

인체공학적 진공리프팅 솔루션

베큐렉스(Vaculex®) 진공리프팅 시스템



강력한 그립력 다양한 응용분야





그림 및 이송솔루션은 전 세계 다양한 산업분야에서 수 천 명의 고객을 지원하여 에너지 효율성, 생산성 및 작업환경을 개선합니다. 인체공학적이고 안전하며, 사용자가 쉽게 적응할 수 있는 친화적인 솔루션은 직원들의 부상위험을 줄이면서 생산성을 높일 것입니다.

다양한 고객 요구사항 및 환경에 맞게 최적화 될 수 있습니다. 다양한 범위의 흡착용 패드와 기구를 사용하는 베큐렉스(Vaculex®)는 소화물, 수하물, 포대/자루, 판, 유리, 통/배럴, 병, 식품, 석재, 창문 등을 포함한 거의 모든 것을 흡착이송할 수 있습니다.

최종사용자의 행복

어떠한 베큐렉스(Vaculex®) 솔루션을 구매하시더라도 탁월한 애프터케어 혜택을 누릴 수 있습니다. 다양한 솔루션을 최대한 활용할 수 있도록 협력할 것을 약속드립니다.

유연한 솔루션 거의 모든 응용분야에서...

최근 몇 년 동안, 베큐렉스(Vaculex®)의 인체공학적 시스템은 여러 산업 분야의 고객들이 활용해 왔습니다. 이 기간 동안 대부분의 산업들이 직원의 건강과 안전에 더 많은 관심을 기울이고 있다는 사실을 알았습니다. 베큐렉스 솔루션은 많은 작업환경을 변화시키는 데 도움이 되었습니다. 결과적으로 수동리프팅이 이루어지는 거의 모든 곳에서 찾을 수 있습니다. 예를 들어 베큐렉스(Vaculex®)는 세계에서 가장 분주한 공항과 항구에서 짐과 화물을 들어 올리고 있습니다.

최근 사람들은 점점 더 많이 온라인 쇼핑을 하고 있습니다. 이러한 구매들은 약속된 시간에 포장되고 배달되어야 합니다. 그 결과로, 물류센터, 유통, 및 주문이행 센터들은 베큐렉스(Vaculex®) 리프터가 필요한 시장입니다.

제조 및 식품산업에서 인체공학적 솔루션에 대한 분명한 요구가 있습니다. 문, 창문, 자루, 가구, 가전, 무거운 치즈, 통, 배럴 등에 대한 리프트 및 이송에 대한 요구가 늘어나고 있습니다.

고용주 및 직원들에게 돌아오는 이익도 결코 작지 않습니다. 독립적 연구통계*에 따르면 수동리프팅으로 인해 반복적인 근골격계 상해와 척추 손상이 발생할 수 있습니다. 이로 인해 병가 또는 심각한 경우에는 추가 장애연금을 내야 할 상황도 초래합니다.

베큐렉스(Vaculex®)는 이러한 업무 관련 부상의 위험을 최소화합니다. 생산성은 유지되거나 증가하지만 신체에 대한 부하는 80 퍼센트 이상 감소할 수 있습니다.



신축다단식 컨베이어와 결합된 베큐렉스 시스템

*Visafe 최종보고서: 비교 연구. 베큐렉스(Vaculex®) vs 100% 수동 핸들링, 수하물 작업자 T2, March 2016.



베큐렉스(Vaculex®)의 인체공학적 리프팅 시스템은 거의 모든 산업에 잘 사용되고 적합한 아주 고마운 다용도 시스템입니다.



수하물 캐리어 터미널



라벨롤



창문



수하물



... 또는 어떠한 재질



포대/자루



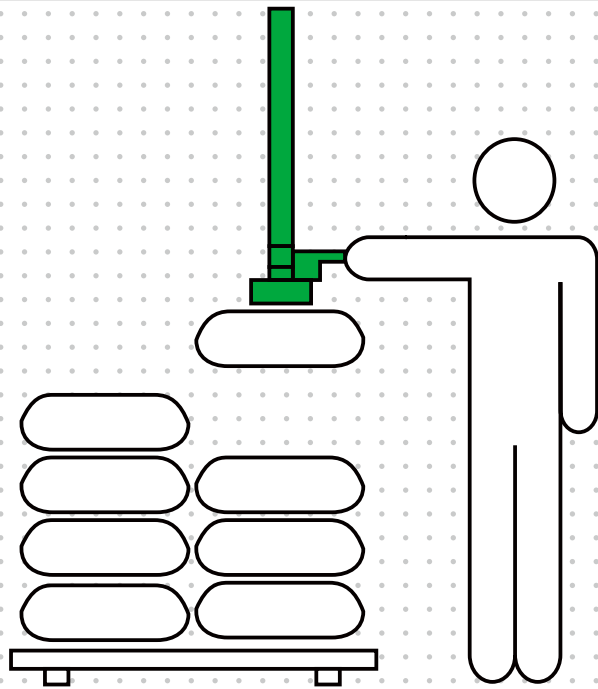
배럴

석재 및 벽돌

거의 모든 것을 흡착이송할 수 있습니다

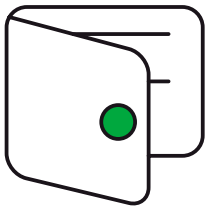
주문자 맞춤 기구를 사용하여 각각의 요구사항에 맞는 솔루션을 제공할 수 있습니다. 더 많은 정보를 원하시면 연락주십시오.

비즈니스에 도움이 되고 사람들에게 좋은 인체공 학적 솔루션



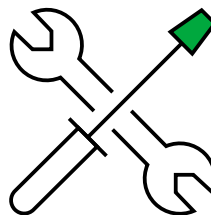
사용자 친화적

진공튜브시스템은 한 번의 동작만으로 흡착력을 이용하여 부하(물체)를 잡고 들어올립니다. 제어핸들은 조작자가 사용하기 쉽고 거의 무중력 상태를 느끼게 됩니다. 하부 회전작용체, 또는 각도어댑터를 사용하면 사용자가 필요에 따라 들어 올린 물건을 회전시키거나 방향을 돌릴 수 있습니다.



좋은 인체공학이란 좋은 경제를 의미합니다.

오랜 제품수명 및 안전성으로 인하여, 베큐렉스 솔루션은 병가의 감소, 직원 교체 및 직원 활용 향상과 같은 많은 이점을 제공하며 대개 생산성 향상 또한 제공합니다.



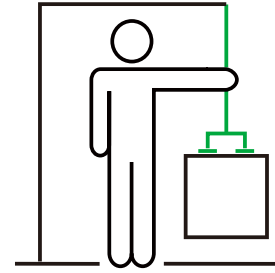
간편한 설치 및 유지 보수

힘의 원천이 되는 진공펌프는 전기식 펌프 또는 공압식 진공펌프를 사용할 수 있습니다. 이 시스템은 일반적으로 지브 또는 경량 브릿지크레인에 설치됩니다. 설치가 간단하며 특정 리프팅 요구 사항에 맞게 조절 가능합니다. 리프터는 서비스 및 수리가 거의 필요없는 아주 단단한 부품으로 만들어졌습니다.



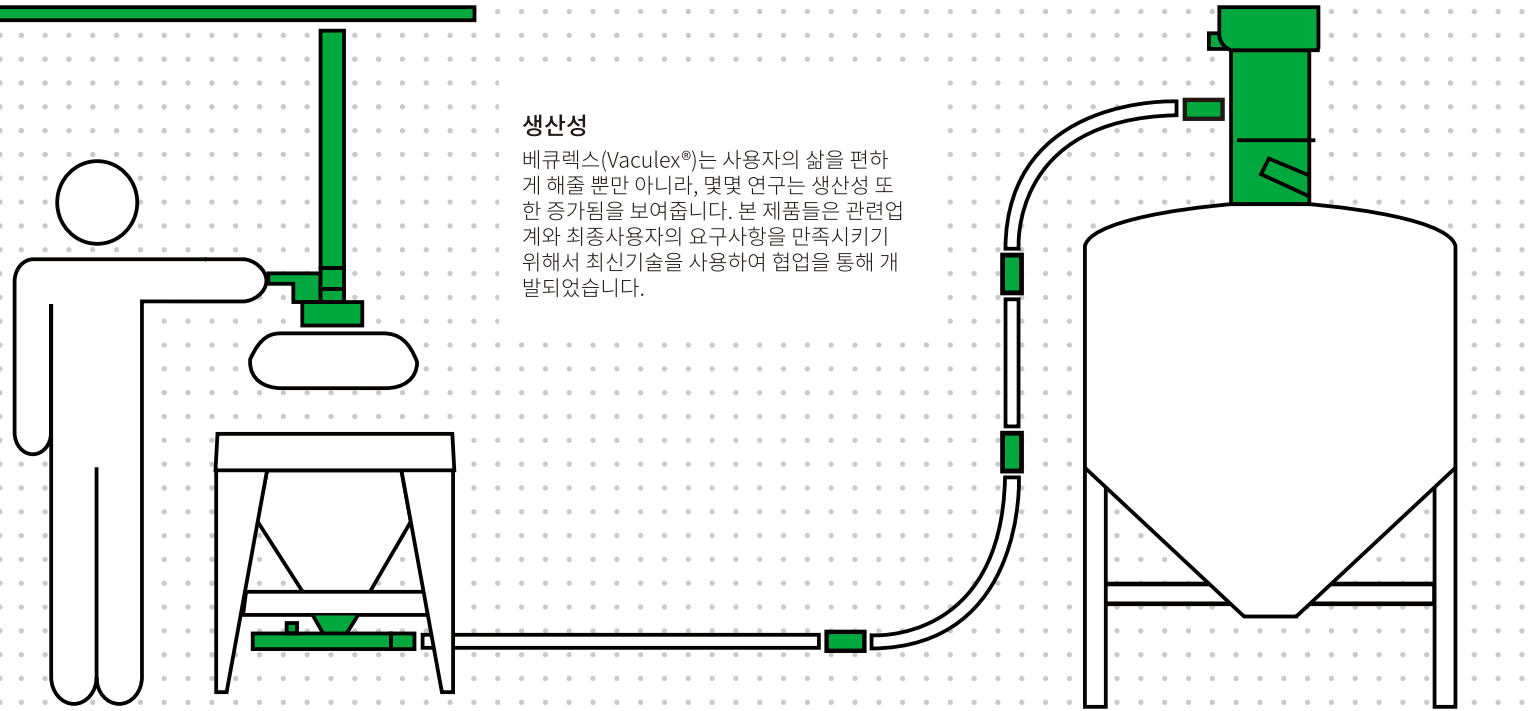
독특한 개인의 안전

베큐렉스(Vaculex®)는 여러 가지 안전 기능이 내장되어 있습니다. 예를 들어, 모든 장치의 표준인 역류방지 체크밸브는 진공이 갑자기 멈추면 부하가 떨어지지 않도록 합니다. 대신에, 부하는 제어된 상태로 서서히 밑으로 내려오게 됩니다. 베큐렉스(Vaculex®)는 아주 무거운 물건을 떨어 뜨리는 위험을 피하도록 설계되었습니다. 중량이 너무 크면 진공 튜브는 들어 올리지 않습니다. 이로 인해 신체 상해 및 제품 손상의 위험이 줄어 듭니다. 후크로 들어 올릴 경우, 베큐렉스(Vaculex®)는 특허받은 보호밸브가 별도로 장착되어 리프팅 스트랩이나 핸들이 실패할 경우 최고의 안전을 보장합니다.



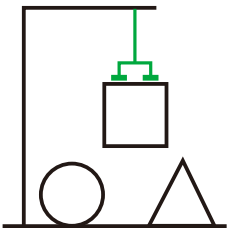
인체공학

베큐렉스(Vaculex®)는 수동핸들링과 관련된 부상의 위험을 크게 줄입니다. 베큐렉스(Vaculex®)를 사용하면 작업자의 신체 부하를 80 퍼센트 이상 줄일 수 있습니다.



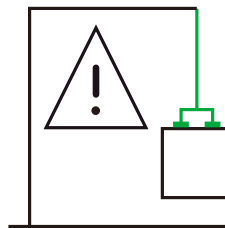
생산성

베큐렉스(Vaculex®)는 사용자의 삶을 편하게 해줄 뿐만 아니라, 몇몇 연구는 생산성 또한 증가됨을 보여줍니다. 본 제품들은 관련 업계와 최종사용자의 요구사항을 만족시키기 위해서 최신기술을 사용하여 협업을 통해 개발되었습니다.



응용분야에 적합한 솔루션

유연성을 극대화하기 위해 튜브리프터는 모듈식 시스템을 기반으로 합니다. 예를 들어, 리프트튜브는 필요한 리프팅 용량에 따라 변경 될 수 있습니다. 또한 핸들의 확장이 필요한 곳에 적용 할 수 있도록 확장핸들을 베큐렉스(Vaculex®)에 장착 할 수도 있습니다.



거친 환경을 극복

당사의 솔루션은 극도로 까다로운 다양한 환경에서 작동하도록 최적화되어 있습니다. 이 제품은 화학, 식품 또는 제약산업을 위한 클래스 A4의 내산용 버전을 제공합니다. 폭발 가능성이 있는 환경에서의 작업을 위해 특수 적용된 ATEX 진공펌프 또는 대안으로, 공압식 진공펌프를 또한 제공합니다.

물류 및 주문이행센터: 성공사례 TNT

물류회사 TNT는 병가비용을 최소화하였고, 현장에 적합한 직원을 고용, 유지하기가 쉬워졌습니다.

글로벌 전자상거래의 급속한 증가는 주문이행 공정을 어렵게 하고 있습니다. 생산성 증가와 작업환경 개선은 이 산업이 당면한 또 다른 어려움입니다. 리프팅 보조 장치가 없는 수동핸들링은 종종 자세가 나쁘고 반복적인 수동리프팅으로 인해 작업 관련 근골격계 상해를 유발합니다.

물류 및 유통센터에는 일반적으로 인바운드 및 아웃 바운드 부두 뿐만 아니라 창고 및 피킹 지역과 같이 엄격한 요구 수준의 수동핸들링이 발생하는 곳이 많이 있습니다.

반입하는 도킹 스테이션에서 일반적인 문제는 적재 컨테이너 및 트레일러를 하역하는 것입니다. 이것은 무거운 짐과

나쁜 리프팅 자세로 인해 인해 가장 육체적으로 까다로운 작업 중 하나입니다

베큐렉스(Vaculex®) 제품은 기존 솔루션을 개조하는 것에서부터 새로운 시설 설치 등 다양한 환경에 적용될 수 있습니다. 목표는 항상 신체의 부하를 최소화하고 생산성을 높이며 사용자의 행복을 향상시키는 것입니다.





배경:

TNT는 수동리프팅으로 인한 부상으로 병가 및 재활 비용 등의 문제점을 가지고 있었습니다. 전 세계 보건 안전 프로그램의 일환으로, 리프트 중에 속도와 생산성을 유지하거나 높이는 리프팅 보조장치를 찾는 것은 꽤 어려운 일이었습니다.

솔루션

베큐렉스(Vaculex®) TP 리프터는 TNT에 설치되었습니다. 직원들은 일상 업무를 수행하는 동안 리프터를 사용하였습니다.

결과

상해 발생이 최소화되었습니다. 베큐렉스(Vaculex®) TP는 크기나 모양에 관계없이 소화물 등을 가볍고 편리한 핸들링 함으로써 생산성을 유지하거나 증가시켰습니다. 베큐렉스(Vaculex®) TP는 99 퍼센트의 소화물을 쉽게 핸들링할 수 있음이 입증되었습니다. 베큐렉스(Vaculex®) TP 인체공학 적 핸들링 솔루션을 사용하여 TNT는 직원 건강문제를 41% 줄이면서 생산성을 16% 높일 수 있었습니다.



TNT는 국제 특송 및 물류 서비스 분야의 세계적인 선두 업체입니다. 200여 개국에 진출한 TNT는 뉴욕, 런던, 암스테르담 및 프랑크푸르트 증권거래소에 등록된 네덜란드 TNT 포스트 그룹 (TPG)의 한 사업부입니다.

"베큐렉스(Vaculex®)의 경제적 이점에는 병가와 재활 비용의 감소로 인한 경제적 혜택이 포함되어 있으며 자격을 갖춘 직원을 유지하고 유지하기가 더 쉬워졌습니다."

- Thomas Engman, 작업관리자, TNT 스웨덴



성공사례: 히드로 공항 수하물 핸들링

히드로 공항

생산성 최대 강화 승객의 만족을 극대화

공항과 항구의 수하물은 일반적으로 자동핸들링과 수동핸들링을 조합하여 핸들링합니다. 수동핸들링은 반복적인 근골격계 상해가 발생하여 작업 시간이 단축되고 결근이 심화될 수 있습니다. 수하물을 핸들링하는 작업장에서 공간은 종종 하나의 중요한 요소이며, 특히 천장높이가 중요합니다.

베큐렉스(Vaculex®)는 다양한 시스템 구성을 가지고 있습니다. 많은 솔루션은 공항과 항구에서 사용하도록 특별히 설계되었습니다. 실제로 우리는 이미 전세계 60 개 이상의 공항과 항구에 솔루션을 설치하였습니다.

베큐렉스(Vaculex®)는 모든 터미널에 설치될 수 있으며 시스템의 기능에 전혀 제약없이 낮은 천장 높이를 가진 좁은 공간에서도 사용될 수 있습니다.





배경:

정상적인 하루 동안 히드로 공항의 수하물 처리기는 평균 6톤의 수하물을 들어 올립니다. 열악한 리프팅 기술과 리프팅 보조장치의 부족은 결국 피로 누적된 등, 어깨 및 목으로 이어질 것입니다.

솔루션

베큐렉스(Vaculex®) BaggageLift가 히드로 공항에 설치되었고 정상 근무일 동안 작업자 신체에 부과되는 압력과 피로도를 측정하였습니다. 독립적인 연구*는 히드로가 의뢰하여 베큐렉스(Vaculex®) TP BaggageLift를 사용한 수동 핸들링과 100% 수동 핸들링을 비교한 비디오 영상과 동기화된 센서 판독값을 사용하였습니다.

결과

히드로 공항에서 실시한 독립적인 연구에 따르면 베큐렉스(Vaculex®) 시스템은 수동 핸들링 방식과 비교할 때 어깨 및 등 근육에 대한 부하를 각각 67% 및 88% 감소시켰습니다.

히드로 공항에 관하여

히드로 공항은 영국 런던 서부의 주요 국제 공항입니다. 히드로는 영국에서 가장 분주한 공항으로, 여객 교통량이 유럽에서 가장 분주한 공항이며, 총 여객 교통량으로 세계에서 6 번째로 분주한 공항입니다. 2017년 7천 5백만명의 승객 기록을 가지고 있습니다.

"베큐렉스(Vaculex®) 리프팅 솔루션을 사용하기 전에 히드로는 무거운 리프트에 많은 문제가 있었습니다. 베큐렉스(Vaculex®) 솔루션 덕분에 작업이 훨씬 효율적으로 되고 직원들이 허리의 문제로 더 이상 고통받지 않습니다. 베큐렉스(Vaculex®)는 환상적인 장비입니다."

— Martin Bell, 훈련교관, Menzies.



*Visafe 최종보고서: 비교 연구. 베큐렉스(Vaculex®) vs 100% 수동 핸들링, 수하물 작업자 T2, March 2016.

제품정보

다양한 부속품과 결합된 베큐렉스(Vaculex®)는 인체공학적 리프터로 무게가 5 - 250kg인 거의 모든 것을 들어 올릴 수 있습니다. 베큐렉스(Vaculex®)는 사용하기 쉽고 작동에 필요한 최소한의 교육만 필요합니다. 대부분의 경우, 작업속도 및 생산성이 증가합니다.

베큐렉스(Vaculex®) TP 시리즈 5 - 65 kg

빠른
핸들링



Vaculex® TP

다용도의 베큐렉스(Vaculex®) TP는 다양한 크기, 모양 및 중량 등의 다양한 제품을 핸들링할 수 있습니다. 본 시스템은 어떤 방향에서도 물건을 잡고, 쉽게 회전하고 각도를 조절할 수 있습니다. 표준 허용중량은 40 kg 이며 65 kg까지 증가 할 수 있습니다.

베큐렉스(Vaculex®) TPZ

TPZ는 표준 TP와 동일한 기능을 제공하지만, 흡착용 기구를 교체할 수 있는 기능을 추가함으로써 최적의 유연성을 제공할 수 있습니다.

낮은
천장룸
버전



베큐렉스(Vaculex®) TPH

베큐렉스(Vaculex®) TPH는 천장 높이가 제한되어있을 때 솔루션으로, 일반적으로 경량 알루미늄 오버헤드시스템에 설치됩니다. 이 특허받은 수평 리프트튜브 기술은 2,5m 천장 높이 (때로는 2m에서도 가능)에 설치할 수 있으므로 최대 리프트 높이를 얻을 수 있습니다.



강력함
유연성



리프트 및
무게 측량
한 동작



인체공학적
수하물
핸들링

베큐렉스(Vaculex®) TP Combi

TP Combi에는 두 개의 들어 올림 모드, 흡착용 기구 및 후크 모드가 장착되어 있습니다. 베큐렉스(Vaculex®) TP Combi는 한 번의 동작으로 후크를 통합한 흡착용 기구를 사용하여 손잡이 등을 가지고 있는 흔하지 않은 물품 등도 안전하게 리프팅할 수 있습니다. 손잡이가 달린 배낭 또는 양동이와 같은 물품을 리프팅하는 데 적합 - 두 가지 모드의 유연성이 필요한 경우.

베큐렉스(Vaculex®) TP Scale

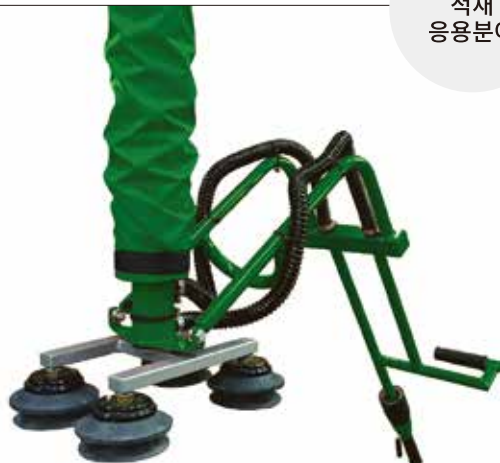
베큐렉스(Vaculex®) TP Scale은 한 동작으로 무게 측량 및 들어 올리기를 같이 할 수 있는 독특한 진공리프트입니다. 내장통합된 저울은 각 소화물/제품이 들어 올려지는 동안 무게를 측정할 수 있습니다. 필요한 경우, 운영자는 무게 제한을 설정할 수 있습니다. 물체가 특정 무게를 초과하면 신호가 표시됩니다.

베큐렉스(Vaculex®) TP BaggageLift

베큐렉스(Vaculex®) BaggageLift를 사용하면 육체적인 피로도 없이 항구와 공항 등에서 화물 등을 들고 옮길 수 있습니다. 제어 핸들은 한 방향의 트리거 제어로 한 손가락으로 쉽게 작동합니다. 거의 모든 화물에 적용됩니다.

베큐렉스(Vaculex®) TS

높은
적재
응용분야



TS는 높은 적재 응용분야를 위해 특별히 설계된 TP 버전입니다. 인체공학적으로 설계된 제어 핸들은 높은 곳에 적재할 때 작업자가 편안하고 사용하기 쉬운 리프터를 제공합니다.

베큐렉스(Vaculex®) TL

TL은 세탁물 및 우편물 포대/자루를 위한 간단하고 쉬운 사용의 리프터입니다. 필요한 압축공기만으로도 이 노동집약적인 응용분야에서 부상의 위험을 줄이고 예리한 물체로 인한 부상을 예방할 수 있습니다.





쉬운
교체-
장착
부속품

베큐렉스(Vaculex®) ML

5 - 55 kg

베큐렉스(Vaculex®) ML은 한 손으로 작동되는 진공리프터로써 5~55 kg 하중의 대부분의 핸들링 상황에 쉽게 적용될 수 있습니다. 이 시리즈는 다양한 제어핸들과 흡착용 기구 및 독특한 핸들링 상황에 맞는 리프팅 시스템을 최적화할 수 있는 선택사양 등으로 많은 가능성을 제공합니다.



목적
더 무거운
중량

베큐렉스(Vaculex®) VL

5 - 250 kg

베큐렉스(Vaculex®) VL은 양손으로 작동하는 사용자 친화적이고 강력한 리프터로, 주로 일반 산업용으로 사용되는 특수 중부하 공구가 필요한 곳에서 일반적으로 사용됩니다. 베큐렉스(Vaculex®) VL은 박스, 자루, 드럼, 금속판, 문, 컴퓨터, 나무상자, 배럴, TV, 가전용품, 가구 등을 들어 올릴 수 있습니다 - 30 ~ 250 kg 사이 모든 제품.

올바른 조합의 베큐렉스(Vaculex®) VL의 부속품은 여러 물체를 동시에 들어 올리거나 기울이거나 회전시킬 수 있습니다. 베큐렉스(Vaculex®)는 또한 물품이 리프팅하고 있는 때 또는 없을 때에 핸들을 홀로 나두었을 때의 높이를 조절할 수 있습니다. 거의 모든 것을 들을 수 있는 강력한 리프팅.



인체공학적
트레일러 및 컨테이너
안에서의 핸들링

베큐렉스(Vaculex®) ParcelLift

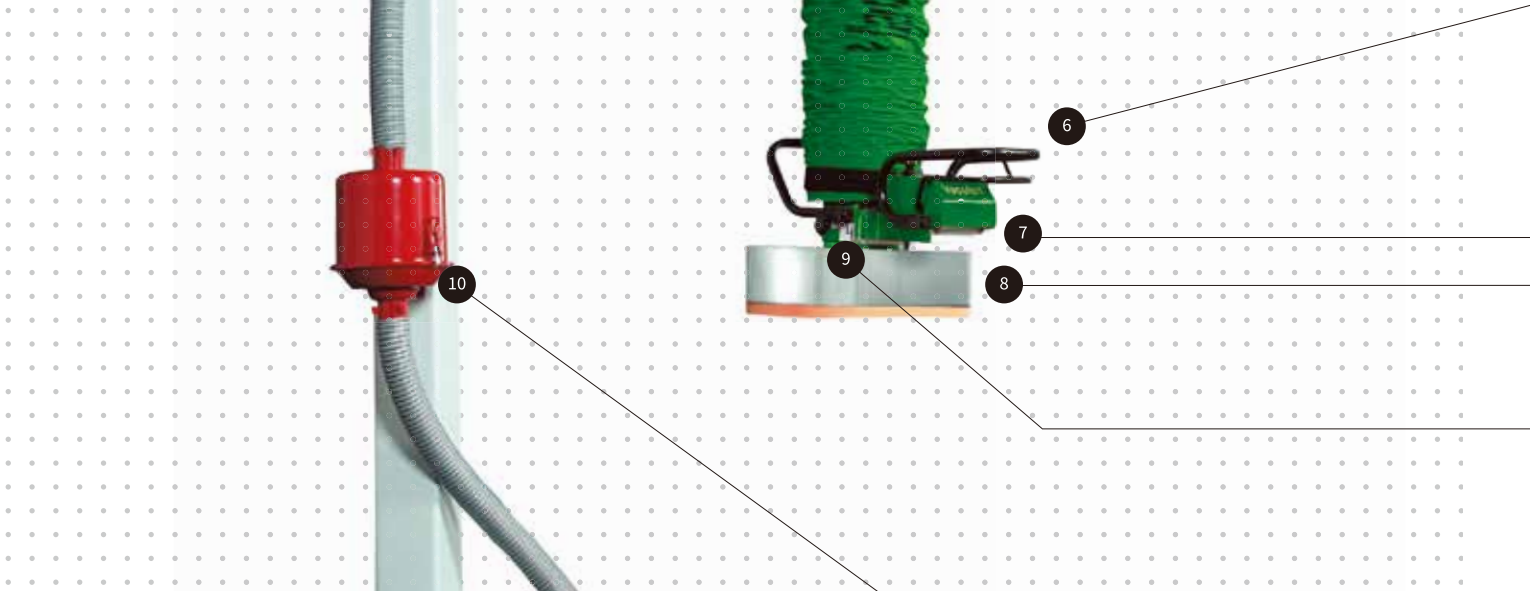
5-40 kg

베큐렉스(Vaculex®) ParcelLift는 트럭이나 컨테이너의 적재된 화물을 로딩 및 언로딩시 생산성을 높여줍니다. 이것은 신축 다단식 컨베이어에 공장-장착 또는 개조-장착 될 수 있습니다.

크기, 모양 및 무게가 다양한 제품과 소화물을 40 kg까지 핸들링할 수 있습니다.

또한 사용 가능한 천장 높이를 감지하고 자동으로 조정함으로써 작업 높이를 극대화하므로 제한된 천장 공간을 한정된 공간에서 작업하기에 이상적인 솔루션입니다.

작동시 베큐렉스(Vaculex®) ParcelLift는 최적의 작업 환경을 제공하도록 설계되었습니다. 사용자가 어느 방향에서나 물품을 잡고 360° 돌려서 필요한 만큼 놓을 수 있습니다. 또한, 쉽고 직관적인 조작을 위해 제작되었으며 최소한의 교육만 필요로 합니다.



1. 서스펜션 아이

다양한 모델로 제공. 지브 크레인 또는 일부 브릿지 크레인 대부분 적합.

3. 상부 및 하부 리프트튜브의 스크류 연결

최적의 리프트 서스펜션을 위한 솔루션
핸들과 상부회전작용체를 튜브와 연결.

5. 효율적인 보호커버

표준의 보호스타킹은 보호력이 우수하며,
리프트튜브의 외부 침식에서 보호.

7. 스프링-밸런스 밸브 제어시스템

항상 물체는 정해진 높이로 돌아갑니다.
작업자가 제어유닛을 놓아 두거나
제어유닛을 실수로 작동시켰을 때

9. 최고의 안전성을 위한 하부보호밸브

적재물이 파손될 경우, 진공 헤드의 하부의 밸브는 즉각적으로
오픈하고 리프팅 힘을 최소화하기 위하여 감소 시켜줌으로써
상해나 손상의 위험을 최소화합니다.

2. 상해를 피하기 위한 상부체크밸브

체크밸브는 정전시에
진공펌프의 멈춤이 발생했을 때, 리프트 유닛을
바닥에 천천히 하강시켜 개인 상해와
재질 손상을 최소화합니다.

4. 최고급 품질의 리프트튜브

독점으로 설계 및 제조
최고급 품질과 오랜 수명
따라서 1년 보증으로 공급됩니다.

6. 방음 장치가 장착된 제어유닛 및 인체공학적인 핸들

베큐렉스(Vaculex®) ML 및 TP 는 한손 동작이며 베큐렉스
(Vaculex®) VL은 두손 동작 입니다

8. 최고의 안전성을 갖춘 흡착용 기구

튜브 리프터는 들어 올릴 수 있는 하중을 떨어 뜨리지 않으며
하중이 너무 무거울 경우 리프트 튜브가 들어 올려지지 않습
니다. 모든 표준 흡착용 기구는 사용되는 리프트 튜브 크기에
맞게 조정되며 안전을 위해서 적어도 2.5 이상이어야합니다 리프
트 튜브의 리프팅 힘보다 2.5 배 큰 흡착력을 가진 흡착용 기구
를 가진 제품을 뜻합니다.

10. 효율적인 에어필터

일반 필터 보관통은 진공펌프의 수명을 늘려줍니다. 선택사양
으로, 아주 큰 사이의 공기 필터는 먼지가 심한 환경을 위해 제
공됩니다.

11. 진공펌프 - 전기식 또는 공압식

다양한 사이즈의 전기식 또는 공압식 진공펌프가 제공됩니
다. 베큐렉스(Vaculex®) ML은 이젝터 펌프와 통합된 상부회
전작용체가 장착됩니다. 전기구동식 진공펌프는 소음박스가
선택사양으로 제공됩니다.

응용분야의 구조에 맞는 최적의 시스템 설계

오버헤드 및 크레인 솔루션

베큐렉스(Vaculex®) 제품 라인은 다양한 오버헤드시스템 또는 크레인시스템에서 사용할 수 있습니다. 즉 시설에서 발생하는 많은 물리적 제약을 극복할 수 있습니다. 기존 시설에 개선 또는 새 건물에 계획하든 필요한 인프라에 적합한 솔루션이 있습니다.

작업환경 구조. 다음은 오버헤드 및 크레인 시스템을 가장 흔하게 사용하는 몇몇의 사례들입니다. 구조, 물리적 제약, 들어 올려지는 물체의 중량, 리프터 타입, 커버되어야 하는 작업 영업 사이즈 등등에 따라 선택사양은 달라집니다.



관절형 지브크레인

- 이상한 모양의 작업 영역에서 유리함.
- 낮은 천장높이를 위하여 제공.
- 느린 것에서 아주 빠른 핸들링까지 모든 것에 적합.



브리지크레인

- 넓은 작업공간 커버 가능.
- 낮은 천장 높이를 위하여 제공.
- 느린 것에서 아주 빠른 핸들링까지 모든 것에 적합.



회전형 지브크레인

- 바닥 또는 벽에서 부터 고정될 수 있습니다.
- 느리거나 중간정도의 빠른 핸들링에 적합.
- 낮은 투자
- 몇 개의 표준 사이즈 제공.



관절형 지브크레인

- 초경량 탄소섬유 관절형 지브 암.
- 빠르거나 아주 빠른 핸들링에 적합.

부속품의 선택



리프트 튜브

들어올려지는 물체의 중량과 치수에 따라 많은 사이즈가 제공.



퀵 커넥터

빠르고 간편한 흡착용 기구 교체 가능.



진공파기 밸브

눌러졌을 때 물품이 릴리스 됨.



하부회전작용체

제어 유닛의 이동없이 물품을 360° 회전가능.



관절형 확장 제어유닛

물품을 적재할 때 사용. 다양한 길이로 제공.



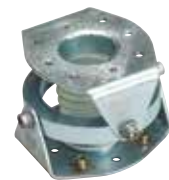
고정형 확장 제어유닛

넓은 폭의 제품을 핸들링할 때 사용. 다양한 길이로 제공.



각도어댑터

수평 및 수직 위치로의 전환용.



유니버설 조인트

하중이 불안정할 때, 리프트 튜브의 수직 위치를 유지하기 위함.



요크 흡착용 기구

분리된 뚜껑, 편평한 형상의 재질, 보드판 등으로 이루어진 마분지 재질의 포장에 적합.



요크 흡착용 기구

길고, 얇은 재질에 적합, 예를 들면 금속판.



대각 흡착용 기구

큰 평판, 보드판 등에 적합.



고정형 요크 흡착용 기구

벨로즈 진공패드, 거친 표면에 사용.



사각형 흡착용 기구

밀폐된 표면 핸들링에 적합.



곡선형 흡착용 기구

관형태의 프레임, 축들, 드럼 등의 핸들링에 적합.



타원형 흡착용 기구

가방, 자루 및 진공포장된 제품 등의 핸들링에 적합.



원형 흡착용 기구

캔, 드럼, 석재, 벽돌 등에 적합.

Product data overview

Vaculex[®] TP

Vacuum Lifting Systems



Vaculex[®] TP

Introduction

Vaculex® TP - Express handling up to 65 kg [140 lbs].

Vaculex® TP is a vacuum lift specifically designed for rapid manual handling of goods. Thanks to the 360° joint the flexibility makes it ideal for any type of parcel handling at logistics-, order fulfillment- or distribution centers, as well as baggage handling at airports and ports. With the 90° angle adapter and you can also tilt the object 90°. The Vaculex® TP family includes TPH, TP Scale, TP BaggageLift and the TP Combi.

Extremely versatile

Vaculex® TP is extremely versatile and handles a great variety of goods in size, shape and weight.

Vaculex® grips the goods from any side and lifts it, you can easily rotate either the lift or the goods 360° to place it where required.

Vaculex® TP is designed for very rapid handling of goods up to 40 kg [88 lbs] but is also available in versions for lifting goods up to 65 kg [140 lbs].

Vaculex® TP decreases strain injuries

Lifting fast in poor posture does not require heavy weights to cause pain and strain injuries. Vaculex® TP is very user-friendly and requires minimal training to operate. It is so light and easily managed that working speed and productivity are maintained or in many cases increased, which is usually the contrary when using a lifting aid.

Benefits

- Handles almost any load between 5 and 65 kg [11 to 140 lbs]
- Extremely fast
- Ergonomic
- Safe
- User-friendly
- Light and flexible
- Increases productivity
- Causes less parcel damage
- Low investment
- Low service cost
- Available with Automatic Turn Off Pump (ATOP) for increased energy efficiency and maximum comfort
- Available with a wide range of accessories

Vaculex® TP

Working Load Limit (WLL)

Each lifter in the Vaculex® TP series has a maximum work load limit, which should never be exceeded. Note that the crane or bridge system that the Vaculex® TP series product is suspended in may have a maximum load limit that is lower than the one of the lift unit.



Always respect the load limit of every part of the system.

The maximum load limits for the Vaculex® TP series standard products are:
mm and kg [inch and lbs]

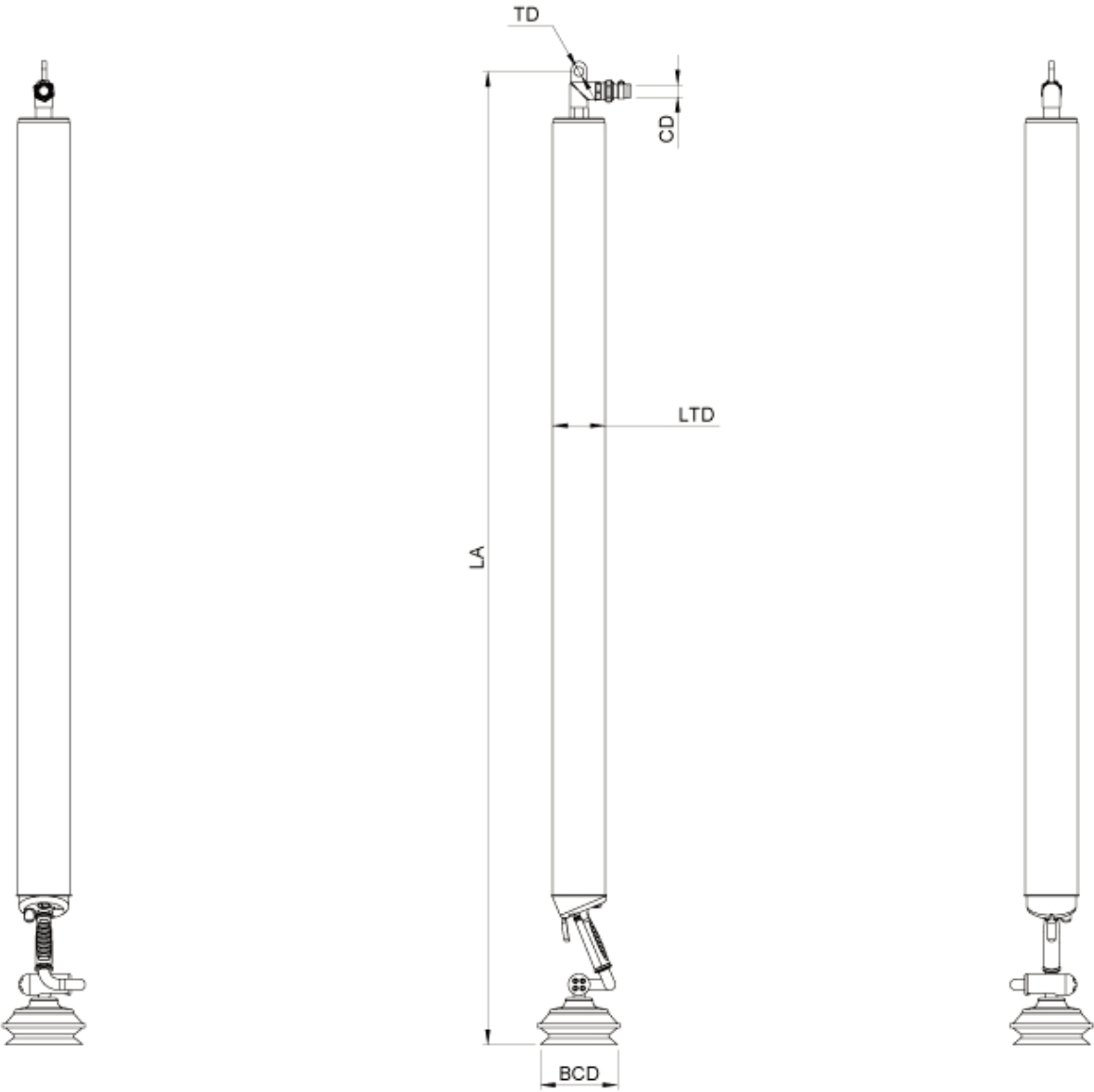
TP series	Lift tube	Pump type	Pump size	WLL
TP	80 [3.15]	Electric	802	35 [77.2]
TP	80 [3.15]	Electric	902	35 [77.2]
TP	80 [3.15]	Pneumatic	150	19 [41.9]
TP	100 [3.94]	Electric	802	35 [77.2]
TP	100 [3.94]	Electric	902	45 [99.2]
TP	100 [3.94]	Pneumatic	150	35 [77.2]
TP	120 [4.72]	Electric	902	65 [143]
TP	140 [5.51]	Electric	802	56 [123]
TP	140 [5.51]	Electric	902	65 [143]
TPH	100 [3.94]	Electric	902	45 [99.2]

Please note that in some cases, the WLL of the lift unit can be lower than the values in the table. Always refer to the WLL marked on the lift unit.

Drawing overview

Simplified drawings with key measurements.
With bellows cup for handling of parcels and many other types of goods.
Dimension mm [inch]

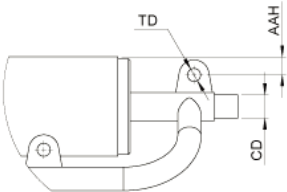
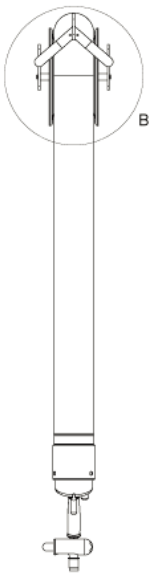
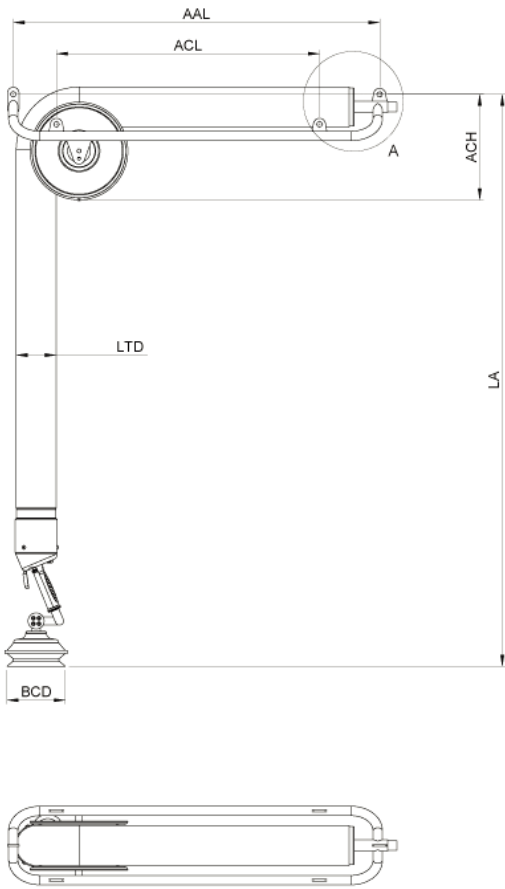
Model	LTD	LA	TD	CD
TP080	80 [3.15]	Max: 3010 [118.5] Stroke: 1847 [72.7]	19 [0.75]	25 [0.98]
TP100	100 [3.94]	Max: 2936 [115.6] Stroke: 1720 [67.7]	19 [0.75]	25 [0.98]
TP120	120 [4.72]	Max: 3128 [123.2] Stroke: 1750 [68.9]	19 [0.75]	25 [0.98]
TP140	140 [5.50]	Max: 3114 [122.6] Stroke: 1725 [67.9]	19 [0.75]	25 [0.98]



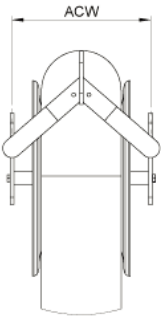
Drawing overview

TPH: With bellows cup for handling of parcels and many other types of goods in low head room areas.
Dimension mm [inch]

Model	LTD	LA	TD	CD	AAL	AACL	ACH	AAH	ACW
TPH100	100 [3.94]	Max: 2243 [88.3] Stroke: 1630 [64.2]	19 [0.75]	25 [0.98]	975 [38.4]	700 [27.6]	280 [11.0]	20 [0.79]	184 [7.24]



DETAIL A
SCALE 1 : 4



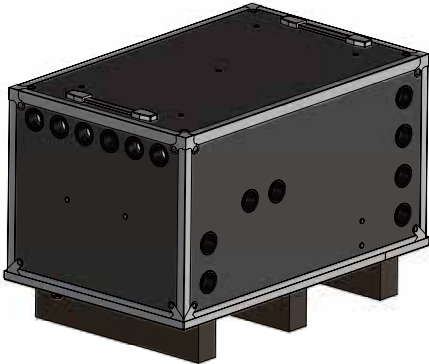
DETAIL B
SCALE 1 : 5

Vaculex® TP

English

Pump

These are the electrical and pneumatic pumps for the TP series.



Pump unit, electric	802		902		X = 50Hz, 3 - phase	Y = 60Hz, 3 - phase
	50Hz	60Hz	50Hz	60Hz	200V ∠	220V ∠
Power (kW)	1.25	1.5	2.2	2.6	230V ∠	265V ∠
Voltage (V)	X*	Y*	X*	Y*	350V Y	380-400V Y
Weight (kg) [lbs]	69 [152]		101 [223]		400V Y	460V Y
Dimensions LxWxH (mm) [inch]	815x515x540 [32x20.3x21.25]		870x560x575 [34.25x22x22.6]			
Sound level (dBA)	54	56	63	65		

Pump unit, pneumatic	150
Air consumption (NI/m at 6 bar) [scfm at 87 psi]	630 [22.2]
Sound level (dBA)	60-65

Crane and Over Head system

Several types of Crane and Over Head system can be used with the Vaculex® TP.

These are the most common systems. More info in the separate datasheet for Cranes and Over Head systems.



Slewing Jib Cranes



Articulated Jib Cranes



Bridge Cranes

Vaculex TS — for stacking of goods

- Unique layout made for stacking goods between low and very high levels.
- Unmatched ergonomics for stacking.
- Configurable for handling of different goods such as boxes, sacks and sheets of metal etc.
- Configurable with most Vaculex accessories.



Easy handling for low and high stacking heights

Low and high stacking heights

Vaculex TS was developed to solve issues with handling goods between low and high stacking heights.

Easy to grip and release goods

Vaculex TS makes it easy to grip or release goods with a high level of control even at levels far above the operators head.

Unique design

The unique design of the Vaculex TS control handle also makes it possible to pick items at floor level without either kneeling or bending to reach the objects.

Highly flxible

The Vaculex TS is easily customized to fulfill your specific needs. The control handle principle for stacking can also be utilized on the Vaculex VL product series.



Technical information

Maximum lifting capacity	65 kg/122 lbs
Lift tube sizes	60-120 Ø
Electrical vacuum pumps	0,75-2,4 kW
Pneumatic vacuum pumps	420 -630 NI/min at 6 bar
Vertical movement (lift height)	
2,5 m lift tube	1,7 m
3,0 m lift tube	2,1 m
Installation height	
2,5 m lift tube	2,8 m
3,0 m lift tube	3,3 m
Safety Factor (Attachment force/Lifting force)	min 2.5





- Ergonomic
- Less risk of strain injuries
- Quick to learn
- User-friendly
- Increase productivity
- Low investment cost
- Low service cost

Loose loaded sack handling

Vaculex vacuum tube lift — Vaculex TL, is a unique lifting aid, specially designed for handling of loose loaded sacks. Typical customers within this segment are laundry shops, the chemical industry, the food industry and other businesses where frequent lifting of loose loaded sacks takes place. This type of repetitive lifting is hard and demanding on the body and muscular skeletal injuries are common.

An investment in Vaculex TL is a small but extremely effective measure in reducing sick leave and rehabilitation costs. In addition a more safe and healthy working environment attracts and maintains good quality employees.

Vaculex TL is the best investment choice as our vacuum tube lift addresses all the vital factors. Vaculex TL is tremendously user-friendly and does not need any time-consuming training to operate. It is so easily managed that working speed and productivity are maintained or in many cases increased, which is usually the contrary when using a lifting aid.

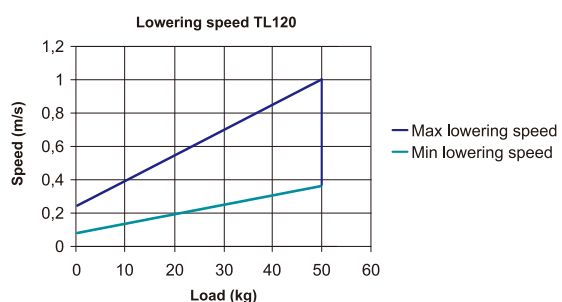
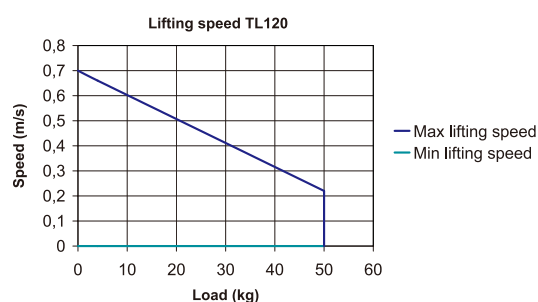
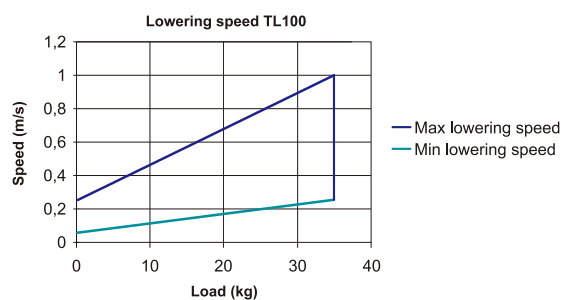
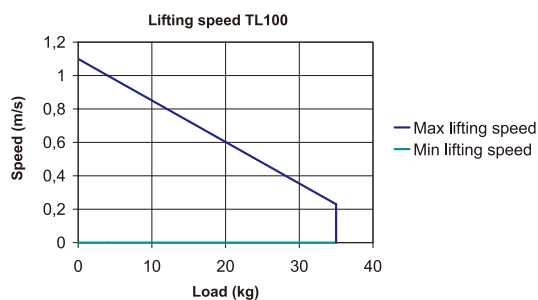


Handling loose loaded sacks

The loop is made by feeding the string through the black holder. Hold up one corner of the sack and put the loop around it. Use the black holder to tighten the loop. Pull the on/off control to lift the sack. If the sack is to be emptied, lift the sack upside down with the opening facing downwards. Lower the sack by pulling the on/off control once more. The speed of the vertical movement can be adjusted.

Technical specifications

Lift unit	Lift tube length 2,5 m	3 m	4 m
Total length (excluding rope sling) not contracted	2700 mm	3200 mm	4200 mm
Total length (excluding rope sling) contracted	980 mm	1120 mm	1410 mm
Vertical movement (lifting height)	1720 mm	2080 mm	2790 mm
Weight complete (with compressed air driven L100 or L150 vacuum pump)	5.1 kg/11.2 Lbs	5.5 kg/12.1 Lbs	6.3 kg/13.9 Lbs
Lift capacity, L100 pump, Lift tube Ø 100 mm	0-35 kg/0-77 Lbs	0-35 kg	0-35 kg
Lift capacity, L150 pump, Lift tube Ø 120 mm	0-50 kg/0-110 Lbs	0-50 kg	0-50 kg
Lift tube diameter	100 mm and 120 mm	100 mm and 120 mm	100 mm and 120 mm
Compressed air driven vacuum pump (venturi pump)	Vaculex L100	Vaculex L150	
Working air pressure	6 bar	6 bar	
Air consumption where pump is running 50% of the time	225 litre/minute at 6 bar	315 litre/minute at 6 bar	
Sound level 1 meter from vacuum pump	60 - 65 dBA	60 - 65 dBA	



What do we stand for ?

Vaculex AB is a world-leading manufacturer of lifting aids based on vacuum technology. Our aim is twofold: to facilitate your work in a purely physical sense — with a focus on efficiency, ergonomics and safety; and to make it easier for you, before, during and after purchase, by way of our knowledge, experience and positive approach.

Product data overview

Vaculex[®] VL

Vacuum Lifting Systems



Vaculex[®] VL

Vaculex® VL

Introduction

Vaculex® VL, the versatile lifter - up to 250 kg [550 lbs]

Vaculex VL is an ergonomic vacuum lifter for any industry. This two-hand lifter can lift multiple objects at once, rotate the load, tilt sideways and much more. Vaculex VL's modular design can be customized to lift almost anything up to 250 kg [550 lbs].

Vaculex® VL design

The design consists of a pump, vacuum hose, lift tube, control unit and finally a suction foot or possibly a gripping tool which is adapted to your needs. This vacuum lifter is available in seven lift tube sizes, between 100-200 mm [3.94-7.87 in], with four different vacuum pumps and many accessories and suction feet for a virtually infinite number of combinations. Normally, Vaculex® VL is driven by an electric vacuum pump for best performance and flexibility but we can also provide pneumatic vacuum pumps if required.

Lift almost everything

With Vaculex® VL you can lift anything up to 250 kg [550 lbs] such as boxes, sacks, bags, drums, cans, bottles, metal sheets, doors, reels, stone slabs, computers, crates, barrels, windows, white goods, TVs and much more.

Good ergonomics is good economics

Repeated lifts do not have to be heavy to be both dangerous and costly. Most often, vacuum tube lifters lead to an increased work rate and better productivity. Costs for extended periods of sick leave are reduced and rehabilitation periods are avoided. Our tube lifters minimize that type of problem and also reduce the risk of accidents that can injure the user as well as damage the goods. Reducing repetitive strain injuries and sick leave is beneficial to everyone involved.

Benefits

- Handles almost any load between 30 and 250 kg [66 and 551 lbs]
- Very user friendly and flexible to fit your specific needs
- Can lift multiple objects at once, rotate the load, tilt sideways etc
- Increases productivity
- Reliable and with low service costs
- Ergonomic and Safe
 - o Reduces repetitive strain injuries and sick leave costs
 - o Reduces the risk of damage goods
- Modular system which can be reconfigured for new tasks over time
- Available with a wide range of accessories
- Available in A2 Stainless Steel
- Available in several ATEX certified versions
- Available with Vaculex ATOP for increased energy efficiency and maximum comfort

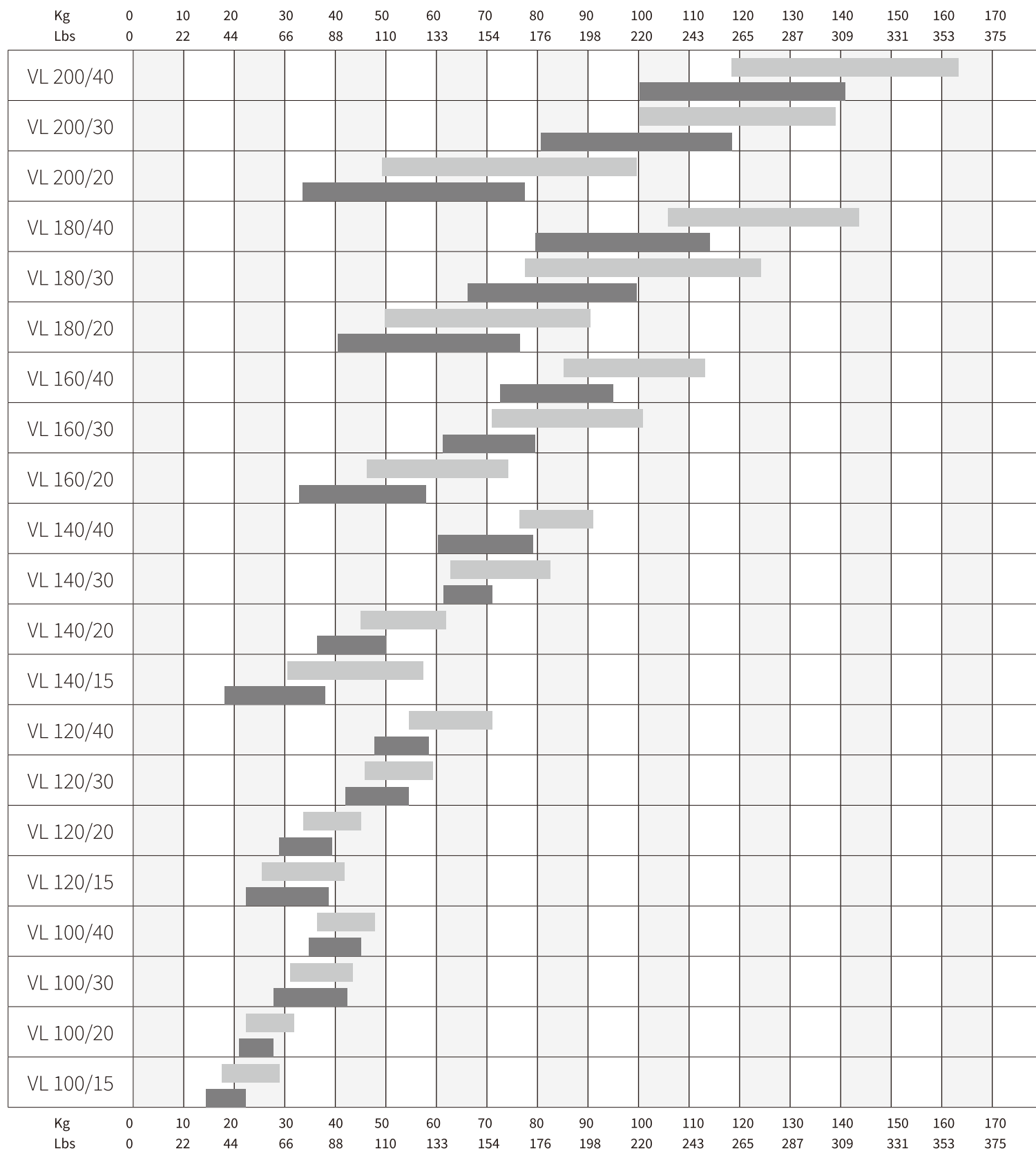
Lifting Capacity

Find the best Lift Unit/Pump combination:

Non porous Lifting object

Porous Lifting object

English



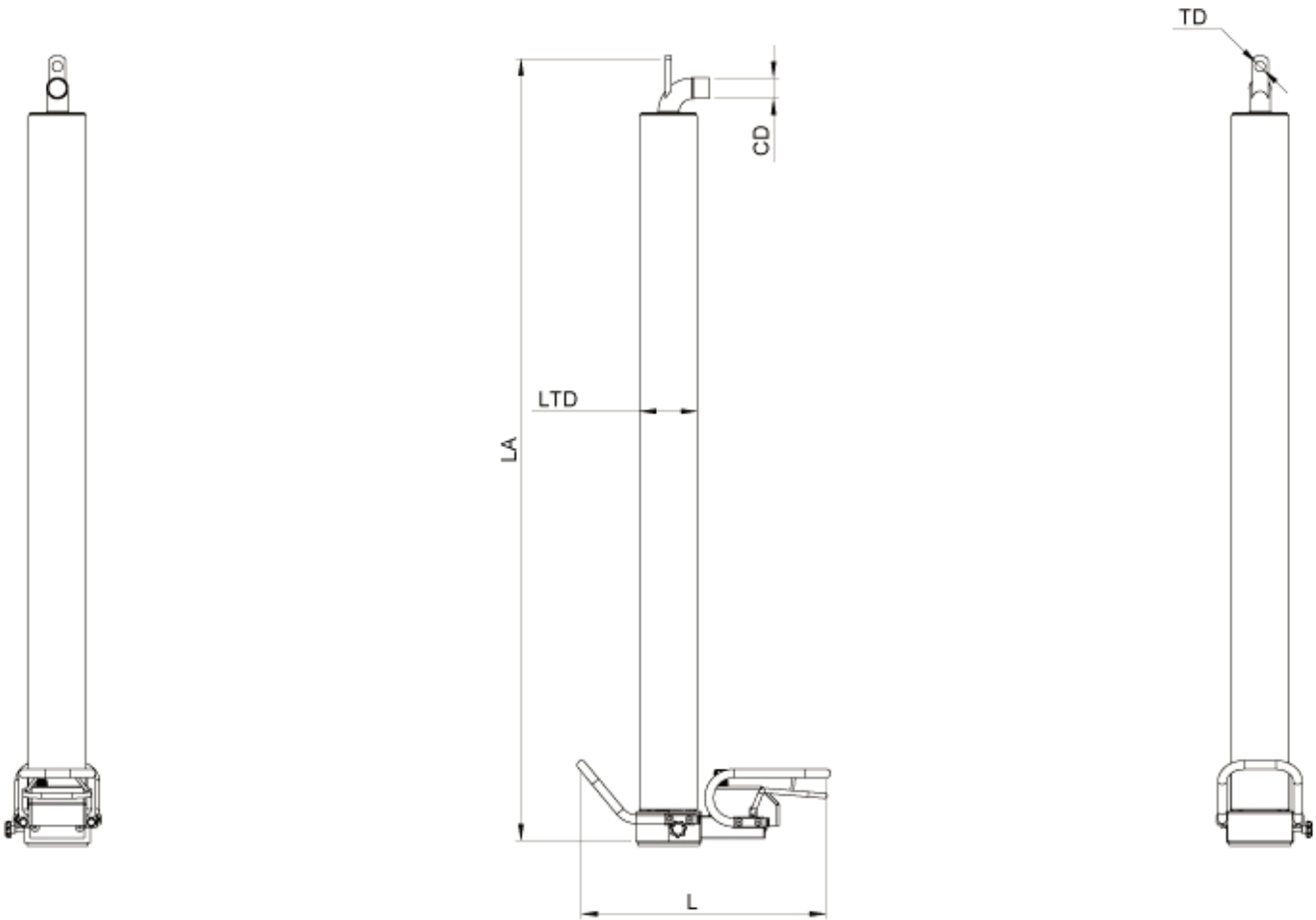
The bars show recommended “weight interval” in kg [lbs] (for the lifted objects) regarding actual Lift Unit/Pump combination. To the left of the bar it takes 2 seconds for the Lift Unit/Pump combination to evacuate and lift 1 meter [39.4]. To the right it takes 4 seconds. We have been using a rectangular suction foot during our tests, therefore you must consider the extra weight if you choose a heavier suction foot.

Note! Try to choose as big Lift Tube as possible. This will give you a “softer” and smother Lift Unit.

Drawing overview

Simplified drawings with key measurements.
Without suction foot or similar (with the possibility to choose suitable foot).
Dimension mm [in]

Model	LTD	LA	TD	CD	L
VL100	100 [3.94]	Max: 2657 [104.6] Stroke: 1720 [67.7]	19 [0.75]	38 [1.50]	450 [17.72]
VL120	120 [4.72]	Max: 2657 [104.6] Stroke: 1750 [68.9]	19 [0.75]	38 [1.50]	450 [17.72]
VL140	140 [5.5]	Max: 2657 [104.6] Stroke: 1720 [67.7]	19 [0.75]	38 [1.50]	450 [17.72]
VL160	160 [6.30]	Max: 2657 [104.6] Stroke: 1650 [65]	19 [0.75]	51 [2]	485 [19.01]
VL180	180 [7.01]	Max: 2657 [104.6] Stroke: 1670 [65.7]	19 [0.75]	51 [2]	485 [19.01]
VL200	200 [7.87]	Max: 2657 [104.6] Stroke: 1580 [62.2]	19 [0.75]	51 [2]	485 [19.01]



베큐렉스(Vaculex®) 진공리프팅 시스템 실제 설치 사진



PE 드럼통 및 철 드럼통 250Kg (200L)

베큐렉스(Vaculex®) 진공리프팅 시스템



Product data overview

Vaculex[®] ML

Vacuum Lifting Systems



Vaculex[®] ML

Introduction

Vaculex® ML - is a small, handy, really easy to operate vacuum lifter which can be manoeuvred with one hand. The lifter is appropriate for loads between 5 and 55 kg [11 and 121 lbs]. A number of electrical vacuum pumps are available. Another option is a pneumatic vacuum pump, that is very easy to install, since the pump is mounted on the top swivel.

One hand operated

Vaculex ML is a one hand operated vacuum lifter which is easily customized to adapt to most handling situations with loads weighing between 5 and 55 kg [11 and 121 lbs] .

Large possibilities

Vaculex ML offers large possibilities to choose between a range of different control handles, suction feet and other options to optimize the lifting system for your specific handling situation.

Easy to apply to your changing needs



Vaculex ML has a modular design which also makes it easy to reconfigure the lifting system if your needs are changing over time.

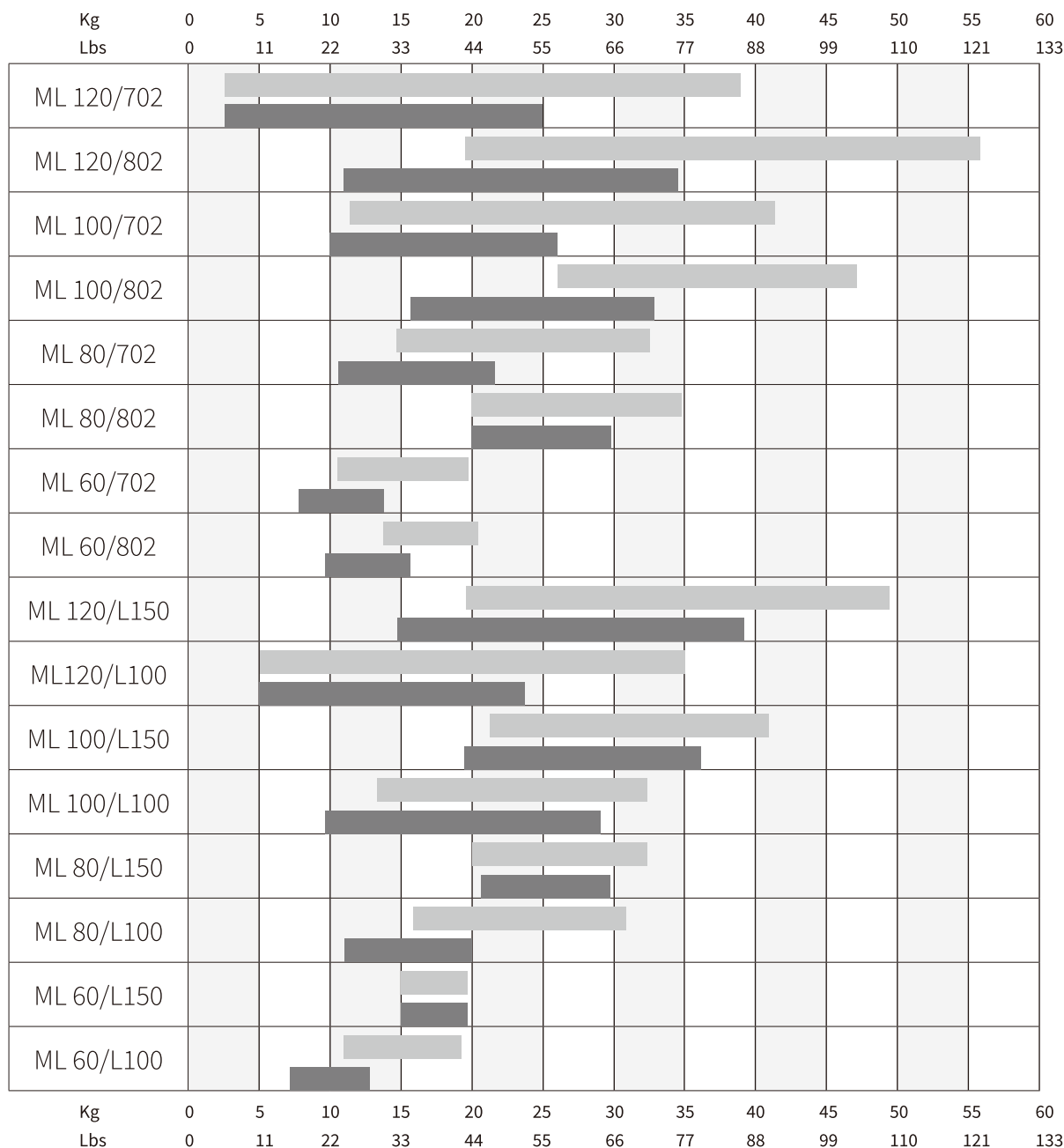
Benefit

- Operated with one hand
- User friendly and able to customize to fit customer specific needs
- For handling of loads between 5 kg and 55 kg [11 and 121 lbs]
- Ergonomic and Safe
 - o Reduces repetitive strain injuries and sick leave costs
 - o Reduces the risk of damage goods
- Increases productivity
- Reliable and with low service costs
- Modular system which can be reconfigured for new tasks over time
- Available as either Electric or Compressed Air powered
- Available with Vaculex ATOP for increased energy efficiency and maximum comfort
- Available with a wide range of different suction feet, vacuum pumps and other options

Lifting Capacity

Find the best Lift Unit/Pump combination

Non porous Lifting object 
Porous Lifting object 



The bars show recommended “weight interval” in kg [lbs] (for the lifted objects) regarding actual Lift Unit/Pump combination. To the left of the bar it takes 2 seconds for the Lift Unit/Pump combination to evacuate and lift 1 meter [39.4 inch]. To the right it takes 4 seconds.

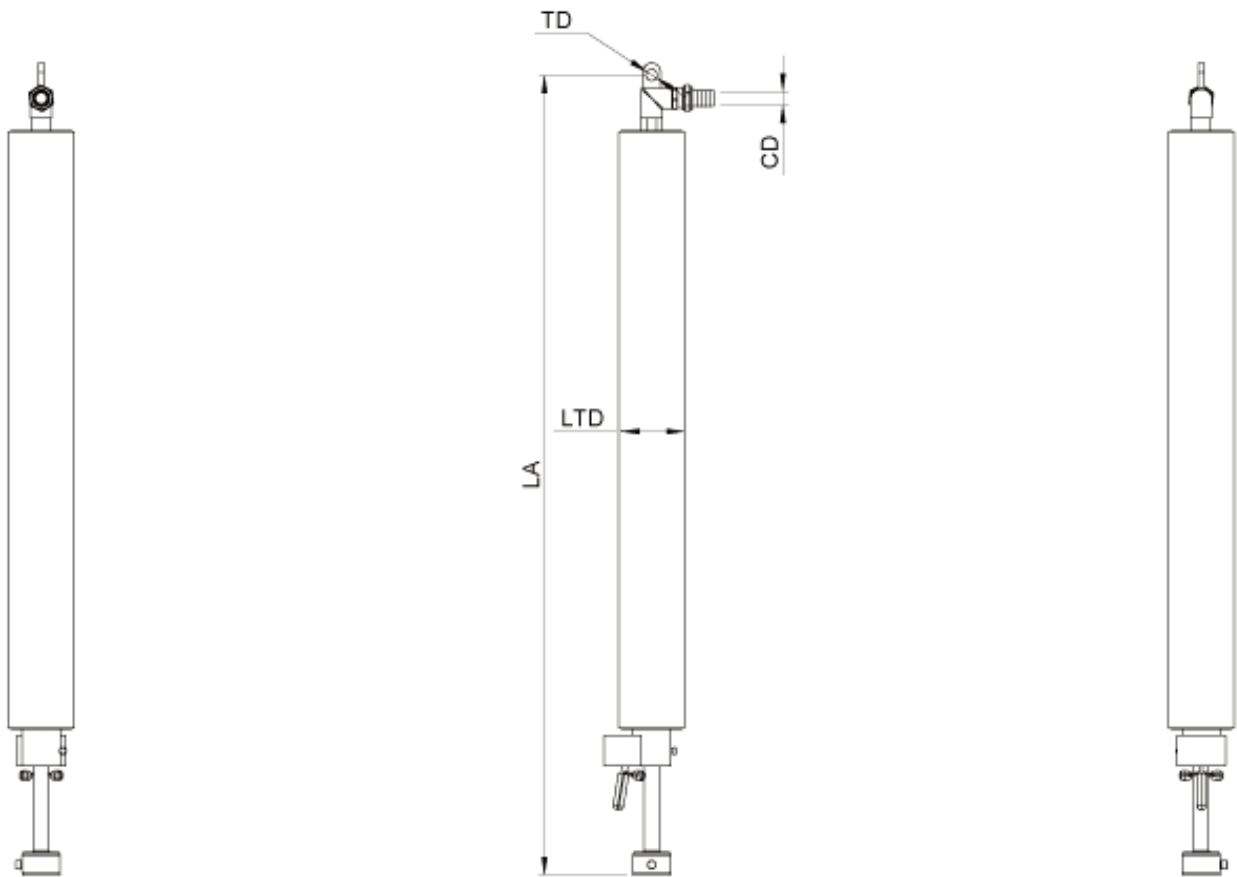
We have been using a rectangular suction foot during our tests, therefore you must consider the extra weight if you choose a heavier suction foot. Note! Try to choose as big Lift Tube as possible. This will give you a “softer” and smother Lift Unit.

English

Drawing overview

Simplified drawings with key measurements.
Without suction foot or similar (with the possibility to choose suitable foot).
Dimension mm [in]

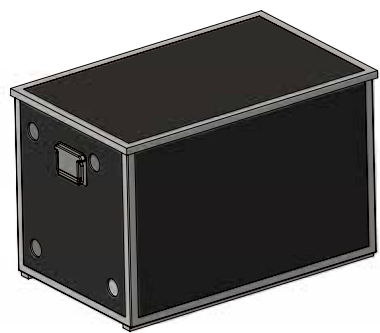
Model	LTD	LA	TD	CD
ML60	60 [2.36]	Max 2850 [112.2] Stroke: 1840 [72.4]	19 [0.75]	25 [0.98]
ML80	80 [3.15]	Max: 2850 [112.2] Stroke: 1840 [72.4]	19 [0.75]	25 [0.98]
ML100	100 [3.94]	Max: 2850 [112.2] Stroke: 1720 [67.7]	19 [0.75]	25 [0.98]
ML120	120 [4.72]	Max: 2850 [112.2] Stroke: 1750 [68.9]	19 [0.75]	25 [0.98]



Vaculex® ML

Pump

These are the electrical and pneumatic pumps for the ML series.



Pumpunit, electric	702		802	
Frequency (Hz)	50Hz	60Hz	50Hz	60Hz
Power (kW)	0.75	0.9	1.25	1.5
Voltage (V)	X*	Y*	X*	Y*
Weight (kg) [lbs]	61 [134.5]		69 [152]	
Dimensions LxWxH (mm) [inch]	815x515x540 [32x20.3x21.3]		815x515x540 [32x20.3x21.3]	
Sound level (dBA)	54	56	54	56

X = 50Hz, 3 - phase	Y = 60Hz, 3 - phase
200V Δ	220V Δ
230V Δ	265V Δ
350V Y	380-400V Y
400V Y	460V Y

Pumpunit, pneumatic	100	150
Air consumption (NI/min at 6 bar) [scfm at 87 psi]	420 [14.8]	630 [22.2]
Sound level (dBA)	60-65	60-65

Crane and Over Head system

Several types of Crane and Over Head system can be used with the Vaculex® ML.

These are the most common systems. More info in the separate datasheet for Cranes and Over Head systems.



Bridge Cranes



Slewing Jib Cranes

다양한 케미칼 포대/자루 25Kg 흡착이송 베큐렉스(Vaculex®) 진공리프팅 시스템



쌀포대 40Kg 흡착이송

베큐렉스(Vaculex®) 진공리프팅 시스템



The very first vacuum lifter of Industry 4.0

piLIFT® SMART



The piLIFT® SMART

The next step in vacuum lifting

The piLIFT® SMART is really something else – in every sense. Combining the best of vacuum lifting technology with low energy consumption, minimal sound levels and smart data features, the quick and intuitive piLIFT® SMART is truly a leap forward. Piab's R&D Manager Anders Lundin tells the story of how the piLIFT® SMART came to be.



ANDERS LUNDIN
Research and Development
Manager, Ergonomic
Handling Division, Piab

“OUR VACUUM LIFTERS have improved over the years, but there have been lingering pain points for our customers that we’ve never quite solved. The sound level is one, the comparably high energy consumption another. But vacuum lifting is a great concept, with features no other ergonomic lifting solution can ever have. Could we improve upon it even more?

We wanted to start with the desired user experience, and work our way up from there. Go back to the roots, in a way.

SO WE THOUGHT: what if we used electronics to regulate the pump and valves, to generate air flow only when needed? That would solve two issues at once. Also, with movement feedback going through an algorithm to adjust the pump and valves, we could greatly enhance the responsiveness.

The first few prototypes were promising, and the technology was patented in 2014. We really

saw the potential and ramped up the R&D efforts, expanding the team. Gradually, we spent more and more time on the project.

There were challenges, but we overcame them one by one. The control system put up a bit of a struggle, but when we straightened out the last kink and I saw the fully functional lifter in action, it fulfilled all my expectations. It worked like a charm, just like I’ve always dreamed. Every single person we’ve shown it to during the process has been equally amazed.

IT’S TAKEN TIME to get here, but I believe all great things require that. To compromise on user experience, functionality and features was never an option.

The piLIFT® SMART is a quantum leap in vacuum lifter technology. We’ve solved every single issue we set out to conquer, in a single swipe. I’m extremely happy with it, and very, very proud.”

SAFE, EASY AND PRODUCTIVE

The piLIFT® SMART – like our Vaculex® range of vacuum lifters – uses vacuum to both grip and lift the load in a single movement. The control handle is easy for the operator to use and the load feels weightless. The bottom swivel and angle adaptor allow the user to rotate or turn the lifted object as required. The power source is a frequency controlled electric pump, activated only to the extent needed, resulting in low energy use and minimal sound levels.

Piab vacuum lifters reduce the risk of injury associated with manual handling significantly; the load on the operator's body can be reduced by more than 80 percent. Long lasting and safe, our solutions provide many benefits including reduced sick leave, lower staff turnover and better staff utilization — most often combined with higher productivity. Products are developed using the latest technology to meet industry and user demands. The piLIFT® SMART being no better example of this.



Key features



LOW ENERGY – LOW SOUND

In the piLIFT® SMART, the system controls the pump and valves, feeding power only when needed. This results in an energy consumption that is 76 percent lower than other comparable vacuum lifters. Vacuum is generated only when the user needs to grip or lift, keeping the air flow minimal at other times. This makes the piLIFT® SMART operate at a mere whisper.



ERGONOMIC

Using lifting equipment greatly lowers the strain on the body. Every aspect of the piLIFT® SMART is designed with ergonomics and natural movement in mind. The design of the control unit, the shape of the handle with interactivity, handguard and the placement of the control buttons are prime examples of ergonomic features. Ergonomics is key.



USER FRIENDLY

The piLIFT® SMART interface is intuitive, logical and easy to learn. With its variable speed buttons you press the upper button and it lifts; press the lower and it descends. The piLIFT® SMART senses its movements, responding quickly to user intentions. Add minimal sound levels and smart functions and you have a great user experience.



SMARTER

The piLIFT® SMART constantly collects data that can be displayed on the built-in display or by logging in to a web platform. Online you access data on the number of lifted units, the weight of the objects, maintenance and service messages and much more. This will help you ensure the wellbeing of the user, streamline your everyday processes and maximize performance.



DO YOU WANT TO KNOW MORE?

Take a look at the online product page: www.piab.com

Smarter, faster, stronger

THE piLIFT® SMART makes use of the same principle of physics as all vacuum lifters, utilizing the same single vacuum source to both grip and lift. This has the added benefit of an inherent safety feature no other lifting solution provides: if the object cannot be gripped, neither will it lift. Hence, there is no risk of dropping it unintentionally. The piLIFT® SMART has a capacity of 40 kg (90 lb).

Features:

- ① Up/Down variable speed controls.
- ② Quick release buttons, for right- or left-handed use. Press briefly for automated pickup or release, enabling you to lift from hard to reach spaces without undue strain.
- ③ Swivel (360°) and angle adapter (0° – 90°), enabling you to rotate the lifting object and to lift packages from the side.
- ④ Enter button. For example press to memorize unloaded and loaded balance level.
- ⑤ Standby button
- ⑥ Display, showing for example the weight of the load.
- ⑦ Ergonomic grip and protective hand guard.
- ⑧ Suction cup, 150 mm [6.10"].
- ⑨ Lift tube with cover sock.

Smart features and connectivity

THE piLIFT® SMART brings the latest technology to enable both operator and operation to obtain live information on performance and status. Maintenance will benefit from service indicators that will enable peak operating performance. The weight of the lifted object displayed on the piLIFT® SMART screen can help the operator to distinguish and identify loads as well as quality assure incoming or outgoing products. The piLIFT® SMART is the first vacuum lifter

ever that meets the needs of Industry 4.0. Via a web based platform usage data can be viewed either live or obtained as defined reports, e.g. total weight and number of units handled. The unique technology enables this information to be integrated into customer systems, that for example sends a signal when pallets are completed or if an individual package is under or over target weight.





“We’re just seeing the beginning of what the piLIFT® SMART can do”

The piLIFT® SMART is not just another vacuum lifter. The usability, flexibility and data management capability puts it in a category of its own. The piLIFT® SMART will appeal to a wide range of customers with needs that include low sound, low energy levels and performance data. David Collins, Vice President and Head of the Ergonomic Handling Division, tells more.

“WE AT PIAB specialize in moving and gripping solutions with vacuum providing smart solutions for the automated world. With our Vaculex® range of vacuum lifters we are experts in ergonomic handling, minimizing strain and health risks for users of our solutions. Our Vaculex® TP lifters, for example, have contributed to the wellbeing of thousands of workers across a spectrum of industries. There is a huge focus on both physical and mental wellbeing in the workplace. Protecting the workforce has never been higher priority.

I AM DELIGHTED that our solutions have contributed to this and now the piLIFT® SMART will take it even further.

No handling device has been more ergonomic, intuitive and easy to learn. Not only have we considered the operator, the piLIFT® SMART offers increased benefits for the operation. An improvement that will benefit users, operations and environments.

The startlingly low sound levels and energy consumption will, I’m sure, be appreciated in



DAVID COLLINS
Vice President and
Head of the Ergonomic
Handling Division, Piab

many places. I also like the fact that it’s easily customizable. It takes no more than the press of a button to set a preferred unloaded or loaded working height.

AND LET’S NOT FORGET
the smart solutions

we’ve built into the piLIFT® SMART. Getting signals when service is required is just the beginning. The capability for collecting and analyzing data to use for the optimization of flows and processes is tremendous. I see great benefits for our customers in avoiding operation downtime, optimizing lifting techniques, ensuring the health of employees and keeping the equipment in top shape. I am very proud to be part of the piLIFT® SMART, the very first vacuum lifter of Industry 4.0.

We’re just seeing the beginning of what the piLIFT® SMART can do.”



베큐렉스(Vaculex®) 진공리프팅 시스템 설치 사진



Uplifting Baggage Solutions

The ultimate ergonomic baggage handling solution for airports and ports



Smart solutions for the automated world™



Lift your business all the way with Piab's airport solutions

Piab provides smart solutions for the automated world. Our gripping and moving solutions help thousands of customers in a wide range of industries globally to improve energy-efficiency, productivity and working environment.

Piab's Vaculex® product range is a world-leading ergonomic lifting equipment based on vacuum technology. Since 2005 Piab has supplied the airport industry with flexible, top-quality equipment made to a Swedish design. Our ergonomic solutions have reduced the high number of injuries associated with manual handling of baggage.

Today, Piab has installed over 650 BaggageLift units in more than 65 airports across the world, boasting thousands of satisfied users who work with the equipment every day.

Existing users of Piab's Vaculex® BaggageLift have highlighted increased productivity, improved working environment and reduced number of injuries. Independent studies show that the load on the body is reduced by more than 80% with added bonus of maintained or increased productivity. We're extremely proud to have created a solution that helps every single baggage handler to get rid of their physical pain, all thanks to Piab's ergonomic Vaculex® solutions.

How can our solutions lift your business?



"For Piab the understanding of the customers' needs is the most important thing in a customer relation. After the customers have installed our equipment, they usually are surprised of how many injuries they can reduce. Our goal is to make our customers' work physically easier."

Steven Higgins –
Global Sales Manager Airport & Port, Piab



ERGONOMIC

Piab provides ergonomic solutions to the high injury risks associated with handling baggage manually. The load on the body can be reduced by 83 %, by using Vaculex® ergonomic vacuum lifters. Good ergonomics means good economics.



ECONOMIC

Long lasting and safe solutions that give you benefits in terms of reduced sick leave, lower staff turnover and better staff utilization. Often combined with higher productivity.



EFFICIENT

Vaculex® vacuum lifters not only makes life easier for the baggage handler; several studies also show increased productivity. This is because the products are developed using the latest technology in cooperation with industry and end users' demands. They also handle a wide range of baggage from large cases to sports bags and even surfboards.



END-USER HAPPINESS

Lighter work and reduced strain injuries contribute to a happier team. Benefits extend to all stakeholders in the baggage handling process. We have the evidence to say that once you realize why the lifter is there, the user voluntarily and happily picks up the lifter.





Take control of the baggage

HOW DOES IT WORK?

An electric vacuum pump pumps out the air which creates the desired vacuum level. When a suction foot is placed airtight on a bag, the result is lower pressure. The difference in pressure makes the tube contract vertically and the object is lifted.

GRIPS ANY BAG - ANYWHERE

The flexibility of the Vaculex® BaggageLift allows it to grip almost any type of bag. No matter the fabric or size, it will lift bags up to 32 kg in gauge, and out of gauge (OOG) environments up to 60 kg. The angle adapter allows the operator to angle the suction foot at ninety degrees to pick up bags from the side and the swivel allows for the baggage to rotate 360°. These built in features allow a wide variety of baggage to be handled safely, including backpacks and soft bags.

SOLUTIONS FOR ALL CONDITIONS

Piab's Vaculex® patented Low Head Room equipment allows unique and flexible solutions where ceiling height, narrow and confined areas with limited available working space may be an issue. Low profile crane systems, monorails, and carbon fiber arms are examples of how we provide our users with innovative answers to challenging airport environments.

HOW MUCH CAN YOU LIFT?

Did you know that a baggage handler lifts at least 6 tons of baggage per shift? This represents 5 Mini Coopers every day!

The Vaculex® is an innovative way to take control of baggage handling. The benefits users reports include reduced injuries, improved working environment and increased efficiency.

Isn't it time to take control of the baggage?



"Since we installed Vaculex equipment we have reduced our sick leave by 50%."

Matthew Pyne –
Station Attendant, Air Canada, Halifax

Flexible solutions for any environment

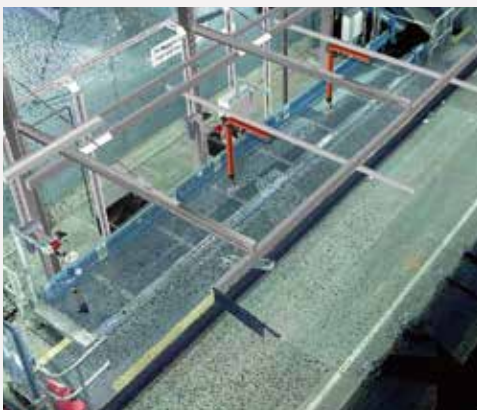
Show us your terminal, and we will help you find a suitable solution!

The flexibility of the Vaculex® products means that we can overcome many of the physical constraints that occur in any cruise terminal - or airport baggage hall. Whether retrofitting into an existing terminal or planning for a new building we can offer solutions that will adapt to the existing or required infrastructure.

We make sure to understand the customers processes and often work closely with integrators and architects. We take responsibility of the design – and the earlier we get involved in a project, the better the outcome.

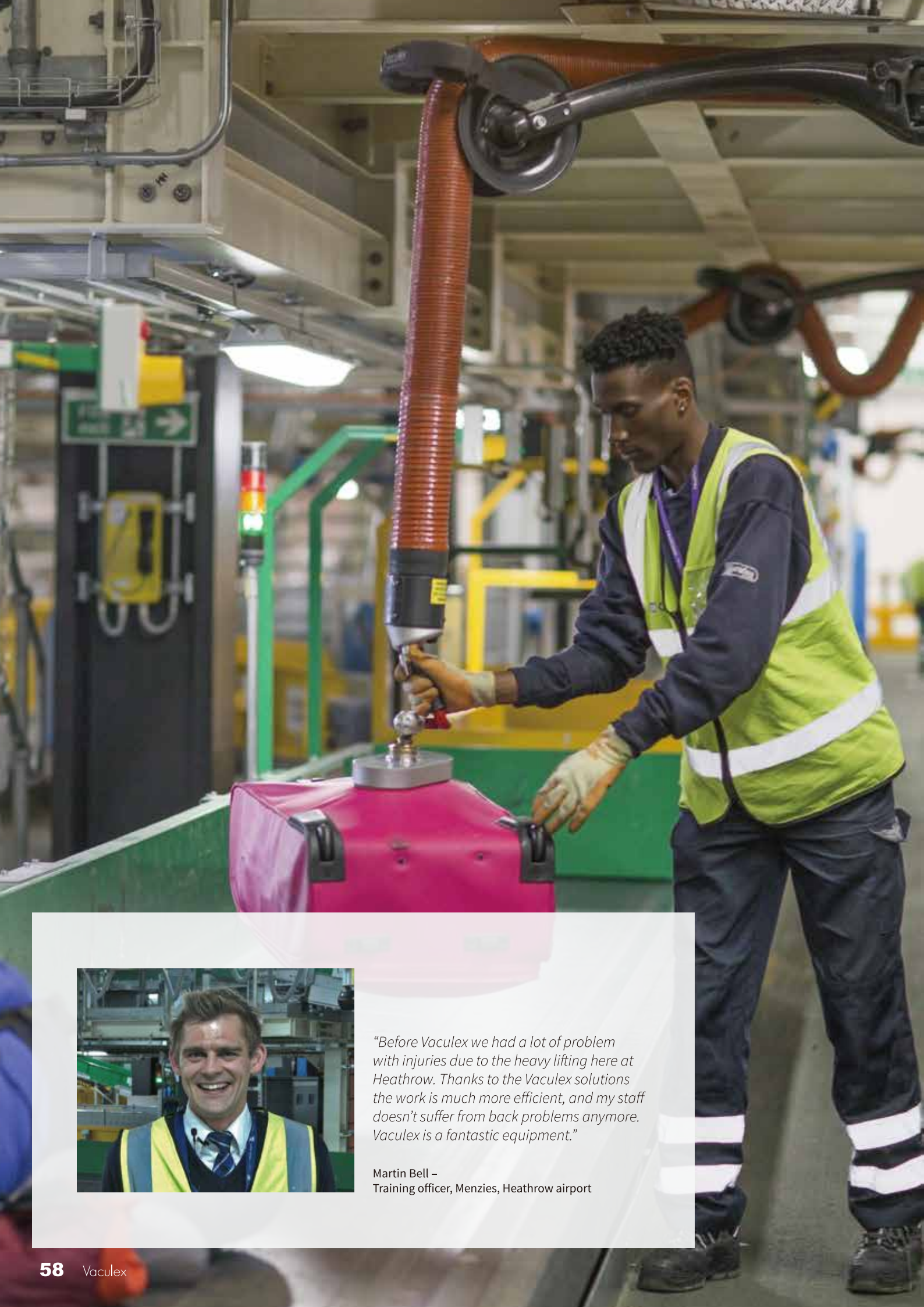
International hubs, domestic or regional airports, all will experience baggage handling challenges - and whether there are open carts or ULDs (e.g. AKH, AKE) - our solutions are just as relevant. Arrival, make up area, transfer, re-flight, out of gauge (OOG/oversized), security check or baggage reconciliation: these are examples of areas where Vaculex® BaggageLift will do the work for you.

With our help the baggage handler gets the best solution that is easy and above all – safe to work with.



Piab's design engineers develop solutions in collaboration with customers, integrators and architects whether these systems are retrofitted or specified into a baggage system from the outset. To ease this process, we use 3D design packages such as SOLID WORKS, NAVIS or REVIT which enable efficient project coordination with design team members. The earlier we can become involved in a project, the better the outcome - space can be safeguarded and the solution less compromised benefitting the end-user.





"Before Vaculex we had a lot of problem with injuries due to the heavy lifting here at Heathrow. Thanks to the Vaculex solutions the work is much more efficient, and my staff doesn't suffer from back problems anymore. Vaculex is a fantastic equipment."

Martin Bell –
Training officer, Menzies, Heathrow airport

We make your work easier

Before, during and after the purchase



BEFORE

By understanding your needs, we design a solution that adapts to the challenges of your operation and infrastructure. Learning about our customers' business and challenges are important to us. Therefore, our solutions are carefully developed using the latest technology in cooperation with the industry and the end users.



DURING

A happy customer is crucial to us. With almost two decades of experience in the aviation industry our dedicated team of professionals have developed a deep knowledge and understanding for the stakeholders' needs to maximize user happiness, efficiency and safety.



AFTER

Your satisfaction is our responsibility. For us a continuous high level of usage of your Vaculex equipment is crucial. Completion of the Vaculex is just the beginning. Our training programs includes practical training, participation and follow up and helps us achieve ambitious usage level targets. Our after sales team work closely with all stakeholders to assure a high operational usage level – creating end-user happiness, safety and efficiency.



"Baggage is such an important thing for the passenger. And with the Vaculex solutions we really can improve what we do. For me, the most important thing is that my staff comes home fit and safe. Introducing manual handling devices is the way forward."

Darren Constant –
Head of airside operations, Menzies, Heathrow airport

Baggage handling for cruise terminals

Ceres implements innovative baggage handling system at Port Canaveral

Port Canaveral's direct access to the Atlantic Ocean makes it an attractive port for the world's most prestigious cruise lines. Ceres Cruise Services provides stevedoring to the major cruise lines calling the Port.

Before Oasis of the Seas began sailing from Port Canaveral, Ceres Terminals took the initiative of installing the Vaculex® system curb side to load baggage onto the conveyor belts and inside Cruise Terminal. "Our Vaculex system has operated flawlessly" and I believe our Vaculex Baggage lifters will be paid back within 3-5 years, through reduced sick leave costs", according to Tim Touzet, Vice President Florida Cruise Operations.

The ILA union's local chapter has been extremely happy with the Vaculex solution as it significantly reduces the risk for back injuries, Tim continues.



"Because of the success in the first terminal the units were installed in, we are going to install 16 more units in the baggage handling room in the new terminal 3, scheduled to open June 2020. We expect the units will help our staff with consistent luggage movement that does not cause the worker to overextend their bodies," says Tim Touzet, Vice President Florida Cruise Operations.







Unloading trucks and containers



Unloading trucks and containers

Vaculex ParceLift – is a unique and ergonomic vacuum lift designed for unloading loose loaded cargo into trucks and containers.

Vaculex ParceLift handles a great variety of parcels in size, shape and weight. Vaculex ParceLift is dedicated to fit a Caljan belt conveyor.

Vaculex ParceLift sense the height of the ceiling and adjust for the optimal height. Vaculex ParceLift is easily managed and your working speed and productivity are maintained or in many cases increased, which is usually the contrary when using a lifting aid.

Typical users within this segment are logistics, transportation, warehouses, mail order, air cargo and other businesses where frequent and fast lifting takes place.



Vaculex

Vaculex develop purpose built vacuum lifts for industries with high demands on ergonomics and productivity.

Read more at www.vaculex.com

World Wide Customers

TOYOTA • HYUNDAI • DAEWOO • MIT-SUBISHI • AIWA • CHRYSLER • GATEWAY 2000 • HITACHI • SAAB • PHILIPS • SANDVIK • SONY • VOLVO CARS • APPLE • DAHU ELECTRONICS • IBM • GENERAL MOTORS • NIPPON PAINT • BERENDSEN • SANYO • TEXAS INSTRUMENT • VOLVO TRUCKS • ABB • DUPONT • ICI PAINTS • PANASONIC • RENAULT • SCANIA • TOSHIBA • WESTERN DIGITAL • COMPAQ • DELL • HEWLETT-PACKARD • ERICSSON • PEUGEOT • SIEMENS • ANHEUSER-BUSCH • NISSAN • TNT • PROCTOR & GAMBLE • DHL



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Vaculex ParceLift™ – faster, smoother loading and unloading

Versatile, ergonomically designed and easy to operate, the Vaculex ParceLift™ increases productivity and efficiency when loading and unloading loose loaded cargo into/out of trucks and containers.



The Vaculex ParceLift™ offers several defining benefits. It can handle a great variety of packages in terms of size, shape and weight, up to 40 kg. It can be fully integrated into many types of telescopic conveyors both factory-fitted or retrofitted at the customer's premises. Furthermore, it maximises working height by sensing the headroom available and adjusting itself automatically, making it the ideal solution for working in confined spaces with limited headroom.

When it comes to operating, the Vaculex ParceLift™ has been designed to create the optimal working experience. It allows the user to grip an item from any side, turn it 360° and release it as required. In addition, it has been created for easy, intuitive operation and requires minimal training.

Easy to use, optimised productivity and less risk of

injury - if you are in the logistics, transportation, warehouse, mail order, air cargo or any other businesses where frequent and fast lifting activities take place, the Vaculex ParceLift™ has the power to make a real difference to your daily operations.

Benefits

- Excellent ergonomics
- Increases productivity
- Improves efficiency
- Reduces the risk of injury
- Reliable and safe
- User friendly, easy operation

Technical specification – Vaculex ParcelLift™

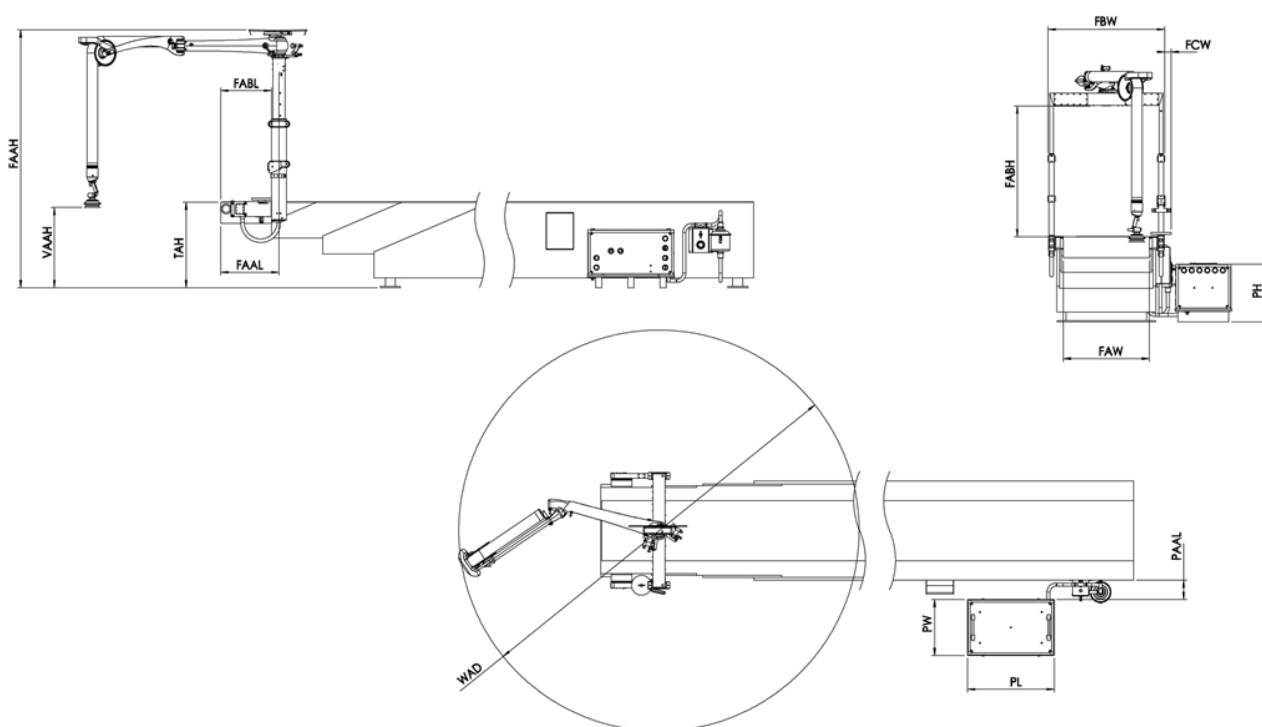
Vaculex ParcelLift™ Crane, Frame and Lift Unit

Recommended max load	40 kg
Safety factor (Attachment force/Lifting force)	min 2.3
Suction foot dimension*	Ø150 mm
Crane weight	8.8 kg
Lifter weight	5.8 kg
Total weight	76 kg
Sound level 1 m from control handle	54-65 dBA

Vaculex ParcelLift™ Pump Unit

Power	2.4 kW 50Hz / 3.0 kW 60 Hz
Voltage	190-255/330-440 V at 50 Hz 190-290/330-500 V at 60 Hz
Pump Unit weight	107 kg
Sound Level 1 m from Pump unit	63 dBA

*Several alternative suction feet are available



Dimension (mm)

Model	WAD	FAW*	FBW	FCW	VAAH*	TAH*	FAAH*	FABH	FAAL	FABL	PL	PW	PH	PAAL
ACF0860		860	1161											
ACF0906		906	1227		Max		Max	Max						
ACF1060		1060	1427		1860		2515	1308						
ACF1106	4000	1106	1427	56	Min	800	Min	Min	601	528	870	560	575	min 300
ACF1260		1260	1627		1630		2043	836						
ACF1306		1306	1627											

* Depending on the dimensions of the telescopic conveyor belt

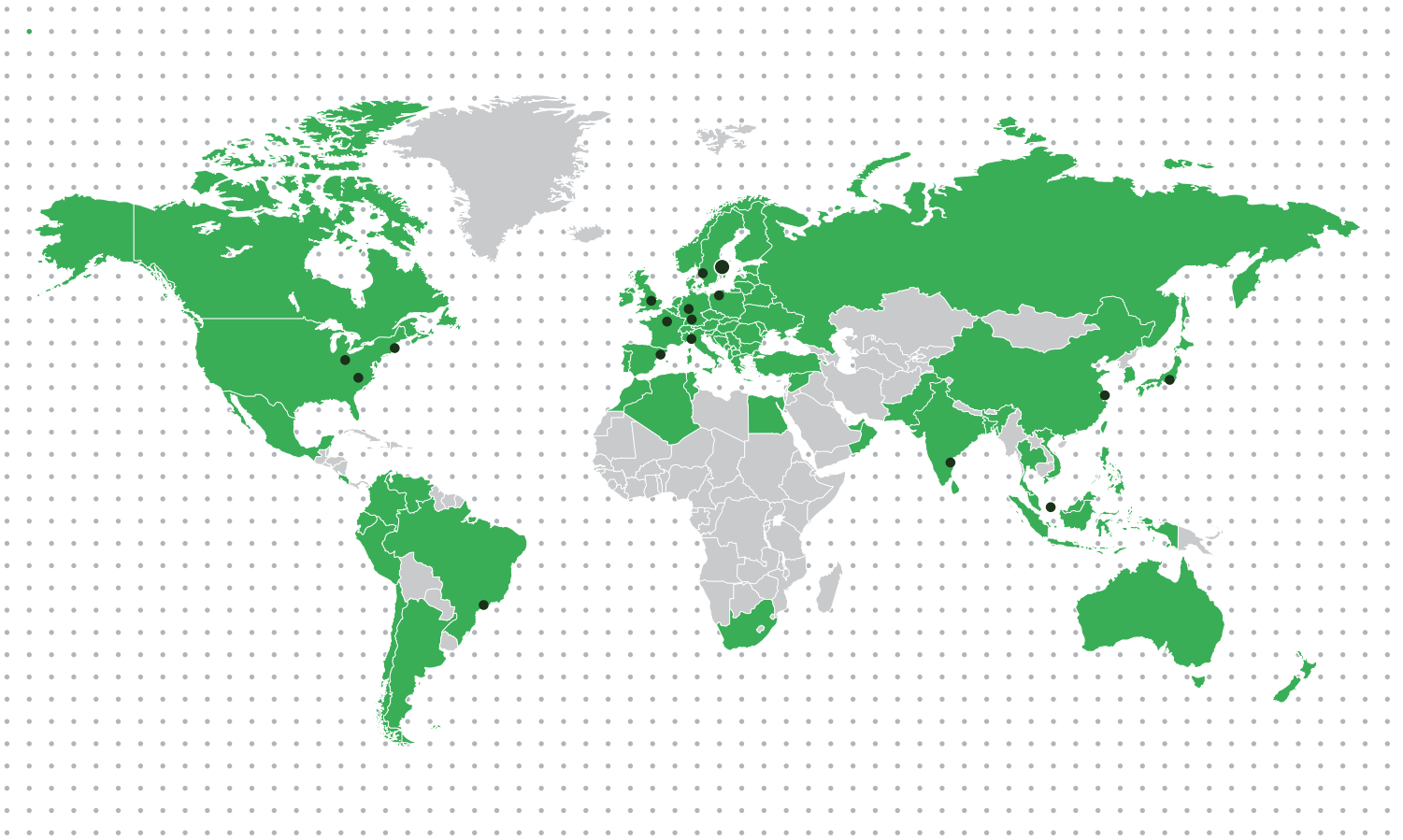


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Smart solutions for the automated world™

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YouTube 에서 “PIAB”를 검색해 보세요 !

Smart solutions for the automated world™

