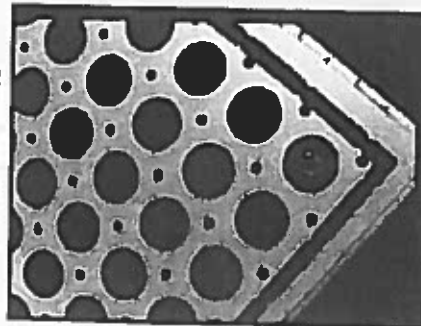
1 It may still be necessary to mask some porous substrates to achieve a satisfactory hold-down vacuum.



Key Benefits

- Improved flatness of surface to be printed.
- Improved print quality over the bed.

Shim Printed on Table



Print-a-Shim*

Print-a-Shim is a pattern of raised dots printed onto the vacuum table to improve the flatness of the table laid on top. Print quality is improved as the placement of each ink drop is more accurately controlled as a result of a more consistent printhead-to-substrate distance.

Process

A sensor fitted above the table maps the surface contours of the table - a typical surface before mapping is shown in Figure 1 opposite. This data is processed to generate an array of dots of varying thicknesses of ink (as shown in Figure 2) to compensate for the contours of the table. The shim is printed and the table skin then fitted over the top. The table is then remapped to confirm the improvement - a typical after mapping is shown in Figure 3.

Figure 1 Before Mapping

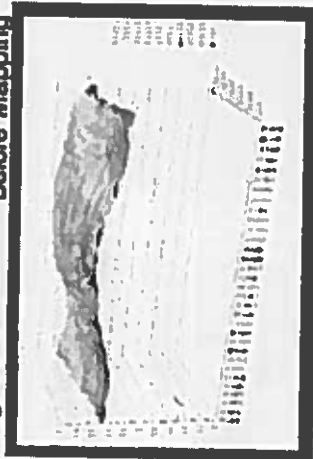


Figure 3 After Mapping

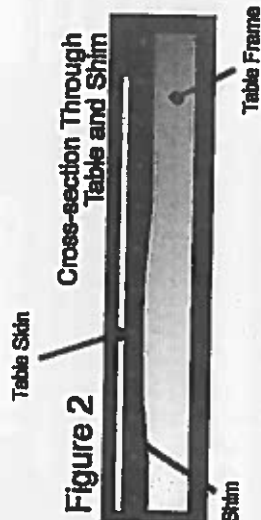
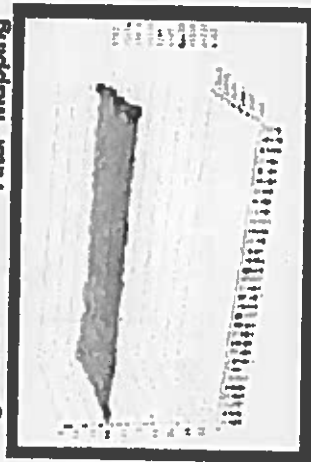


Figure 2 Cross-section Through Table and Shim

* Patent pending at time of publication. Not an option for machines using LM or OL Inks



Ordering Information

Machine Name	Serial Number	Description	Part No.
940L, Q40L, R40L, S50L, R50L	50000 - 50099**	Onset 50000 Productivity Pack	CONVERSION_KT379
940L, Q40L, R40L, R50L	54100 onwards	Onset X Productivity Pack**	CONVERSION_KT379 or CONVERSION_KT359**
X1, X2, X3			

** Machines with serial numbers between 50001 and 50019 are also valid 500 UV lamps may be compatible - please contact Inca for compatibility.

** The Productivity Pack is fitted as standard on Onset X machines that have 10 or more channels.

** The choice of kit is dependent on the machine serial number. Please contact Inca.

• Please contact financesales@incadigital.com for pricing information and for any other queries.

• Orders should be submitted to financesales@incadigital.com.

• Installation data will be confirmed at time of order.

Robot Substrate Handling System Corrugated Board (Full Auto) (Dual Robot)

Protective Hand Guarding

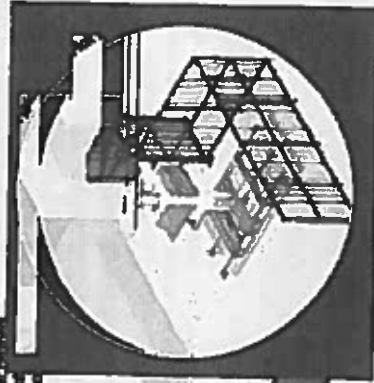
Protective hand guarding prevents intrusion into the unloading zone and is functionally specific. Invasive hand guarding system in this diagram assumes that the unloading zone is NOT adjacent to walls (hand guarding MAY NOT be required if walls are present).

Unloaded Robot

488 JIB end 4 in Place
printed substrate from the
printer on to the unloading
stack.

Consider Caliber
One or more sensitive printers
may be loaded (print
position dependent on
specification).

Unloading



Head Effectors

Each robot is fitted with an
appropriate specialized head
effector, permitting reliable and
effective handling of substrate
types conforming to specification.

Load & Unload Area

Light Curtains (optional)
When operating in Automatic Semi-
Automatic modes, entry into the load
and unloading zone is detected by Infrared
Infrared light curtains, breaking a curtain
will remove power from the drive and
stop printer and robot operation.

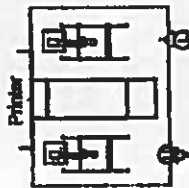
Load (A) and Unload (B) Areas
When required, printed substrate stacks are
moved in and out of the load/unload zone
using a pallet truck. The position of the load
and unload stacks are clearly marked. Stack
capacity (weight) is subject to limitations.

Typical Installation
Single Pick
Stack Edge Access

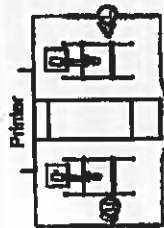
Load Robot
488 JIB end 6 Pick
Moves substrate to the printer
from the load stack. The load robot
will lift in addition two sets of
curtain for sheet dependent
during pickup.

Why choose a Robot Substrate Handling System?

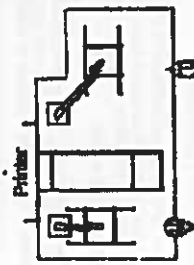
- ①② **Range of Load & Unload Options**
 - Load - From a single stack to 1, 2, or 3 up on the vacuum table using the load robot.
 - Unload - From the vacuum table to an uncollected stack using the unload robot.
- ①③ **Reduced Handling Time & Faster Changeover**
 - Robot Substrate Handling Systems reduce the overall cycle time of Onset X printers, offering increased productivity.
 - Load and unload paths can be changed quickly, with printed sheets released to pump-up finishing with minimal delay.
- ①④ **Supports a Range of Corrugated Board & Grades**
 - Head effectors designed and manufactured by Inca feature a number of custom options that can be arranged in a variety of configurations, ensuring to provide range of corrugated substrate sizes and face grades.
 - Distorted (bowled) substrate can be handled and comprehensive control of table vacuum level and zoning always ensures a fine surface for maximum print quality.
- ②③ **Range of Load & Unload Options**
 - Load - From a single stack to 1, 2, or 3 up on the vacuum table using the load robot.
 - Unload - From the vacuum table to an uncollected stack using the unload robot.
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 - Distorted (bowled) substrate can be handled and comprehensive control of table vacuum level and zoning always ensures a fine surface for maximum print quality.
- ③④ **Reliability & Accuracy of Substrate Placement**
 - All robots have outstanding position repeatability and excellent path accuracy, ensuring accurate and repeatable sheet loading on the vacuum table. This means images can be consistently printed in the same position on the substrate, making post-print finishing easier and more efficient.
- ③⑤ **Multiple Standard Layout Configurations with the Option to Customise**
 - Standard layout configurations offer a robust footprint over traditional automation systems. If required, robot positioning and safety systems can be customised (subject to cable run, delivery and installation time) to further maximise space utilisation.
- ③⑥ **Base of Use**
 - Robot Substrate Handling Systems are fully integrated within the Inca Q&A, making operation simple with minimal training requirements.
- ④⑤ **Supported by all Onset X Printers**
 - Robot Substrate Handling Systems are supplied from the entry level Onset XT through to the ultra-high productivity Onset X3.



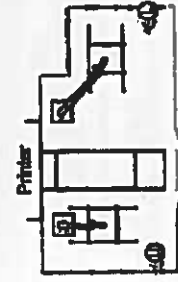
Single Pick - Long Edge Access



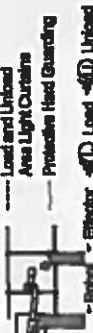
Multi-Pick - Short Edge Access



Multi-Pick - Long Edge Access



Key



Technical Specification

Robots	Load	Unload
ABB Arms Brown Boveri Ltd.		
Model / # Axis	IRB 6700 / 6 Axis	IRB 640 / 4 Axis
Max. Weight	2,902 kg (118.9 lb)	2,957 kg (118.4 lb)
Supply	400-480 V, 3-phase and Protective Earth/Ground, 25A per phase	
Energy Consumption	ISO-Cube: 2.05 kW ISO-Cube: 2.7 kW; Normal movement: 3.2 kW	

1. Refer to manufacturer's literature for full specification including but not limited to dimensions, weight, service requirements (electrical, compressed air, etc.), environmental effects and safety systems.
2. Maximum operational height when limited to recommended specifications using 300 mm pick or less.

Iron Digital Printers Ltd. Head Effectors	
Quantity	1 x Load; 1 x Unload
Stiction Cups	30 per effector (12 adjustable)
Vacuum Bars	3 per effector (2 adjustable)
Smart Camera System	Load effector only
Compressed Air (per effector)	Pressure 6 bar (88 psi) Volume 1.5 m ³ /minute Supply 20 mm diameter push fitting

Media & Handling - Full Automatic Operation	
Supported Media Types ¹	Corrugated Board PaperGrip [®] Micro, E, B, C, EB, BC
Number of Sheets ²	Single Pick Configuration Up to 3 sheets load & unload Multi-Pick Configuration Up to 3 sheets load & unload
Maximum Sheet Size	Length (X): 3,220mm (126.8 in); Width (Y): 1,800mm (83 in)
Minimum Sheet Size	Length (X): 806mm (31.7 in); Width (Y): 800mm (31.5 in)
Gauge (Thickness) ³	Minimum: 2mm (0.078 in); Maximum: 30 mm (2in)
Maximum Weight ⁴	10 kg (22lb) Disturb ⁵ 25 mm (1 in) Disturbance 125-300 gsm
Maximum Stack Capacity (Height) ⁶	Load 1,300 mm (51.2 in) Unload ⁷ 1,300 mm (51.2 in)
Table Loading Accuracy	Accurate to ± 1 mm (0.039 in)

1. Check media specifications and test performance before printing; adjustments limited to handling corrugated board.
2. All in and E grades should be tested to ensure repeatable sheet separation before printing.
3. Maximum number of sheets and columns ability dependent on limitation layout, head effectors fixed and range of robotic movement available.
4. Maximum thickness selected to 49 mm (1.93 in) with printed sides & table able fixed.
5. Maximum test of all items selected every one table; 20 kg (44 lb) maximum weight when operating in Manual mode at maximum pick speed; 80 kg (176 lb) maximum weight when operating in Manual mode at speed pick speed using maximum table vacuum (speed dependent on substrate).
6. Over maximum sheet size on table.
7. From Easy Pick - loading, height, head effectors and may vary to robot line height and effector depth.
8. Pick speed required to ensure accurate elements serving.

[09/02/20] - Robotic Substrate Handling System Datasheet (Corrugated) (Dual Robot) [Issue 4] [6 Mar 2018]

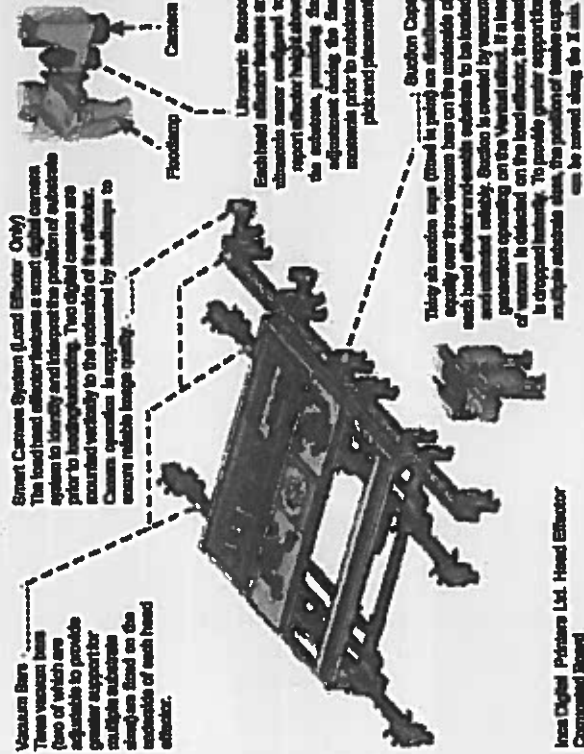
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Configurations	Short Edge Access	Long Edge Access
Single-Pick Footprint ¹	13.08 m x 8.12 m (514.8 in x 319.8 in)	13.08 m x 9.51 m (514.8 in x 365.6 in)
Multi-Pick Footprint ²	13.08 m x 11.20 m (514.8 in x 441.1 in)	13.08 m x 12.08 m (514.8 in x 475.6 in)
Min. Ceiling Height ³	3.2 m (128 in)	

1. Machine + Robots + Head Guarding; installation may affect footprint; access space required.
2. Provides necessary clearance for unattended robotic operation.

Safety System
Components and specifications are condition specific
Load & Unload Area Light Curtains
Entry into load and unload areas is detected by invisible infra-red light curtains breaking a curtain shape printer and robot operation
Programmable Laser Scanning System
Configured with multiple emitters (or safety) zones and controlled by multiple safety systems to monitor equipment for presence of (unprogrammed) obstacles and motion
Protective Head Guarding
Protective head guarding prevents insertion into the load/unload areas

1. Active In Automation and Head Automatic modes only.
2. Locations will stop faster when operating (robot non-operational in Manual mode).



Iron Digital Printers Ltd. Head Effector
[Iron Digital Printers Ltd] [616 Caddis Lane, Cambridge, CB3 3JG, UK] [T: +44 (0)1223 577600] [E: info@incadigital.com]

C Included free of charge



Bronze
Available for
all machines



Silver
Available for
all machines



Gold
Subject to
satisfactory
machine audit



Platinum
Subject to
satisfactory
machine audit

Features	
Time to Site	Within 72 hours
Call-out (£840/visit)	List price
**1 Parts	List price
**1 Consumables	10% discount
Service Kits	25% discount
Shipping	Not included
Labour (£230/hr)	List price
Preventive Maintenance (Labour Only)	Up to 3 visits
Print Quality Tune-up (Labour Only)	Not included
**3 Telephone Support/ Remote Connection	**4 8:30 am - 5:00 pm Mon-Fri C
Training (excluding expenses)	1 day on-site
**5 Printhead Assurance Contract	100% uptime
Online Applications Support (£360 per connection)	100% uptime
Access to Customer Portal	List price per connection

Within 72 hours	
Within 48 hours	Within 48 hours
20% discount	20% discount
40% discount	40% discount
40% discount	40% discount
75% discount	75% discount
Not included	Not included
50% discount	50% discount
Up to 3 visits	Up to 4 visits
Not included	One visit
**4 8:30 am - 5:00 pm Mon-Fri C	**7:00 am - 10:00 pm Mon-Fri Fri C 9:00 am - 5:00 pm Sat C 9:00 am - 5:00 pm Sun
1 day on-site	Up to 2 visits
100% uptime	100% uptime
List price per connection	50% discount per connection

Prices	
Annual	£19,800.00
Quarterly	£5,167.50
Monthly	£1,715.00

£39,800.00	£59,800.00
£10,385.00	£15,982.50
£3,650.00	£5,485.00

**1 Excluding printheads and UV lamps
**2 An additional charge will be made for the use of a same day courier
**3 An additional charge will be made for all outside the hours stated
**4 UK firm. Excluding Bank Holidays

**5 UK firm. Sunday hours on Bank Holidays
**6 Prices may vary depending on location
**7 Additional training may be purchased at a discount
**8 Discount applies if purchased with a contract

Pricing and labour rates are reviewed annually on April 1. All prices are subject to local Digital Ltd. terms and conditions as detailed in our document 850071 Terms and Conditions, available on request.



incadigital.com

A SCREEN GRAPHIC AND PRECISION
SOLUTIONS GROUP COMPANY

EU Service Contract Terms and Conditions

015 026016 Fax: 015 026016 Tel: 015 026016 Tel: 015 026016

Response Line #44 (0) 1223 577000

The following is an extract from document 87007 Terms and Conditions (Issue 2) with which it should be read.

24. Service Contracts

24.1. All Service Contracts offered by Inca for Equipment are valid for a period of 12 months from the Service Contract start date.

24.2. An initial payment is due at the time of signing, followed by additional payments in advance over the course of the Service Contract as defined in the payment terms. Failure to meet the payment terms will result in the loss of a service demanding payment following which if payment is not made within 30 days Inca may terminate the Service Contract with immediate effect. Contract renewal shall be at the prices and terms and conditions in effect at the time of renewal.

25. Customer's Responsibilities

25.1. The Customer's responsibilities in the Service Contract include, but are not limited to:

- 25.1.1. Operating the Equipment and performing all cleaning and preventive maintenance routines as defined in the Equipment User Manual and in any subsequent updates and service bulletins.
- 25.1.2. Making the Equipment immediately available when requested by Inca representatives for service visits and mandatory upgrades.
- 25.1.3. Providing Inca representatives with ink, substrates and other Consumables necessary for performing Equipment service.
- 25.1.4. Providing Inca representatives with full and safe access to the Equipment during service visits.
- 25.1.5. Implementing changes to operational processes or to the Equipment environment as suggested by Inca.
- 25.1.6. Assisting Inca representatives with remote diagnosis of Equipment problems.
- 25.1.7. Notifying Inca promptly of any faults with the Equipment and not operating the Equipment until such fault has been diagnosed by Inca or its authorised representative.
- 25.1.8. Allowing only Inca-trained individuals to operate the Equipment.
- 25.2. In order for Inca representatives to perform Inca obligations under the Service Contract, the Customer must inform Inca whether it uses Non-Approved Ink with the Equipment. In the event that the Customer uses Non-Approved Ink the terms of the Non-Approved Ink Policy shall apply.

26. Access to Equipment

26.1. Time spent by any Inca employee or representative at the Customer's premises where such representative is unable to access the Equipment or where the representative is unable to perform services due to any fault of the Customer will be charged at the Contract-specified rate for standard labour.

27. Customer use of Equipment

27.1. Equipment repairs required as a result of Customer error, negligence or Equipment misuse or solvent, or refusal to implement changes recommended by Inca - and unwarranted call-outs will be billed at non-contract labour and call-out charges. Required replacement parts will be invoiced at current list prices.

27.2. Equipment diagnosis and repairs required as a result of the use of Non-Approved Ink shall be charged in accordance with the Non-Approved Ink Policy.

27.3. Any service or repair (including any required replacement parts) requested by the Customer in relation to any Equipment that has been damaged directly or indirectly as a result of:

- 27.3.1. receiving modifications not recommended or performed by Inca;
- 27.3.2. being moved from the original location of installation without Inca involvement;
- 27.3.3. being fitted with replacement parts purchased from third parties other than Inca;
- 27.3.4. being serviced or repaired (other than day to day routine maintenance) by an individual who has not completed an approved Inca (engineer training scheme); or
- 27.3.5. a failure to provide or maintain appropriate input power, temperature, humidity, electrical grounding or other environmental requirement will be excluded from the Inca Parts Warranty (870028 Parts Warranty for New Filled Products) and any other applicable Inca servicing arrangements agreed to with the Customer and billed at non-contract labour and call-out charges and quoted as required per incident.



27.4. Inca is not responsible for Equipment movement, disconnection or reconnection under the standard terms of this Contract, but will quote for such activities.

27.5. Inca is not responsible for the generation, characterisation, management, treatment, storage, disposal or release of any chemicals or hazardous materials from or related to the Equipment resulting from Service Contract services by Inca.

28. Health and Safety

28.1. The Customer is responsible for Health and Safety assessments and practices regarding use and maintenance of the Equipment. It is the responsibility of the Customer to ensure that any service carried out under the Service Contract can be performed in a safe working environment, and existing Health and Safety practices remain valid at all times.

29. Customer Contact

29.1. The Customer must designate two individuals to serve as the primary and secondary contacts for Equipment support. These individuals must have sufficient authorisation to approve and accept the Services of the Equipment at completion of service.

30. Remote Access and Connections

30.1. The Customer must install and maintain a dedicated telephone line and Internet connection to assist with Equipment maintenance. These connections are mandatory under the standard Equipment purchase agreement, and the Customer is responsible for all installation costs.

30.2. Inca reserves the right to connect remotely to the Equipment via an Internet connection without prior notice for the purposes of analysis, data download and diagnostics. This anonymous data will be collected by Inca and stored with its approved Ink and service products, to assist with Equipment diagnosis, technical support, Equipment use and product development. Inca shall not be liable for any failure to notify any fault where such remote connection is not made available by the Customer.

31. Replacement Parts

31.1. Equipment components replaced by persons other than Inca representatives or Inca-trained Customer personnel and any faults directly resulting from such component replacement will not be covered by the Inca Parts Warranty (870028 Parts Warranty for New Filled Products).

31.2. Replacement parts supplied by Inca under the terms of this Service Contract can be new, previously repaired or rebuilt. Replacement parts are provided on an exchange basis, and the replaced part shall become the property of Inca. If such replacement parts are considered Consumable in nature or are provided under Service Contracts that are non-parts inclusive, they will be invoiced at current list prices.

31.3. Parts replaced under a non-parts inclusive Service Contract that fall within 30 days of the date of part installation due to a defect in manufacture will be replaced at no extra parts charge to the Customer. The Customer will be responsible for labour and call out charges associated with the parts replacement. If the newly replaced part malfunctions within a time failure within 10 days of the date of replacement, Inca will replace the part at no charge to the Customer.

31.4. Inca warrants that Printheads are free of manufacturing defects and provides a 12 month warranty for premature failure of seals and electronics (870028 Parts Warranty for New Filled Products). Nozzle failure due to clogging, contamination, blockage or use of Non-Approved Ink is not covered by warranty and the Customer should refer to the Non-Approved Ink Policy which sets out such obligations in the event that Non-Approved Ink has been used. It is the responsibility of the Customer to maintain Printheads and ink filters as defined in the Equipment User Manual and subsequent updates and service bulletins.

Confidential

8700284
Issue 2, June 2017



- Web Browser Interface - comprises two main areas of functionality
 - IncaAccess - a set of tools to enable job and print queue management to be completed offline (away from the printer's operating interface)
 - IncaViewer - visualise printer data to identify trends, improve costing and analyse efficiency

- IncaScript - gaps between Inca printers and customer MIS, workflow and RIP products are bridged by custom scripts that are deployed and supported by Inca

- IncaAPI - access IncaConnect functionality via Representational State Transfer (RESTful) web API
 - RESTful APIs provide interoperability between computer systems on the Internet

While every reasonable effort has been made to ensure the accuracy and appropriateness of the content of this document, Inca Digital Printers Limited can not be held responsible for any errors, omissions or consequential loss/damage howsoever caused. The information supplied is subject to change without notice due to on-going design improvement and a unit may differ in detail from that described.

IncaConnect

IncaConnect offers a suite of software tools that allow integration of Onset X and Spyder X printers into existing MIS (Management Information System) production software and workflow solutions, and aims to reduce costs and improve efficiency.

Web Browser Interface

IncaAccess (Remote Management & Scheduling)

IncaAccess enables machine status monitoring and job, substrate, finish and print queue management to be completed away from the printer's operating interface (Inca GUI). It can improve machine utilisation by not having to set up jobs or queues at the console, meaning the printer has greater up-time, improving income generation and ROI.

IncaAccess Features

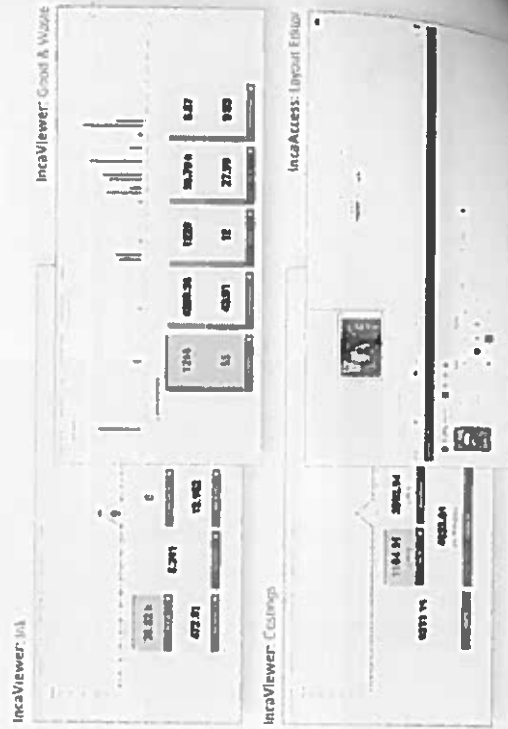
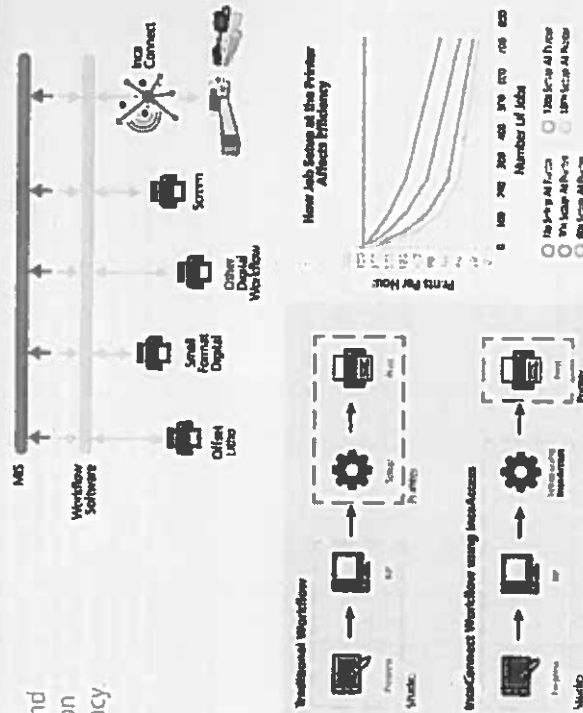
- Jobs** - Provides facilities for job management including identifying jobs in each queue, previewing images, editing the order in which jobs will print and adding queues
- Queue Builder** - Enables jobs to be moved/copied between print queues using drag and drop
- Print History** - Displays print job history statistics
- Settings** - Provides facilities for viewing user accounts, viewing and editing substrate types and sizes and viewing available finish definitions
- Utilities** - Layout Editor - fully featured layout editing with layering functionality, configure jobs from the web interface, including complex multi-bed substrate, layer and image jobs, without use of printer console

IncaViewer (Reporting Tool)

IncaViewer enables printer KPIs (Key Performance Indicators) viewed, organised and printed. Detailed statistics on print productivity and consumable usage can be filtered over user-defined time periods, providing greater visibility on printer performance. This data can also be fed back into MIS and workflow system(s), enabling more accurate job quotations/estimates to be generated.

IncaViewer Features

- Productivity** - Includes productive time, number of jobs, beds printed, average beds and printed area, ink consumption and cost (supporting different per-colour ink costs), ink and substrate wastage, substrate use and cost (supporting multi-up substrates)
- Filters** - Filter by parameter, including job name, finish, substrate type and size
- Range** - Select date and time periods, excluding hours and/or days when there was no activity, e.g. when the factory was closed
- View** - Represent data as totals or per-job averages
- Data Comparison** - View two data sets concurrently, e.g. this month versus last month, days versus nights, one substrate type versus another, etc.

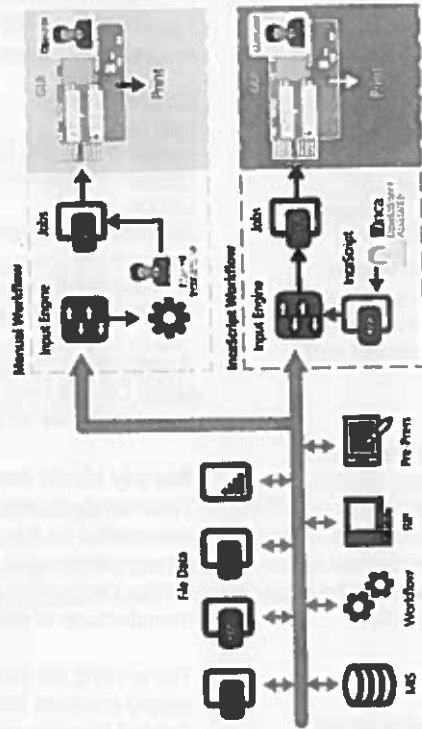


Benefits

- Reduced Data Re-Entry, Fewer Errors and Better Print Quality - customised scripts created using IncaScript can reduce interaction points where users can make mistakes entering data or selecting incorrect substrate types and/or finishes. Job data (e.g. copy count, substrate type/size etc.) is specified upstream and passed to the printer, meaning data entry is not required throughout the flow of the job to the printer.
- Offline Job Set-up and Queue Management - IncaAccess enables the removal/reduction of setup time from the responsibility of the press operator, providing an opportunity to improve scheduling and increase productivity. By not having to setup up jobs/queues at the console, the printer has greater up-time and can be used to print more, generating more income and greater ROI.
- Greater Schedule Understanding and Efficiency - development and integration of custom scripts using IncaScript can allow premium jobs to be scheduled for print efficiency (by substrate, type or store order), improving profit margins.
- Improves Quotation/Estimate Accuracy - to reduce potential loss of income due to poor estimation of substrate and/or ink usage, consumables costing data can be fed back into MIS and workflow system(s) (either manually using data from IncaViewer or automatically by custom scripts using IncaAPI), enabling accurate job quotations/estimates to be generated.

IncaScript (Custom Workflow Integration)

There are many varieties of RIP, MIS and workflow software all with different methods of communicating with the outside world and other software. Using IncaScript, gaps between Inca printers and customer MIS, workflow and RIP products are bridged by custom scripts that are deployed and supported by Inca.



Input Engine can be configured to run external applications or custom scripts and XML transforms on incoming files, based on job folder configuration. This feature targets advanced workflows and third party integrations that require configuration in the field, and allows Input Engine to import file formats and perform operations that are unavailable as standard. Examples of automated actions that can be performed range from the very simple to more sophisticated:

- File Renaming - jobs are automatically renamed, making identification clearer for the operator when using the printer GUI.
- Queries - on receipt of a ripped file, Input Engine uses a script to query the substrate type and size automatically from the MIS database, removing the requirement for the operator to transcribe this from the paper job ticket.

IncaAPI (3rd Party Software Integration)

Functionality exposed via the Web Browser Interface including queue and job management and machine setting/print history visibility is also made available to third parties via a straightforward Representational State Transfer (RESTful) web API. Data can be fed back into MIS and workflow system(s), enabling more accurate job quotations/estimates to be generated. Other software systems can use the API to integrate between themselves and Inca Onset X and Spyder X printers. Documented in R4005-TM-302 IncaConnect API Guide - contact your support agent for integration specification documentation.

Ordering Details

IncaConnect is supplied as a "Black Box" solution directly from Inca Digital Printers Ltd., simplifying installation and deployment. It also enables the ability for greater compliance with customer IT policies.



The IncaConnect PC can be installed as a proxy to a customer's network, Print PC and outside world (if sanctioned), meaning the Print PC can be removed from the network. This removes the requirement for anti-virus software having to be installed on the Print PC which can impact on performance.

Basic installation and training can be provided¹ directly by Inca Technical Support or by local support agents. Custom IncaScript/IncaAPI development assistance² can also be provided by Inca Technical Support (please contact Inca for more details).

Description	Part No
IncaConnect (including installation & training)	Conversion: KIT423
IncaConnect (parts only)	Conversion: KIT424

1. Charges may be incurred.
2. Development assistance subject to additional cost.

Uvijet LM

Low Migration UV Curing Ink System for Inca Onset Series Printers

Uvijet

PRODUCT INFORMATION

Uvijet LM has been developed to decorate sheet-fed corrugated and display boards for applications where the printed item is intended to be used for indirect food contact for secondary packaging. A suitable functional barrier must still be present as part of the primary packaging layer.

Uvijet LM must not be used for primary packaging applications eg. fruit boxes.

Uvijet LM can also be used effectively on paper and display boards.

Features

- Excellent flexibility on display and corrugated board
- Fast cure for high production output
- Low print odour
- Adjustable print finish (satin - high gloss)
- 5 kg open top containers for ease of use

Ink Properties

The Uvijet LM Ink range is a high quality UV curable inkjet system designed for piezo drop-on-demand printheads. Using Fujifilm's unique Micro-V dispersion technology to maximise pigment loading, the Uvijet range of UV curing inks deliver vibrant, solid colours demanded by the major brands. Uvijet LM has been specially developed for the Inca Onset flatbed printers and offers superb dot reproduction, bright colours and gloss functionality.

Printing Material

Within the corrugated segment there are a wide variety of top coat liner grades available. It has been proven that the quality and grade (gsm) of these can have a significant impact on the overall performance of the printed item i.e. quality, odour, finishing results and overall print appearance. It is recommended that the most suitable material is determined during the demonstration process.

Post Print Finishing

Automated die cutting can be very aggressive on the ink surface, especially when sheets are being bottom fed (often inverted) from a printed stack, this can cause physical abrasion/rub to the ink surface.

Care should be taken to understand the end-to-end production requirements during the demonstration phase prior to purchase.

Ink will require 24 - 48 hours to fully post cure.

Development of Uvijet LM

Uvijet LM has been formulated to:

- DIN 1230-1:10-02 which is the sensory analysis of paper and board intended to come into contact with food stuffs.
- Article 3 of EC Regulation 1935/2004 - Legislation applicable to printing inks for paper & board. Must not prevent the final package from meeting the requirements of the Regulation - safety, taste, odour.
- EC Regulation on GMP 2003/2008 - Good manufacturing practice for materials & articles intended to come into contact with food (specifically references printing inks)
- EuPIA Guidelines - comprehensive guidance on Good Manufacturing Practice, use of low migration materials and prevention of migration
- Swiss Ordinance SR 817.023.21
- Nestle Guidance Note on packaging inks 08-2016

Colour Range

LM216 Cyan
LM867 Magenta (Blue Shade)
LM052 Yellow
LM004 Black
Available in 5 kg containers

QV017 UV Flush

Available in 5 litre containers

Application Range

Uvijet LM has been designed to decorate paper and board materials only.

Supply chain responsibility

The manufacturer of the packaging and the filler are responsible for the properties of the food packaging and its compliance with legal requirements. This involves a written Declaration of Compliance issued by the manufacturer of the packaging and/or the filler.

The printing ink manufacturer's responsibility is to supply products that are fit for the intended purpose as defined between members of the packaging chain.

Fujifilm are not liable for any aspects of the production of food packaging once the inks have left the manufacturing site.

THE END USER MUST DETERMINE THE SUITABILITY OF THIS PRODUCT FOR THE INTENDED USE PRIOR TO PRODUCTION AND SUPPLY.

Co-use with Other Inks

For information regarding Uvijet LM and its co-use with other ink ranges, please contact your local Fujifilm technical support.

Curing

Excellent cure and adhesion are achieved immediately on curing. However, maximum adhesion, chemical, scuff and scratch resistance may not be obtained until 24 hours after initial curing. The actual level of cure will depend upon ink thickness, substrate and the UV curing lamps being used. Superior through cure may be obtained by reducing the print speed to increase the overall UV dose.

Outdoor Use

Uvijet LM is not recommended for outdoor use.

Storage

Uvijet LM ink should not be stored in direct sunlight or near heat sources and should be kept away from peroxides. For optimum shelf-life, products should be stored at moderate temperatures between 5°C and 30°C.

When stored in a cool environment Uvijet LM inks are expected to have a shelf-life of 12 months from date of manufacture.

Fujifilm Speciality Ink Systems Limited:

- Has certification to the International Environmental Standard ISO 14001.
- Is committed to minimising the risk to users of our products, and also to minimising the impact of our activities on the environment, from formulation through to production and supply.
- The Research and Development team work to an in-house Health Safety and Environmental policy, termed 'Design for Health, Safety and Environment'.



Uvijet LM has gained UL GREENGUARD Gold Certification.

This helps manufacturers create - and helps buyers identify - interior products and materials that have low chemical emissions. GREENGUARD Certification is part of UL Environment, a business unit of UL (Underwriters Laboratories). GREENGUARD Certification. More detail here: ul.com/gg.

The information and recommendations contained in this Product Information sheet, as well as technical advice otherwise given by representatives of Fujifilm Speciality Ink Systems Limited and its associated companies, whether verbally or in writing, are based on our present knowledge and believed to be accurate. However, no guarantee regarding their accuracy is given as we cannot cover or anticipate every possible application of our products and because manufacturing methods, printing stocks and other materials vary. For the same reason our products are sold without warranty and on condition that users shall make their own tests to satisfy themselves that they will meet fully their particular requirements. Our policy of continuous product improvement might make some of the information contained in this Product Information sheet out of date and users are requested to ensure that they follow current recommendations.

with the aim of proactively developing products with the least impact on health, safety and the environment.

- Regularly review and monitor our impacts and activities, setting objectives and targets as part of a continual improvement process.
- Is committed to reducing waste through better use of raw materials, energy, water, re-use and recycling.

Safety and Handling

Uvijet LM Inks:

- Have a flash point greater than 55°C and are therefore not classified as 'dangerous substance' under the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR).
- For optimum shelf life, all products should be stored at moderate temperatures, between 5°C and 30°C. Storage outside of these temperatures may lead to deterioration in the performance of the product.

Comprehensive information on the safety and handling of Uvijet inks is given in the appropriate Safety Data Sheets.

Environmental Information

Uvijet LM Inks:

- Do not contain ozone-depleting chemicals as described in the Montreal Convention.
- Are formulated free from aromatic hydrocarbons.
- Are free from any volatile solvent and can therefore be considered to have less impact on the environment when compared to solvent-based products.

CERTIFICATE OF COMPLIANCE



FUJIFILM

Uvijet LM

Restrictions: Certified for Signage Applications

99207-420

Certificate Number

08/22/2017 - 08/22/2019

Certificate Period

Certified

Status

UL 2818 - 2013 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings

Decorative Display determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using a Classroom Environment with an air change of 0.82 hr^{-1} and a loading of 22.90 m^2 ; and Decorative Display determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using an Office Environment with an air change of 0.68 hr^{-1} and a loading of 3.00 m^2 .

Product tested in accordance with UL 2818 test method to show compliance to emission limits on UL 2818, Section 7.1 and 7.2.



Environment

UL Environment investigated representative samples of the Identified Products to the Identified Standard(s) or other requirements in accordance with the agreements and any applicable program service terms in place between UL Environment and the Certificate Holder. UL Environment and the Certificate Holder hereby acknowledge that the Certificate Holder is authorized to use the UL Environment Mark for the Identified Products manufactured at the production site(s) covered by the UL Test Report, in accordance with the terms of the Agreement. The Certificate is valid for the identified dates unless there is non-compliance.

GREENGUARD Gold Certification Criteria for Building Products and Interior Finishes

Criteria	CAS Number	Maximum Allowable Predicted Concentration	Units
TVOC ^(a)	-	0.22	mg/m ³
Formaldehyde	50-00-0	9 (7.3 ppb)	µg/m ³
Total Aldehydes ^(a)	-	0.043	ppm
4-Phenylcyclohexene	4994-16-5	6.5	µg/m ³
Particle Matter less than 10 µm ^(a)	-	20	µg/m ³
1-Methyl-2-pyrrolidinone ^(a)	872-50-4	160	µg/m ³
Individual VOCs ^(a)	-	1/2 CREL or 1/500th TLV	-

^(a) Defined to be the total response of measured VOCs falling within the C₆-C₈ range, with responses calibrated to a toluene surrogate. Maximum allowable predicted TVOC concentrations for GREENGUARD Gold (0.22 mg/m³) fall in the range of 0.5 mg/m³ or less, as specified in CDPH Standard Method v1.2.

^(b) The sum of all measured normal aldehydes from formaldehyde through nonanal, plus benzaldehyde, individually calibrated to a compound specific standard. Heptanal through nonanal are measured via TD/GC/MS analysis and the remaining aldehydes are measured using HPLC/UV analysis.

^(c) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.

^(d) Based on the CA Prop 65 Maximum Allowable Dose Level for Inhalation of 3,200 µg/day and an inhalation rate of 20 m³/day

^(e) Allowable levels for chemicals not listed are derived from the lower of 1/2 the California Office of Environmental Health Hazard Assessment (OEHHA) Chronic Reference Exposure Level (CREL) as required per the CDPH/EHLB/Standard Method v1.2 and BIFMA level credit 7.6.2 and 1/100th of the Threshold Limit Value (TLV) Industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, and Cincinnati, OH 45211-4438).



Environment

UL Environment has inspected representative samples of the identified product(s) to the identified standard(s) or other requirements in accordance with the agreements and any applicable program services terms in place between UL Environment and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Environment Mark for the identified product(s) manufactured at the production facility covered by the ULF Test Report, in accordance with the terms of the Agreement. The Certificate is valid for the identified dates unless there is non-compliance with the Agreement.