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TM PEDANE was born in the 90s as a manufacturer of ramps for loading/offloading. A combination of product efficiency, workers' skills and innovative solutions brought us in time to a position as a global market driver, leader in national and international aluminum and steel dock equipment markets.



TM PEDANE can provide a wide range of products, focusing on the goal of improving efficiency of goods, vehicles and people flow and providing a long time experience in this field. Being an old-timer in industrial logistics, the company can ensure vanguard service, with top quality assistance.



20 years experience brought a complete portfolio of products, including dock levelers, rapid doors, dock shelters up to complex safety wheel-blockers. These innovative solutions, together with top level consulence, ensure a solution to every request.





## **OUR SERVICES**



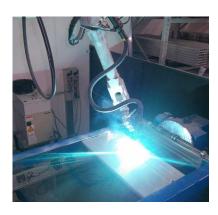
## **R&D AND INNOVATION**

Our technicians keep increasing products efficiency and performances, developing more and more innovations for cutting-edge logistics.



## **TECH**

Our personnel's know-how in welding, robot and cutting avant-garde machinery allow high quality standards and top excellence in production.



## **CONSULTANCY**

Our expert consultants provide customers with the best solution to reduce risks and ensure top performance for trafic in logistic areas, for efficient and smart loading/offloading.



## **MAINTENANCE**

Entrusting loading bays maintenance to our professionals, more than a law obligation, is the key factor to keep your products efficient, safe and long-lasting.



## **ECO-SUSTAINABILITY**





LCA is key to evaluating the environmental impact of aluminium products.



## ECO-FRIENDLY PRODUCTS AND PROCESSES

TM PEDANE has been a forerunner for sustainable consumption for several years, using aluminum as the key factor of their whole production.

Aluminum products have a smaller environmental impact than all others thanks to recycling credits and long life expectation of its products.

All aluminum products require less energy for production and maintenance during their lifecycle, thus affecting much less than other materials our GWP (global warming potential).

Its **endless recycling process** doesn't wear or alter any physical or chemical feature, this means a positive effect on environment, reducing by 95% the energy consumption used by mining materials supply chain.



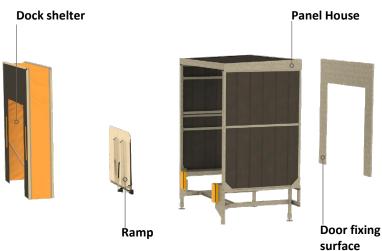
# ZERO

ZERO is a very innovative conception of loading bays, based on these key principles:

- ZERO MASONRY WORKS
- ZERO ENERGY CONSUMPTION
- ZERO BIG INSTALLATION COSTS
- ZERO INDOOR MAINTENANCE
- ZERO PROBLEMS







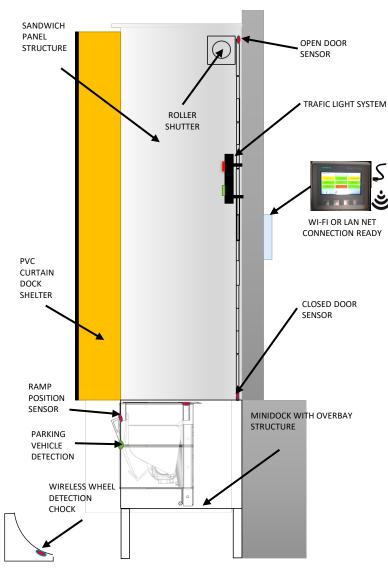
In particular, thanks to an INNOVATIVE PRE-ASSEMBLED AND FOLDABLE COVERING STRUCTURE, it is possible to DELIVERY A COMPLETE LOADING POINT WITH RAMP, FRAME AND COVERING, READY TO BE RAPIDLY AND EASILY MOUNTED ON SITE.

ZERO was created as a LOADING POINT WITHOUT ENERGY CONSUMPTION, thanks to its configuration with manual vertical ramps or miniramps, this means NO MASONRY PREDISPOSITIONS are needed, above this ZERO REQUIRES NO EXTRA COSTS FOR INSTALLATION AND MAINTENANCE OF ELECTRO-HYDRAULIC SYSTEMS.

Thus, this system is FULLY GREEN, EFFICIENT, CHEAP AND EASILY MANAGEABLE.

## 4.0 INDUSTRY





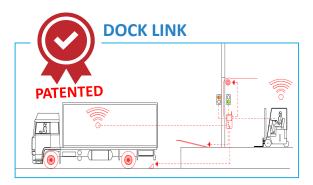
## **FUTURE IN LOGISTICS**

4.0 industry in loading bays means that every loading point can be monitored in order to analyze workflows.

Thanks to door/ramp/truck detection sensors it is possible to have realtime feedback for all loading/offloading phases and avoid all stops with immediate interventions.

TM Pedane 4.0 system can count door/ramp work cycles and timing, thus **detecting ordinary maintenance time**.

PLC and sensors detection, if connected to specific company software, can provide full access to all info needed, for company workflows management and analysis.



## **SAFETY**





**FALL FROM HEIGHT:** One of the worst and most frequent risks in loading/offloading areas is falling dowin from bay edge. This can be caused by slippery surfaces, open doors, sudden truck leaving or simply carelessness.

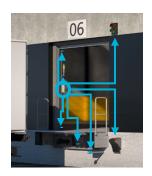


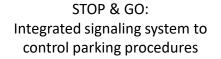
**CRUSHING:** Another common risk with heavy consequences. Trucks parking back have reduced visual range and many blindspots, people might get caught between vehicle and loading bay.

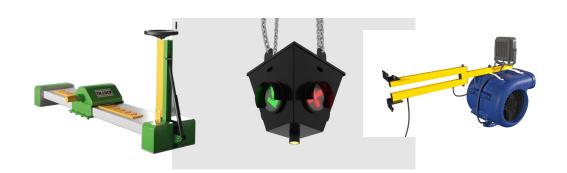


SUDDEN VEHICLE LEAVING ITS PARKING: Above previously mentioned dangers, a huge risk is forklifts fall due to vehicles unexpectedly leaving its parking place. This can be caused by driver's carelessness while turning on the engine, or even by vehicle movements during loading/offloading phases and forklifts passages

## **OUR SOLUTIONS FOR PARKING SAFETY**







TM.LOCK innovative manual wheelblock

XR Warehouse trafic signaling system

B360 Truck box ventilation and lighting systems





## **HOW TO CHOOSE: CAPACITY**

UNI EN 1398: STANDARD ON DOCK LEVELERS considers 3 different definitions of load:

#### 1.Nominal load

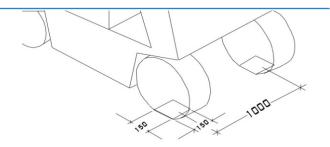
It's the simple total weight of what's passing over the ramp, so the sum of LOADING MEANS + OPERATOR + GOODS.



#### 2.Axle distributed load

Nominal load is considered by the load as a DISTRIBUTED LOAD on a vehicle with defined a WHEELAXLE of Forklift wheels. This load is calculated for 2x TRACKS with a contact surface of 150x150mm and an interaxle of 1 meter.

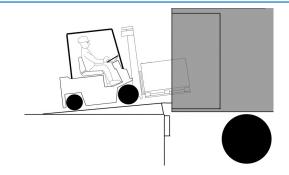
BEWARE: SINGLE OR COUPLE BACKWHEELED VEHICLES are a CONCENTRATED load, this means a 60% CAPACITY REDUCTION on the ramp (see point 7)



## 3. Dynamic load

Dynamic load is a ratio between nominal load and pressure on ramp, caused by passage of forklift. All of our ramps are certified according to UNI EN 1398 considering dynamic load, this means they have a DYNAMIC COEFFICIENT CALCULATED ACCORDING TO THE LAW, this is the main difference with US expressed capacities of ramps.

BEWARE: DYNAMIC LOAD IS AFFECTED BY SPECIFIC SLOPE LIMITATIONS OF EACH LOADING MEANS, PLEASE FOLLOW INDICATIONS ON POINT 6 TO COMPLY WITH STANDARD CAPACITY LIMITATION



## 4.Expressed certified capacity: UNI EN 1398:2009 vs ANSI STANDARD 30.1/2:2015(USA)

Choosing the correct product according to its capacity implies acknowledging that our loading ramps are compliant to UNI EN 1398 EUROPEAN STANDARD, which considers always DYNAMIC LOAD as the main parameter to identify the capacity of a leveler, as ENGINEERING MUST ALWAYS IMPLY A SAFETY DYNAMIC COEFFICIENT. On the contrary, ANSI US STANDARDS and indications to american dock equipment producers (like LODEM association) clearly GIVE THE RESPONSIBILITY OF CONSIDERING AN EXTRA SAFETY DYNAMIC COEFFICIENT OF 2.5 TO CUSTOMERS. Here below we show an example to clear out this important difference in choice of ramps:

Forklift weight 3.600 kg
Goods weight 1.500 kg
Driver weight 100 kg
Total weight/nominal load 5.200 kg

Correct capacity of ramp according to UNI EN 1398
Correct capacity of ramp according to ANSI STANDARD MH30.1/2

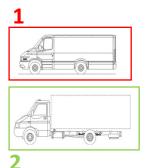
6.000 kg / 60 KN 30.000 lbs = 13.500 kg / 135 KN

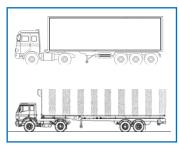
## **HOW TO CHOOSE: RAMP MODEL**

## 5.Width -> WHICH VEHICLE TYPE WILL BE LOADED/OFFLOADED?

TM loading ramps choice is generally divided in 3 DIFFERENT WIDTHS:

- 1250MM = PERFECT FOR SMALL VEHICLES (VANS SUCH AS DUCATO/SPRINTER...) or usage in PAIRS ON BIG TRUCKS/TRAILERS
- 1650MM = PERFECT FOR BIGGER VANS OR SMALL TRUCKS (BOXED/OPEN/CURTAIN SIDE VANS SUCH AS DAILY/EUROCARGO...)
- 3. 2000-2200MM = BIG TRUCKS/TRAILERS/CONTAINER TRUCKS





3

## 6. Length -> MAX SLOPE AND DIFFERENCE OF HEIGHT TO OVERCOME

The choice of a ramp length implies considering the maximum difference of height between truck floor and loading bay level. Above this, it's important to consider which loading means is to be crossing it and each specific max slope allowed.

LOADING MEANS MAX SLOPE

Caged trolley3%Manual transpallet3%Electric transpallet7%Battery forklift10%Diesel fuelled forklift12.5%

#### LENGTH CALCULATION

Minimum length of the ramp (mt) = difference of height (cm) / max allowed work slope (%)

#### 7. PARTICULAR LOADING MEANS

The choice of a correct and suitable ramp for customer's type of work must imply considering whether they are about to use it with TWO SPECIFIC LOADING MEANS TYPES:

- VERY LOW MEANS FROM GROUNDFLOOR and/or SMALL WHEELED MEANS, such as TRANSPALLETS WITH MAN STANDING ON BOARD require a REDUCED SLOPE (see point 6) and are not compatible with some ramps (those with bent lips or hook sliding system)
- 2. SINGLE OR COUPLED BACKWHEEL MEANS are a concentrated load and require capacity adaptations (see point 2)



LOW MEANS: NO BENT LIPS and HOOK SLIDING SYSTEM, REDUCED SLOPE



SINGLE OR COUPLED BACKWHEEL MEANS: STRUCTURE EXTRA REINFORCEMENT

#### 8. TYPE OF LOADING BAY

TM ramps can be supplied for many types of installation:

- INSIDE CONCRETE, IN ALREADY PRE-CAST PITS (NEW OIL TSL BAG)
- 2. INSIDE CONCRETE, TO BE POSITIONED BEFORE CONCRETE CASTING (OIL MRXXXXXXXX-BOX)
- OVERBAY, TO BE WELDED TO PRE-EXISTING ANGULAR PROFILES TO THE CORNER OF THE BAY (all fixed manual ramps, MRxxxx-STD, sliding ramps on steel rail type TR/GAS.GF3000, hydraulic dock levelers with overbay structures)
- 4. OVERBAY, TO BE SCREWED TO CONCRETE CORNER: point 3 + OPTIONAL STEEL ANGULAR PROFILE or SLIDING ON TR/GAS.GA3000 ALUMINUM RAILS

## **HOW TO CHOOSE: GENERAL PRESCRIPTIONS**

#### 9. LAYING SURFACE

UNI EN 1398:2009 standard imposes a **MINIMUM LAYING SURFACE OF RAMP ONTO TRUCKFLOOR OF 100MM**, <u>it is at customer's charge to CHECK THAT PROTECTION STRUCTURES AND BUMPERS given as ramp accessories + ANY EVENTUAL TRUCK BUMPER OR DISTANCING ELEMENT (STEEL PARTS, STAIRS or TRUCKFLOOR RECESS) GUARANTEE SUCH LAYING SURFACE, TM Pedane engineers ramps for USAGE IN A STANDARD CONDITION WITH UNRECESSED TRUCKFLOOR + 100MM DEEP TRUCK BUMPERS, ANY DIFFERENT CONDITION REQUIRES TAILORED ADAPTATIONS AND/OR PARTICULAR RAMPS, TO BE CONSIDERED AND DISCUSSED BEFORE THE QUOTATION</u>

#### 10. ADHERENCE OF LIP TO TRUCKFLOOR

All TM loading ramps are engineered with a specific BENT-CURVED LIP, IN ORDER TO PROVIDE SUITABLE LAYING SURFACE IN ALL CONDITIONS WITHIN SLOPE LIMITATIONS GIVEN BY THE LAW, BOTH IN POSITIVE AND NEGATIVE SLOPE, it will be up to customer to verify:

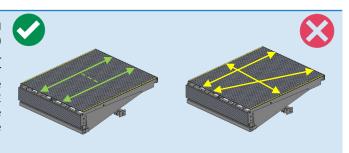
- 1. COMPLIANCE OF CURVED LIP WITH SPECIAL MEANS (see point 7)
- 2. PERFECT COPLANARITY (absence of slope anomalies in width) and PERPENDICULARITY (truck at 90° angle with loading bay) OF LOADING BAY AND TRUCKFLOOR, in order to avoid any PARTIAL LAYING or TORSIONS DANGER for ramps and loading means.

#### 11. FLOATING USAGE

As specifically mentioned by UNI EN 1398:2009 standard, ramps must work in FLOATING CONDITION, that is to say they MUST FOLLOW TRUCK SURFACE HEIGHT ADJUSTMENTS DURING LOADING/OFFLOADING, this means ANY DIFFERENT USAGE IS FORBIDDEN, for instance blocking the ramp in emergency mode by pushing the emergency button and/or use ramps onto tail lift plates, etc...

#### 12. PASSAGE ON RAMPS

TM loading ramps are made to work EXCLUSIVELY WITH CENTRAL PERPENDICULAR (considering loading bay wall) PASSAGE, with a DISTRIBUTED LOAD ON TWO PARALLEL TRACKS. Any TRANSVERSAL, DIAGONAL, UN-CENTERED or CONCENTRATED (see point 2) PASSAGES will require STRUCTURAL ADAPTATIONS OR SPECIAL TAILORMADE RAMPS, these special conditions will have to be communicated by customers and discussed before quotation, being beyond standard ramp specifications.

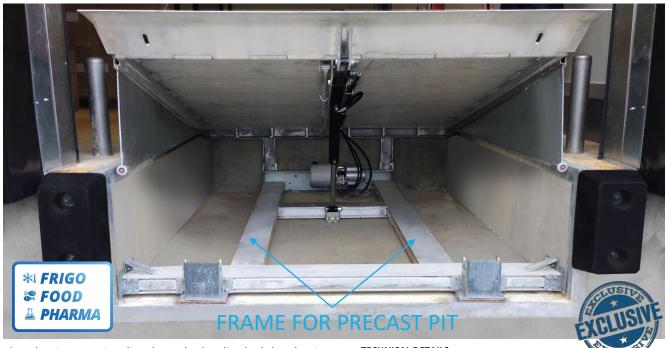






**ELECTROHYDRAULIC DOCK LEVELERS** 

# ALUMINUM ELECTROHYDRAULIC DOCK LEVELER model NEW OIL STANDARD — swing lip / precast pit

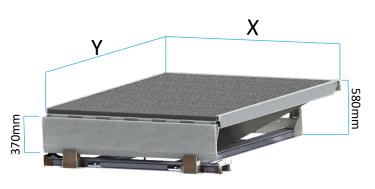


The aluminum swing lip electrohydraulic dock leveler is an exclusive TM product, perfect for CLEAN ENVIRONMENTS, more particularly for FRIGO – FOOD – PHARMA industries.

Aluminium levelers are:

- TOTALLY RUST-FREE
- LOW MAINTENANCE
- RECYCLABLE

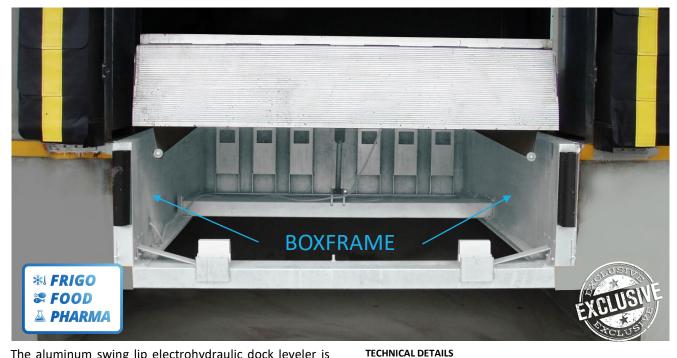
New Oil Standard version is ENGINEERED FOR INSTALLATION INSIDE PRECAST PIT AFTER CONCRETE CASTING, it is FOLDABLE FOR A CHEAPER TRANSPORTATION and it's simple to install into pit.



CAPACITY	60 kN (6T)
PLATE	H40mm aluminium extruded profiles
MAX. CONCENTRATED LOAD ON PLATFORM	1,3 N/mm²
LIP MATERIAL AND LENGTH	Aluminium: 370mm (optional) Steel: 400mm
CONTROL PANEL PROTECTION CLASS	IP54
MIN/MAX TEMPERATURE OF OIL	Da -20°C a +60°C
ACTIVATION	Electrohydraulic: 24 V/DC 18W S1
NOMINAL POWER FEEDING	400V Threephase 50Hz
NOMINAL MOTOR POWER	0,75 kW
EUROPEAN STANDARD	EN 1398 Dock Levelers

CODE	X mm	Y mm	H+/-	WEIGHT (Kg)
NEW150A-ALL	1650	1400	240	200
NEW200A-ALL	1650	1900	300	250
NEW250A-ALL	1650	2400	360	330
NEW300A-ALL	1650	2900	430	400
NEW150B-ALL	2000	1400	240	220
NEW200B-ALL	2000	1900	300	280
NEW250B-ALL	2000	2400	360	400
NEW300B-ALL	2000	2900	430	500
NEW150C-ALL	2200	1400	240	260
NEW200C-ALL	2200	1900	300	320
NEW250C-ALL	2200	2400	360	450
NEW300C-ALL	2200	2900	430	590

## ALUMINUM ELECTROHYDRAULIC DOCK LEVELER model OIL – swing lip / with boxframe



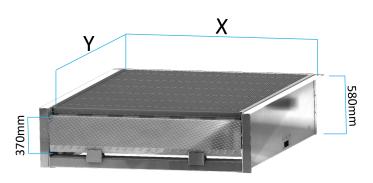
The aluminum swing lip electrohydraulic dock leveler is an exclusive TM product, perfect for CLEAN ENVIRONMENTS, more particularly for FRIGO - FOOD -PHARMA industries.

Aluminium levelers are:

- **TOTALLY RUST-FREE**
- LOW MAINTENANCE
- **RECYCLABLE**

OIL version is ENGINEERED WITH GALVANIZED STEEL BOXFRAME FOR INSTALLATION BEFORE CONCRETE CASTING, faster transportation and easy mounting.

CAPACITY	60 kN (6T)
PLATE	H40mm aluminium extruded profiles
MAX. CONCENTRATED LOAD ON PLATFORM	1,3 N/mm²
LIP MATERIAL AND LENGTH	Aluminium: 370mm (optional) Steel: 400mm
CONTROL PANEL PROTECTION CLASS	IP54
MIN/MAX TEMPERATURE OF OIL	Da -20°C a +60°C
ACTIVATION	Electrohydraulic: 24 V/DC 18W S1
NOMINAL POWER FEEDING	400V Threephase 50Hz
NOMINAL MOTOR POWER	0,75 kW
EUROPEAN STANDARD	EN 1398 Dock Levelers



CODE	X mm	Y mm	H+/-	WEIGHT (Kg)
OIL150A-ALL	1650	1400	240	270
OIL200A-ALL	1650	1900	300	350
OIL250A-ALL	1650	2400	360	450
OIL300A-ALL	1650	2900	430	550
OIL150B-ALL	2000	1400	240	290
OIL200B-ALL	2000	1900	300	390
OIL250B-ALL	2000	2400	360	500
OIL300B-ALL	2000	2900	430	620
OIL150C-ALL	2200	1400	240	320
OIL200C-ALL	2200	1900	300	430
OIL250C-ALL	2200	2400	360	540
OIL300C-ALL	2200	2900	430	680

# ALUMINUM TELESCOPIC LIP DOCK LEVELER model TSL-ALL

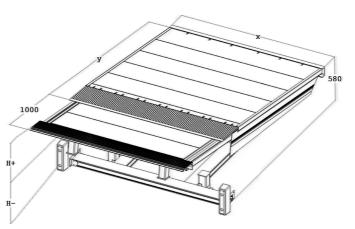


The exclusive aluminium telescopic lip dock leveler is perfect for CLEAN ENVIRONMENTS in FOOD – PHARMA – COLD INDUSTRY, especially if combined with RECESSED PIT configuration, with sectional door closing in front of the leveler.

Above this, the aluminium version can provide a SMOOTHER PASSAGE FROM PLATE TO LIP and a BETTER FLEXIBILITY. TSL ramps can be supplied with a DISTANCING STRUCTURE TO CREATE AN ANTI-CRUSHING SAFE ZONE.



EXT2 (optional)
Couple of safety distancing frames to create an anticrushing safe zone



TECHNICAL DETAILS	
NOMINAL LENGTH	2500, 3000 mm
NOMINAL WIDTH	2000, 2200 mm
CAPACITY	60 kN (6 T)
PLATE	H40mm Aluminum extruded profiles
MAX. CONCENTRATED LOAD ON PLATFORM	1,3 N/mm²
LIP MATERIAL AND LENGTH	ALUMINUM EXTRUSION: 1000 mm
CONTROL PANEL PROTECTION CLASS	IP54
MIN/MAX TEMPERATURE OF OIL	From -20°C to +60°C
SOLENOID VALVES	24 V/DC 18W S1
NOMINAL POWER FEEDING	400V Threephase 50Hz
NOMINAL MOTOR POWER	0,75 kW
EUROPEAN STANDARD	EN 1398 Dock Levelers

CODE	X mm	Y mm	H+/-	WEIGHT (Kg)
TSL250B-ALL	2000	2500+1000L*	440/425	650
TSL300B-ALL	2000	3000+1000L*	500/425	690
TSL250C-ALL	2200	2500+1000L*	440/425	700
TSL300C-ALL	2200	3000+1000L*	500/425	750

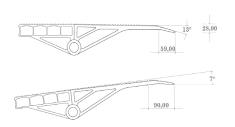
<sup>\*</sup> L = Lip

## Lip alternative versions

#### LIP TYPES

## Standard aluminium lip

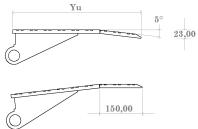
Standard aluminium lip can guarantee TOP FLEX-TORSION AND FITTING TO SLOPING SURFACES, moreover piano hinge cutting ensures a CLEAN ROTATION POINT WITH NO BREAKABLE HINGES



## Standard galvanized steel lip

Standard galvanized steel lip is more robust and rigid, thus MORE RESISTANT TO IMPACTS AND EXTREME WORK CONDITIONS.

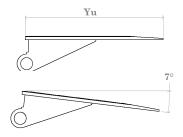
5° inclination allows the ramp to work **BOTH IN NEGATIVE AND IN POSITIVE SLOPE**, complying with UNI EN 1398:2009.



NEW/OIL/BAG-HG Yu = 400mm MR: Yu = 400mm

## Flat galvanized steel lip

Flat galvanized steel lip is engineered without curves, thus PERFECT WITH SMALL WHEELED OR LOW VEHICLES, where bent lips can cause bumps, lack of curving anyway means that USAGE IS LIMITED TO NO SLOPE OR ONLY NEGATIVE SLOPE WITH TRUCKS LOWER THAN BAY.



NEW/OIL/BAG-HG Yu = 400mm MR: Yu = 400mm

#### LIP CUTS

#### **SIDEFLAPS**

Lip cutting with sideflaps leaves a CENTRAL ELEMENT WITH SUITABLE WIDTH TO LAY ONTO NARROW VEHICLES (such as VANS) and SIDEFLAPS WITH AUTOMATIC CLOSURE. This solution is standard for 2200mm wide ramps.

#### **BEVELED LIP**

As an alternative to sideflaps cut, the lip can be beveled at 45° or cut at 90°, in order to reduce laying surface for USAGE WITH NARROWER MEANS (such as VANS) KEEPING THE INTEGRITY OF THE LIP.

#### **SEGMENTED LIP**

Segmented lip cutting is a special solution, usually INDICATED WITH EXTREMELY SIDE SLOPING LOADING BAYS, in order to let the ramp adhere as much as possible to the truckfloor, and to avoid uncorrect positioning.









## Installation inside pit

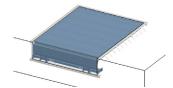
## CT angular cornerframe

In case of **CLOSED PRECAST PITS**, the pit must be protected and reinforced by metal to its corners, that is to say a **CORNERFRAME WITH TANGS CAST INSIDE CONCRETE (code CT-xxxxxxxx)** 

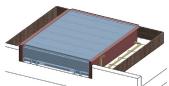
## BF boxframe

In case of INSTALLATION BEFORE CONCRETE CASTING, ON CONCRETE BASEMENT, the ramp can be equipped with a <u>GALVANIZED STEEL SHEET BOXFRAME WITH TANGS</u>, to be sent possibly also before the ramp itself, during building completion phases (code BFxxx)



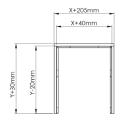


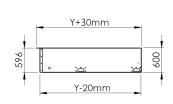






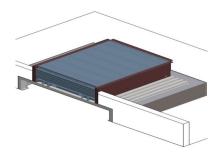


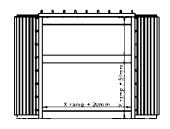


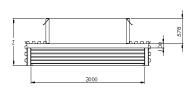


## **VS Tailboard housing frame**

In case of **OPEN PITS TO BE DONE BEFORE CONCRETE CASTING**, the ramp with boxframe can be equipped also with a **SPECIFIC HOUSING FRAME IN CORRUGATED SHEET FOR THE TRUCK CANTILEVER TAIL LIFT PLATE** (code VSxxx)







CODE CORNERFRAME	CODE BOXFRAME	CODE TAILBOARD HOUSING FRAME	COMPATIBLE RAMP
CT150A/B/C	BF150A/B/C	VS150A/B/C	NEW150A/B/C-ALL
CT200A/B/C	BF200A/B/C	VS200A/B/C	NEW200A/B/C-ALL
CT250A/B/C	BF250A/B/C	VS250A/B/C	NEW250A/B/C-ALL – TSL250B/C-ALL
CT300A/B/C	BF300A/B/C	VS300A/B/C	NEW300A/B/C-ALL – TSL300B/C-ALL

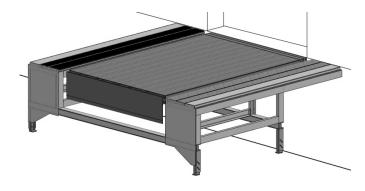
## Installation outside bay: overbay structures

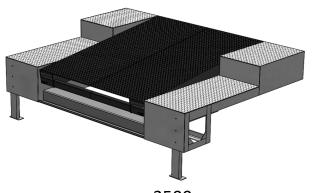
## **XB Standard overbay structure**

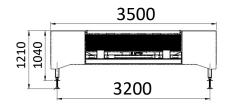
In case of OVERBAY installation, XB metal structures can provide GROUND ADJUSTABLE FEET and a wide passage surface with SIDE FOOT PASSAGE FOR OPERATORS.

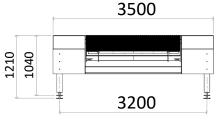
## XBI inclined overbay structure

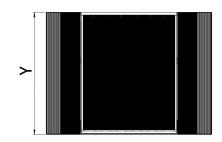
XBI version is SPECIFICALLY ENGINEERED FOR INCLINED INSTALLATION OF TELESCOPIC LIP DOCK LEVELERS with SIDESTAIRS TO HOST TRUCKDOORS TO BE OPENED ONCE TRUCK IS ALREADY PARKED. This configuration allows MINIMUM HEAT/REFRIGERATION LOSS during parking procedures.

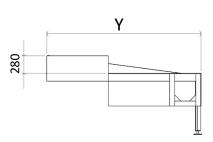












Both overbay structure types are available in 4x alternative versions.



CODE XB	COMPATIBLE RAMP	Υ	CODE XBI
XB150	NEW150	1500	-
XB200	NEW200	2000	-
XB250	NEW250 - TSL250	2500	XBI250
XB300	NEW300 - TSL300	3000	XBI300



## PANEL HOUSE: external loading points



DOCK HOUSES are made with steel frames with adjustable ground feet, suitable with any streetfloor surface.

They can be combined with any type of electrohydraulic dock levelers or miniramps. The loading point is usually completed by a dock shelter, being it curtain, cushion or inflatable type. The overbay structure can be equipped with dock bumpers.

**Standard covering frame is made by sandwich panels,** perfect for top noise/weathering insulation and protection.

The last ingredients to complete your loading bay are industrial doors and loading bay accessories (wheel chocks, lighting, trafic lights, detection sensors).

CODE	COMPATIBLE OVERBAY STRUCTURE	Υ
PH150	XB150	1500
PH200	XB200	2000
PH250	XB250	2500
PH300	XB300	3000

Dock House systems are pre-built structures to be installed as new added loading points without any construction intervention on logistic warehouses.

These structures do not occupy any indoor space and guarantee **top energy saving**, as the building can be efficiently closed and sealed behind them, leaving them outside.

DOCK HOUSES are engineered to be tough and resistant to any wind force and snow weight. Above this they are equipped with vertical water drainage systems and several covering structures.



A special **PH-COLD version for FULL COVERING**, combinable with INFLATABLE DOCK SHELTERS and DOOR CLOSING BEYOND THE DOCK LEVELER for COLD WAREHOUSES is also available on request.

#### **Available in 4 VERSIONS**







## PAINTED STEEL MINIRAMPS

## models MR-ACC



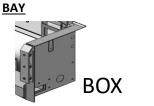
Painted steel miniramps are a PERFECT SOLUTION FOR STANDARD LOADING BAYS WITH MODERN TRUCKS, that is to say for VERY SMALL DIFFERENCES OF HEIGHT. Their ROBUST STRUCTURE in painted steel is PERFECT FOR ROUGH, MASSIVE AND VERY FREQUENT WORK. MINIRAMPS are:

- Easy to use and compact, less bulky than normal dock levelers.
- Easy to install and much cheaper than electrohydraulic dock levelers

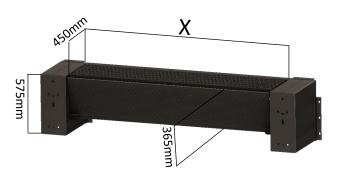
## AVAILABLE IN MANUAL AND HYDRAULIC VERSION, WITH TWO MAIN ALTERNATIVES PER TYPE:

## <u>BOX = MODEL WITH BOXFRAME FOR INSTALLATION</u> INSIDE CONCRETE

STD = MODEL WITH OVERBAY DISTANCING STRUCTURES
FOR INSTALLATION, BY WELDING /SCREWING TO THE







NOMINAL LENGTH	2000 mm
NOMINAL WIDTH	450 + Lip 365mm
CAPACITY	60 kN (6T)
PLATE	Pianted steel (standard RAL5010, other colours on request)
BOXFRAME (BOX) DISTANCING STRUCTURES (STD)	Pianted steel (standard RAL5010, other colours on request)
ACTIVATION	MANUAL VERSION Removable rigid handlebar Gas struts assistance
	HYDRAULIC VERSION Hydraulic system with 0.75kW control unit and 380V threephase 50Hz control panel

MAX. CONCENTRATED LOAD ON PLATFORM	1,3 N/mm²
LIP MATERIAL AND LENGTH	Painted steel: 365mm
EUROPEAN STANDARD	EN 1398 Dock Levelers
ACCESSORIES NOT INCLUDED	Dock bumpers (see specific sheet) Handrails

CODE	VERSION	X mm	H+/-
MR-ACC.MAN.BOX	MANUAL	2000+70 (boxframe)	110
MR-ACC.MAN.STD	MANUAL	2000+700 (side structures)	110
MR-ACC.IDR.BOX	HYDRAULIC	2000+70 (boxframe)	110
MR-ACC.IDR.STD	HYDRAULIC	2000+700 (side structures)	110

## **ALUMINIUM MINIRAMPS**

## models MR-ALL

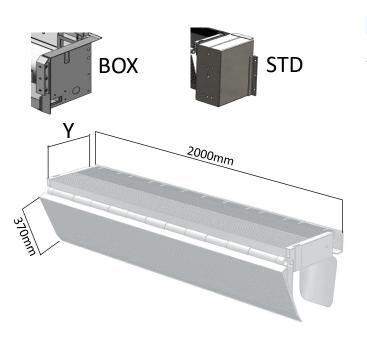


Miniramps with aluminium plate and swing lip have the same advantages of EFFICIENCY AND SMART SPACE OCCUPATION of steel version, above this PLATFORM AND LIP FULLY MADE IN ALUMINIUM can ensure TOTALLY RUSTFREE PASSAGE, EASIER HANDLING AND LOW MAINTENANCE.

## AVAILABLE IN MANUAL AND HYDRAULIC VERSION, WITH TWO MAIN ALTERNATIVES PER TYPE:

## **BOX = MODEL WITH BOXFRAME FOR INSTALLATION INSIDE CONCRETE**

STD = MODEL WITH OVERBAY DISTANCING STRUCTURES
FOR INSTALLATION, BY WELDING / SCREWING TO THE BAY



NOMINAL LENGTH	2000 mm
NOMINAL WIDTH	400, 700, 1000 + Lip 370mm
CAPACITY	60 kN (6T)
PLATE	H40mm aluminium extruded profiles
BOXFRAME (BOX) DISTANCING STRUCTURES (STD)	Hot dip galvanized steel (optional STAINLESS STEEL)
ACTIVATION	MANUAL VERSION Removable rigid handlebar Gas struts assistance
	HYDRAULIC VERSION
	Hydraulic system with 0.75kW control unit and 380V threephase 50Hz control panel
MAX. CONCENTRATED LOAD ON PLATFORM	
	and 380V threephase 50Hz control panel
PLATFORM	and 380V threephase 50Hz control panel  1,3 N/mm²

CODE	VERSION	Y mm	H+/-	WEIGHT (Kg)
MR480B-MAN.BOX	MANUAL	400	110	170
MR780B-MAN.BOX	MANUAL	700	140	220
MR480B-MAN.STD	MANUAL	400	110	170
MR780B-MAN.STD	MANUAL	700	140	220
MR480B-OIL.BOX	HYDRAULIC	400	110	170
MR780B-OIL.BOX	HYDRAULIC	700	140	220
MR1080B-OIL.BOX	HYDRAULIC	1000	190	270
MR480B-OIL.STD	HYDRAULIC	400	110	170
MR780B-OIL.STD	HYDRAULIC	700	140	220
MR1080B-OIL.STD	HYDRAULIC	1000	190	270





## FIXED MANUAL RAMP

## model CR

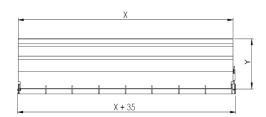


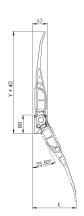
## CR MANUAL RAMP has many advantages:

- It doesn't occupy space inside the bay and it's easy to handle.
- Thanks to its aluminum extruded structure, this ramp is good-looking and strong, totally rust-free.
- It is easy to install and cheaper than hydraulic ramps
- It can be easily moved through a chord.

## Optional:

- 45-90° beveled lip on last 120mm
- L-shaped screwable plate 150x250mm for fixing
- Flat lip for small wheeled vehicles, ONLY FOR 0 OR NEGATIVE DIFFERENCES OF HEIGHT





NOMINAL LENGTH*	400/600/800mm
NOMINAL WIDTH*	1250/1650/2000 mm
CAPACITY	40 kN (4T)
PLATE+LIP	H40mm aluminium extruded profiles
MAX. CONCENTRATED LOAD ON PLATFORM	1,3 N/mm²
ACTIVATION	Pvc coated steel handling chord
SAFETY	Vertical anti-falling side block

CODE	X mm	Y mm	H+/-	WEIGHT (Kg)
CR40S	1250	400	50	17
CR60S	1250	600	75	24
CR80S	1250	800	100	33
CR40A	1650	400	50	20
CR60A	1650	600	75	30
CR80A	1650	800	100	35
CR40B	2000	400	50	25
CR60B	2000	600	75	30

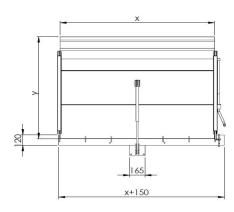
# FIXED MANUAL RAMP WITH GAS STRUT ASSISTANCE model CR-GAS

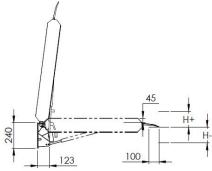


Thanks to gas strut servo-assistance, fixed manual ramps type CR-GAS can be longer than CR, thus overcoming BIGGER DIFFERENCES OF HEIGHT (preferably positive ones) WITH SIMPLE AND EFFICIENT MOVIMENTATION through a rigid side handle

#### Optional:

- 45-90° beveled lip on last 120mm
- L-shaped screwable plate 150x250mm for fixing
- Flat lip for small wheeled vehicles, ONLY FOR 0 OR NEGATIVE DIFFERENCES OF HEIGHT
- Side protection frame with bumpers (see photo)





NOMINAL LENGTH*	800/1060/1200/1600/2000 mm
NOMINAL WIDTH*	1650/2000 mm
CAPACITY	40 kN (4T) – CR-GAS80B 50 kN standard <b>60 kN ON REQUEST</b>
PLATE+LIP	H40mm aluminium extruded profiles
MAX. CONCENTRATED LOAD ON PLATFORM	1,3 N/mm²
ACTIVATION	Rigid side handle Gas strut servo-asssistance
SAFETY	Anti-falling Pedal mechanic sideblock

CODE	CAPACITY (kg)	X mm	Y mm	H+/-	WEIGHT (Kg)
CR-GAS80B	4000	2000	800	100	60
CR-GAS106B	5000	2000	1060	130	65
CR-GAS120A	5000	1650	1200	150	70
CR-GAS160A	5000	1650	1600	200	90
CR-GAS200A	5000	1650	2000	250	110
CR-GAS120B	5000	2000	1200	150	90
CR-GAS160B	5000	2000	1600	200	105
CR-GAS200B	5000	2000	2000	250	125

## SLIDING MANUAL RAMPS WITH HOOK SYSTEM

## models TRR-TR

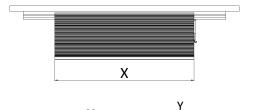


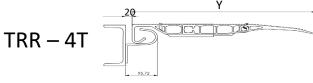
TR-TRR sliding manual ramps have a simply HOOK SLIDING SYSTEM, perfect with uneven/sloping loading conditions. On the other hand, this system is SUITABLE ONLY WITH BIG WHEELED VEHICLES (FORKLIFTS), NOT WITH SMALL WHEELED MEANS such as TRANSPALLETS.

## Optional:

- 45-90° beveled lip on last 120mm
- Flat lip for small wheeled vehicles, ONLY FOR 0 OR NEGATIVE DIFFERENCES OF HEIGHT

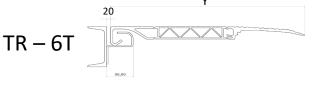
## Sliding rails are supplied as a separate product (see page 11)





CODE	X mm	Y mm	H+/-	WEIGHT (Kg)
TRR55S	1250	550	70	22
TRR75S	1250	750	100	30
TRR95S	1250	950	125	36
TRR55A	1650	550	70	30
TRR75A	1650	750	100	34
TRR95A	1650	950	125	38
TRR55B	2000	550	70	36
TRR75B	2000	750	100	45

NOMINAL LENGTH*	TRR: 550/750/950 mm TR: 400/650/900 mm
NOMINAL WIDTH*	TRR: 1250/1650 mm TR: 1250/1650/2000mm
CAPACITY	TRR: 40 kN (4T) TR: 60 kN (6T)
PLATE+LIP	H40-50mm aluminium extruded profiles
MAX. CONCENTRATED LOAD ON PLATFORM	1,3 N/mm²
ACTIVATION	Pvc coated steel handling chord
SAFETY	Vertical anti-falling side block
	V



CODE	X mm	Y mm	H+/-	WEIGHT (Kg)
TR40S	1250	400	50	27
TR65S	1250	650	80	35
TR90S	1250	900	120	43
TR40A	1650	400	50	35
TR65A	1650	650	80	42
TR90A	1650	900	120	50

# SLIDING RAMPS WITH BALL BEARING SYSTEM model ES

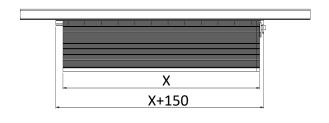


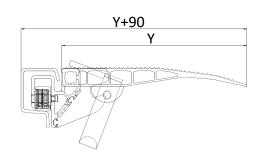
ES sliding manual ramps are engineered with a VERY EFFICIENT BALL BEARING SLIDE SYSTEM, made of a specific extrusion with ball bearings to the bottom, HINGED TO A PLATE, so that the manual ramp is TIGHTLY FITTING TO THE CORNER OF THE BAY, THUS PERFECT ALSO FOR SMALL WHEELED LOADING MEANS, above this ball bearing slide system allows SMOOTH SLIDING ON BIGGER DISTANCES, WITH A CHANCE TO REDUCE QUANTITY OF LOADING RAMPS.

#### Optional:

- 45-90° beveled lip on last 120mm
- Flat lip for small wheeled vehicles, ONLY FOR 0 OR NEGATIVE DIFFERENCES OF HEIGHT

#### Sliding rails are supplied as a separate product (see page 11)





NOMINAL LENGTH*	400/600/800 mm
NOMINAL WIDTH*	1250/1650/2000 mm
CAPACITY	40 kN (4T)
PLATE+LIP	H40mm aluminium extruded profiles
MAX. CONCENTRATED LOAD ON PLATFORM	1,3 N/mm²
ACTIVATION	Pvc coated steel handling chord
SAFETY	Vertical anti-falling side block

CODE	X mm	Y mm	H+/-	WEIGHT (Kg)
FC 40C	1250	400	F.O.	24
ES40S	1250	400	50	34
ES60S	1250	600	75	40
ES80S	1250	800	100	48
ES 40A	1650	400	50	42
ES 60A	1650	600	75	55
ES 80A	1650	800	100	68
ES 40B	2000	400	50	58
ES 60B	2000	600	75	65

# SLIDING RAMPS WITH GAS STRUT ASSISTANCE model GAS

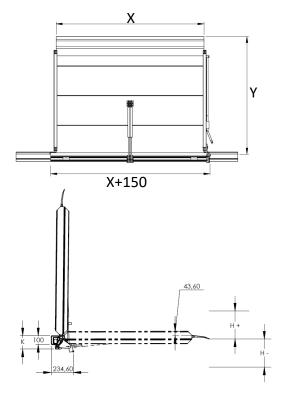


Thanks to servoassistance given by gas struts, GAS ramps can provide bigger sizes than standard sliding ramps, thus overcoming BIGGER DIFFERENCES OF HEIGHT (preferably positive ones) WITH SIMPLE AND EFFICIENT MOVIMENTATION through a rigid side handle.

#### Optional:

- 45-90° beveled lip on last 120mm
- Flat lip for small wheeled vehicles, ONLY FOR 0 OR NEGATIVE DIFFERENCES OF HEIGHT

## Sliding rails are supplied as a separate product (see page 11)



NOMINAL LENGTH*	1200/1600/2000 mm
NOMINAL WIDTH*	1650/2000 mm
CAPACITY	50 kN standard <b>60 kN ON REQUEST</b>
PLATE+LIP	H40mm aluminium extruded profiles
MAX. CONCENTRATED LOAD ON PLATFORM	1,3 N/mm²
ACTIVATION	Rigid side handle Gas strut servo-asssistance
SAFETY	Anti-falling Pedal mechanic sideblock

CODE	X mm	Y mm	H+/-	WEIGHT (Kg)
GAS120A	1650	1200	150/150	70
GAS160A	1650	1600	200/200	90
GAS200A	1650	2000	250/250	110
GAS120B	2000	1200	150/150	90
GAS160B	2000	1600	200/200	105
GAS200B	2000	2000	250/250	125

## MANUAL RAMP ACCESSORIES

## FIXED MANUAL RAMP ACCESSORIES

## WALL SCREWING ANGULAR PROFILE L150.250.2500-5

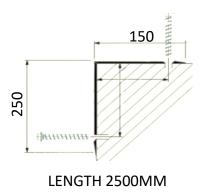
Wall screwing 150x250mm angular profile with 5mm thickness and 2500mm length is necessary for installation of manual fixed ramps or miniramps to loading bay corners with NO METAL PROFILE OR TOO LITTLE PROFILE OR DAMAGED PROFILE for fixing.

# EXT2 Protection and distancing side structures (CR-GAS)

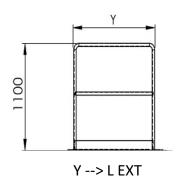
Protection and distancing side structures type EXT, made of GALVANIZED STEEL PROFILES with variable width (see images below), can ensure FASTER AND SAFER TRUCK PARKING, as they can let vehicle stay at the right position to lay down the lip onto the truckfloor

# Side protection handrails for EXT structures (CR-GAS)

PPT galvanized steel side protection handrails, with H1100mm and h100mm TOEBOARD, combined with side protection EXT structures, can prevent from any side falling danger on CR-GAS ramps.



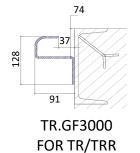


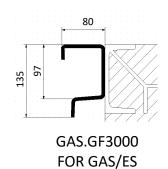


## SLIDING MANUAL RAMP ACCESSORIES: SLIDING RAILS

# GF GALVANIZED STEEL RAILS TO BE WELDED TO PRE-EXISTING PROFILE

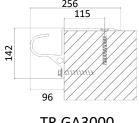
Galvanized steel rails are engineered to be directly SCREWED TO AN EXISTING H160MM PROFILE WITH TANGS INSIDE CONCRETE, not included in supply and to be previously cast inside concrete during building operations.



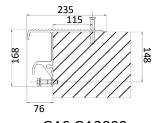


# GA ALUMINUM ANGULAR RAILS TO BE SCREWED TO CONCRETE

Aluminum angular rails can be directly LAID AND SCREWED ONTO CONCRETE CORNERS (WITH SCREWS INCLUDED IN SUPPLY), they're the perfect choice in case of absence of metal profiles or in case they were too small for the steel rails.







GAS.GA3000 FOR GAS/ES





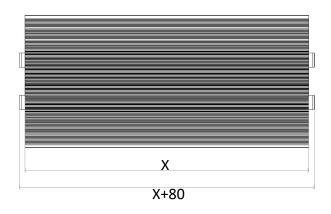
## MOBILE BRIDGE FOR FORKLIFTS

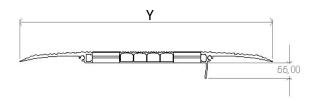
## model DPC



DPC aluiminum mobile bridge, unlike PLQ, is engineered with H40 ALUMINUM EXTRUDED PROFILES, this means it's SUITABLE WITH HEAVIER LOADS (up to 6T). The extrusion architecture causes the ramp to become a NATURAL BUMP, so this ramp is SUITABLE WITH BIG WHEELED VEHICLES (LIKE CABINED FORKLIFTS).

## The bridge is equipped with MANUAL LIFTING SIDEHANDLES and BOTTOM ANTI-FALLING VERTICAL BLOCK.





#### **TECHNICAL DETAILS**

	TECHNICAL DETAILS					
	NOMINAL LENGTH*			530/730/930 mm		
	NOMINAL WIDT	·H*	1250/	1250/1650/2000 mm		
CAPACITY			60 kN	60 kN (1T)		
PLATE+LIP			H40mm Aluminum extruded profiles			
MAX. CONCENTRATED LOAD ON PLATFORM			1,3 N/mm²			
ACTIVATION				) - n.2 sidehandl -90 – n.4 sideha		
SAFETY			H100mm bottom anti-falling vertical block			
	ODTIONAL	TIONAL Hinged and embedded handles				
	OPTIONAL		Hingeo	d and embedded	d handles	
_	CODE	X mm	Y mm	d and embedded	WEIGHT (Kg)	
		X mm			WEIGHT	
	CODE		Ymm	H+/-	WEIGHT (Kg)	
	CODE  DPC50S	1250	<b>Y mm</b> 530	H+/- 65	WEIGHT (Kg)	
	DPC50S DPC70S	1250 1250	<b>Y mm</b> 530 730	<b>H+/</b> - 65 90	WEIGHT (Kg) 20 28	
	DPC50S DPC70S DPC90S	1250 1250 1250	Y mm  530  730  930	H+/- 65 90 110	WEIGHT (Kg)  20 28 35	
	DPC50S DPC70S DPC90S DPC50A	1250 1250 1250 1650	Y mm  530  730  930  530	H+/- 65 90 110 65	WEIGHT (Kg)  20 28 35 28	
	DPC50S DPC70S DPC90S DPC50A DPC70A	1250 1250 1250 1650	7 mm  530  730  930  530  730	H+/- 65 90 110 65 90	WEIGHT (Kg)  20 28 35 28 38	
	DPC50S DPC70S DPC90S DPC50A DPC70A DPC90A	1250 1250 1250 1650 1650	Ymm  530  730  930  530  730  930  930	H+/- 65 90 110 65 90 110	WEIGHT (Kg)  20 28 35 28 38 49	

930

110

59

DPC90B

2000

# MOBILE BRIDGE WITH HINGED LIP model PLUS



Thanks to its **BIGGER DIMENSIONS and FLAT HINGED BACKLIP,** PLUS aluminum mobile bridge is perfect for **DIFFERENCES OF HEIGHT BIGGER THAN 10CM AND/OR WITH LOW WHEELED VEHICLES (MANUAL/ELECTRIC TRANSPALLETS,...),** moreover PLUS bridges are
equipped with **SIDE ANTIFALLING PROTECTION EDGES.**They are easy and smart to handle, through **HAND TROLLEY OR FORKLIFT FRAME (NOT INCLUDED)** 

# CAR.MA manual trolley CAR.MU forklift frame X X+220

NOMINAL LENGTH*	1560/1960/2360 mm
NOMINAL WIDTH*	1650/2000 mm
CAPACITY	60 kN (6T)
PLATE+LIP	H40mm aluminium extruded proflies H90mm extruded side edges
MAX. CONCENTRATED LOAD ON PLATFORM	1,3 N/mm²
ACTIVATION	Manual trolley or forklift frame (not included)
OPTIONAL (NOT INCLUDED)	Side vertical anti-slip blocks

CODE	X mm	Y mm	H+	WEIGHT (Kg)
PLUS150A	1650	1560	200	100
PLUS190A	1650	1960	250	120
PLUS230A	1650	2360	300	140
PLUS150B	2000	1560	200	200
PLUS190B	2000	1960	250	250
PLUS230B	2000	2360	300	300





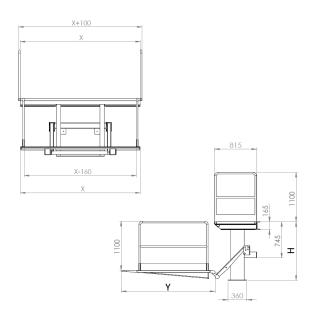
# HYDRAULIC LIFTING PLATFORM FROM BAY TO STREETFLOOR model QUEEN



QUEEN hydraulic lifting platform is the perfect solution for LOADING/OFFLOADING OF LIGHT LOADS (MAX CAPACITY 1000-2000 KGS) WITH TRANSPALLETS OR TROLLEYS, FROM LOADING BAY TO STREET FLOOR.

Thank to its hydraulic lifting-rotating arm moving system, the platform can ROLL DOWN FROM VERTICAL STORED POSITION TO HORIZONTAL POSITION AND MOVE DOWN TO STREET FLOOR, AUTOMATICALLY TILTING TO CONNECT PLATFORM WITH GROUND LEVEL.

Loading bay connecting frame is equipped as a standard with side operator falling protection handrails, as an optional also moving platform can have side handrails.



2400 mm MODIFIABLE ON REQUEST
1800 mm MODIFIABLE ON REQUEST
10/20 kN (1/2 T)
1,3 N/mm²
Painted steel
6060 alloy H40mm aluminium extruded profiles
Electrohydraulic system 1,5kW power unit Button board on bay connection frame Footswitches on moving plkatform
Parachute valves on pistons Side operator falling protection handrails (on bay connection frame) Consensus footswitch on platform Vehicle/load falling protection roll-stop
Side operator falling protection handrails (on moving platform) Surplus button board with spiral cable for usage on moving platform.

CODE	X mm	Y mm	H MIN/MAX mm	Capacity kg
QN.1T	2400	1800	900/1050	1000
QN.2T	2400	1800	1050/1300	2000

# **COLUMN LIFTING TABLE**

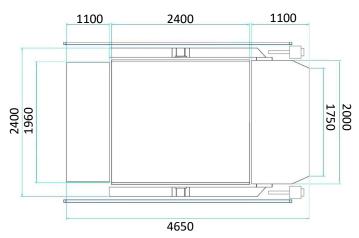
# model TM25EL-E



TM25EL-E column lifting tablle is an innovative system in the market, a UNIQUE SOLUTION AMONG GROUND/TRUCK CONNECTING DOCK EQUIPMENT, as it is:

- 1. FASTER THAN SCISSOR LIFTS
- 2. SMARTER AND MORE COMPACT THAN YARD RAMPS
- 3. <u>FULLY COMPLIANT WITH «CRAM» STRCT FRENCH SAFETY REQUIREMENTS</u>
- 4. **FULLY AUTOMATED**
- 5. <u>EQUIPPED WITH UPS FOR FUNCTIONING EVEN IN</u>
  CASE OF BLACK-OUT

TM25EL-E is also equipped with POSITIONING/OFFLOADING WHEELS, INTEGRATED ANTI-FALLING HANDRAILS, DOUBLE BUTTON BOARDS WITH DETACHED CONSENSUS BUTTON, SAFETY EDGES UNDERNEATH PLATE, AUTOMATIC BACKFRONT LIP MOVIMENTATION WITH ANTIFALLING CABLE LOCK SYSTEM FOR BACKLIP.



#### **TECHNICAL DETAILS**

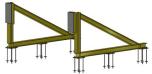
PLATE WIDTH (X)	1960 mm
PLATE LENGTH (Y)	2400 mm
CAPACITY	25 KN (2500 kg)
MAX CONCENTRATED LOAD ON PLATE	1,3 N/mm²
PLATE-HANDRAILS-FRONTLIP	Painted steel Optional STAINLESS STEEL
BACKLIP	6060 Alloy extruded Aluminum
FRAME	Painted steel
ACTIVATION	Electrohydraulic 5kW Power unit Electrical winch for backlip activation PLC board control panel
SAFETY	Parachute Valve Lip releasing control mechanical system Descent control UPS Side protection anti-falling handrails Double button board with separated consensus button Safety detection sensors under platform

ACCESSORIES NOT INCLUDED

KIT OF SIDE PROTECTION TRANSPARENT POLYCARBONATE PROTECTIONS

KIT OF FRONT PROTECTION AGAINST TRUCK IMPACT DAMAGES





CODE	X	Y	Capacity
	mm	mm	kg
TM25EL-E	1960	2400	2500

# MOBILE YARD RAMPS

## models KING



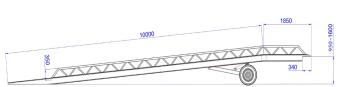


KING-ALL yard ramp is the ONE AND ONLY YARD RAMP in the market with the following features:

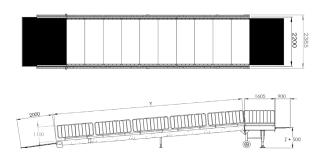
KING-ACC yard ramps are the CHEAPER ALTERNATIVE to aluminium KING version. They are equipped with manual hydraulic pump height adjustment system, side vehicle falling protection structures and chain for moving wheels + upper golpher. Surface treatment on frame is painting while passage surface is in grid steel.

- RUST-FREE, thanks to GALVANIZED STEEL FRAME and FULLY ALUMINIUM EXTRUDED SURFACE
- RECYCLABLE, thanks to high amount of aluminium used in the structure
- SELF-CARRYING, as it doesn't lay its own frame weight onto the truck backwheel-axle, unlike steel yard ramps
- ENGINEERED TO BE PERFECTLY COMPLYING WITH UNI EN 1398:2009 STANDARD IN TERMS OF MAX ADMITTED SLOPE.





CODE	X (external) mm	Y (total) mm	Capacity kg
KING-ACC.8T	2070	11850	8000



CODE	Y + BACKLIP LENGTH mm	CAPACITY Kg
KING100	8000+2000	8000
KING120	10000+2000	8000
KING140	12000+2000	8000

Side protection handrails



Grip enhancing stripes



Covering frame with roof



Full covering tunnel







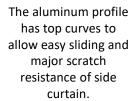
## **DOCK SHELTERS**

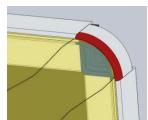
# PVC retractable versions: SG-SGH



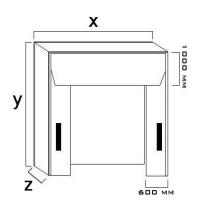
Retractable dock shelters with side self-extinguishing PVC curtain and front panels in double frame pvc for an innovatively strong structure, EASIER TO MOUNT AND ASSEMBLE (see user manual) thanks to side curves for easy side pvc inserting in rails. Available also in SGH ground version. The new COMBO semi-assembled version ensures easier and cheaper transportation

The frame is engineered for easy mounting, thanks to special extrusion with housing part for side curtain sliding.









#### **TECHNICAL DETAILS**

NOMINAL WIDTH*	X: 3460 mm
NOMINAL HEIGHT*	Y: 3400/4500 mm
DEPTH	Z: 600/900 mm
UPPER FRONT PANEL	Double frame PVC, black colour, 3mm thick, H1000mm
SIDE FRONT PANELS	Double frame PVC, black colour, 3mm thick, W600mm
SIDE CURTAIN	Anti-scratch self-extinguishing 650gr/m2 PVC, yellow colour
INSTALLATION	Aluminium extruded profile with joint cover to hide fixing screws  SEMI-ASSEMBLED COMBO FRAME WITH FRAME AXLES SPLIT IN TWO AND INTERMEDIATE JOINTS
ACCESSORIES	Extendable curtain
	Drainage gutter on top

CODE	X mm	Y mm	Z mm	Thickness mm
SG.600	3460	3400	600	3
SG.900	3460	3400	900	3
SGH.600	3460	4500	600	3
SGH.900	3460	4500	900	3

## **DOCK SHELTERS**

# Cushion version: SGG



Foam rubber cushion dock shelters are the perfect choice for controlled temperature warehouses, in order to reduce any heat/refrigeration loss. They are suitable with STANDARDIZED TRUCKS and PERFECTLY FLAT OUTER STREET FLOORING.

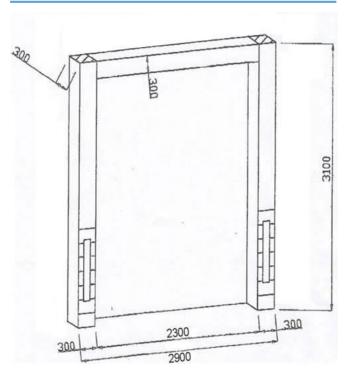
#### **DETAILS**:

- Cushion with foam rubber filling, pvc curtain covering and screwable wooden backplate.
- PROTECTION FRONT PVC FLAPS (see photo below)
- YELLOW STRIPES ON VERTICAL CUSHIONS for parking assistance



#### **TECHNICAL DETAILS**

NOMINAL WIDTH*	X:2900mm
NOMINAL HEIGHT*	Y: 3100mm
CUSHION SIZES	300X300 MM
CURTAIN	Antiscratch self-extinguishing 650gr/sqm PVC, yellow colour
INSTALLATION	Screwing through wall directly to backplate



CODE	Width	Height	Cushions
	mm	mm	W x D (mm)
SGG	2900	3100	300x300

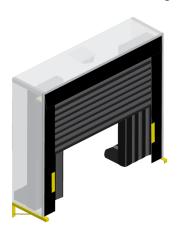
## **DOCK SHELTERS**

# Inflatable version: SG-AIR



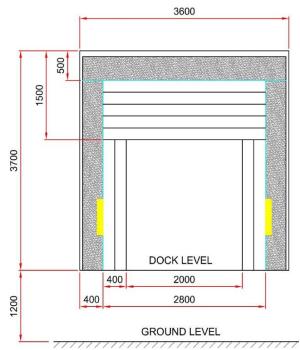


The inflatable dock shelter, with sandwich panel covering structure and special texture air injectable bags is perfect for controlled temperature environment with a need of minimum heat/refrigeration loss.



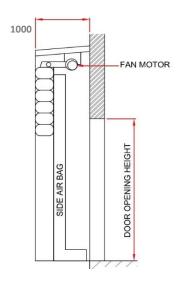


The bags have replying system to flatter down in 15 SEC



#### **TECHNICAL DETAILS**

WIDTH	3600 mm (modifiable on request)
HEIGHT	3700 mm (modifiable on request)
DEPTH	1000 mm
FRONT PANELS	Black framed pvc with differentiated frames and antiscratching structure.
STRUCTURE	Sidewalls: 42mm thick sandwich panel with metal structure.
AIRBAGS	High resistance texture, waterproof and anti- scratch frame with inner replying system.
FAN	Feeding: 380-415V threephase min. 10A



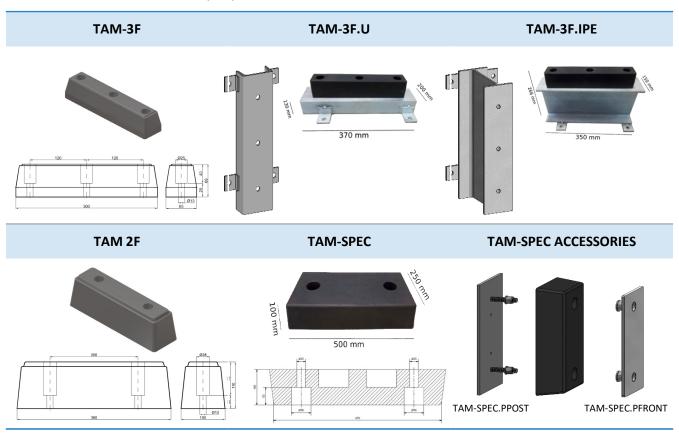
CODE	X mm	Y mm	Z mm
SGAIR-1000	3600	3700	1000



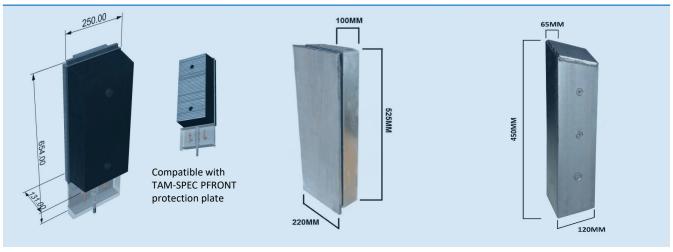


# Dock bumpers

### **RUBBER / STEEL VERSIONS (truck impact protection)**







SWINGING BUMPER, able to follow truck height adjustments during loading / offloading. WEARING RESISTANCE +80% (compared to TAM2F/3F)

SHOCK ABSORBING BUMPER with strong hot dip galvanized steel shell and shock absorbing SBR rubber elements THE STRONGEST ONE

SHOCK ABSORBING BUMPER with steel frame and SBR rubber absorption disks.

CHEAPER AND STRONGER, NEW VERSION WITH STRONGER STEEL SHELL

# Park assistance: wheel-guides and van lifting wedges

### **EASY PARKING wheel-guides**

EASY PARKING park assistance wheel-guides allow the truck to be guided during parking, avoiding any positioning mistakes and ramp/bumpers damage risks. They are available in STRAIGHT AND BENT VERSION, WITH STANDARD D133MM TUBES OR BIGGER D168MM TUBES.



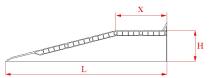


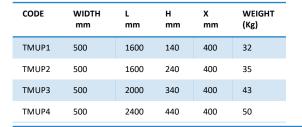
## TMUP / BIGUP van lifting wedges

UP product line includes ALUMINIUM EXTRUSION van lifting wedges, able to LIFT UP LOWER VEHICLES TO LOADING BAY LEVEL. They are available in TWO MAIN VERSIONS:

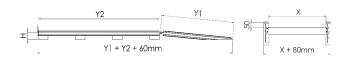
- 1. TMUP are trapezoidal wedges to lift only the BACK WHEELAXLE, they are LIGHTER AND MOBILE
- 2. <u>BIGUP are 8mts long, including an horizontal part to HOST THE WHOLE VEHICLE IN HIGHER HORIZONTAL STOP, they</u> are made to be ground fixed and left installed in front of a bay.











CODE	X mm	Y1 mm	Y2 mm	H mm	WEIGHT (Kg)
BIGUP.3+5	500	3000	5000	300	130
BIGUP.5+3	500	5000	3000	500	130

# Lighting and ventilation

## **B360 truck box lighting/ventilation**

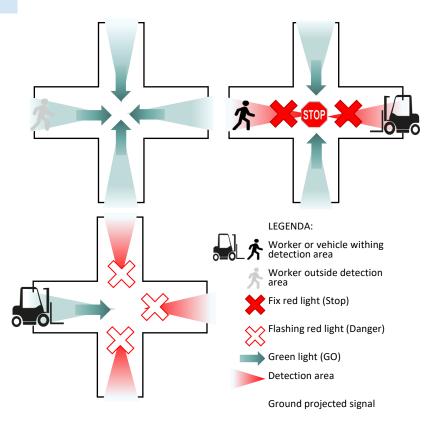
B360 is an EXTENSIBLE AND 360° orientable a system, combinable with LED LIGHTING AND/POWERFUL VENTILATION, in order to cre ADEQUATE LIGHT AND AIR EXCHANGE LEVEL INS TRUCK BOXES DURING LOADING/OFFLOADI TEMPERATURES:



### XR Traffic safety control system

XR traffic check system is able to supervise passage inside a warehouse, helping to prevent fom any accident in crowded crossing points with several people and machinery crossing the same area.





### STGO.LIGHT.LED/EST

STGO.LIGHT are LED TRAFIC LIGHTS FOR OUTDOOR TRUCK SIGNALING during parking procedures, they can be connected to ramp/door control panels and equipped with CROSS/ARROW SYMBOL COVERS.

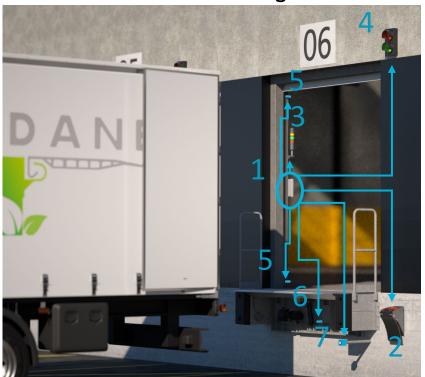




# STOP&GO: Parking assistance signaling system

STGO is a MODULAR TRUCK PARKING AND LOADING ASSISTANCE AND SIGNALING SYSTEM, able to apply IN/OUT VISUAL SIGNALING LIGHTS to inform truck driver and warehouse workers about state of loading bay operations. This system is available in TWO MAIN VERSIONS...

## Q2 VERSION: full control + dangers detection



Number	Core Components
1	Control panel Q2
2	Wheel blocking chock + wall bracket
3	Indoor column light
4	Outdoor traffic light

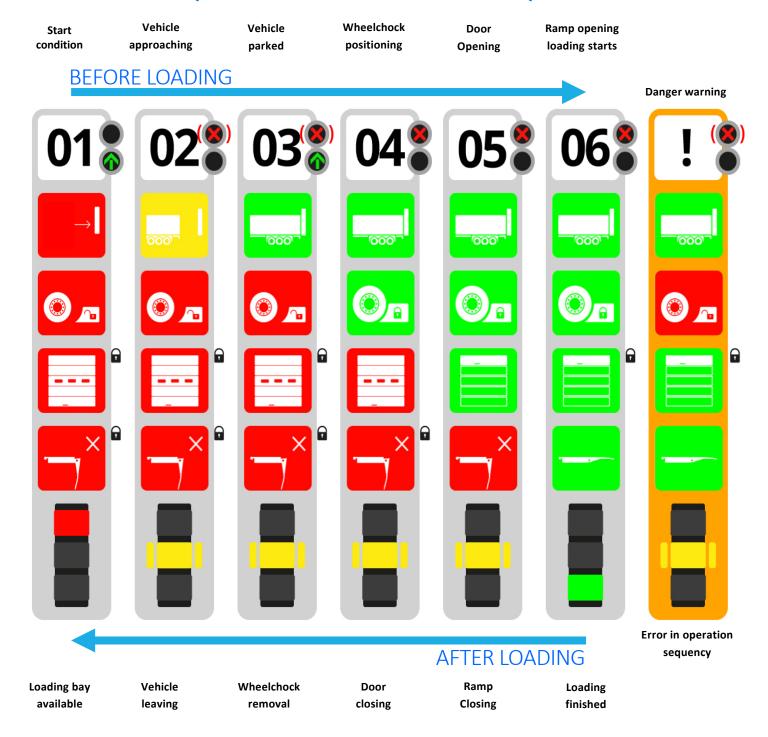
Number	Optional Components
5	Door open/closed sensors
6	Leveler Lip open/closed sensor
7	Parking sensor

# Q1 VERSION: IN/OUT lights + wheelchock



Number	Components
1	Control panel Q2
2	Wheel blocking chock + wall bracket
3	Indoor column light
4	Outdoor traffic light

# STOP&GO: Q2 FULL VERSION - WORK SEQUENCE



These visuals show the sequence of phases and signaling logic of STGO Q2 type with its full optional package, from the beginning to the end of a safe loading procedure. In these conditions the whole loading bay is being monitored and dealt, including its main actors and parts (TRUCK PRESENCE / MOVEMENTS, RAMP, DOOR, INDOOR OPERATORS). As show in the ORANGE FIELD, Q2 systems can also DETECT AND SIGNAL ANY DANGER AND ERROR IN CORRECT SEQUENCE OF PHASES (such as removing a chock without closing door and ramp first).

STGO system in Q2 is READY TO BE INTEGRATED IN A 4.0 INDUSTRY CERTIFIED LOADING BAY SYSTEM.

# Wheel blocking systems: manual – pneumatic - hydraulic

#### TM.LOCK manual wheel blocker

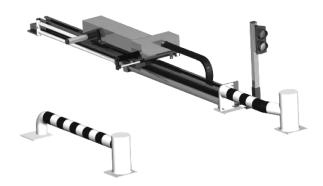
TM.LOCK manual wheel blocking system is VERY ROBUST (thanks to its FULL STEEL ROUNDBAR at H400MM FROM GROUNDFLOOR, IMPOSSIBLE TO OVERCOME BY TRUCK and BIG TROLLEY+SLIDING FRAME STRUCTURE), easy to INSTALL TO CONCRETE FLOORING, equipped with TRAFFIC LIGHT, LED SIGNALING POINTS and MICROSWITCH for DOOR/DOCK CONNECTION.

Thanks to its <u>WHEEL FOR REAR HANDLING WITH LOWERING BAR FOR ROUNDBAR INSERTING</u>, TM.LOCK doesn't require operator to stand beside the wheel blocker, this means **NO EXTRA SPACE NEEDED FOR MOVIMENTATION.** 



### **AUTOBL** electrohydraulic wheel blocker

AUTOBL electrohydraulic wheel blocking system can provide the <u>same structural advantages of EASBL (HEAVY FRAME WITH FULL STEEL ROUNDBAR FOR H400MM BLOCK, EASY INSTALLATION ON CONCRETE FLOORING, ACCESSORIES)</u>, adding to it an <u>ELECTROHYDRAULIC MOVING/ACTIVATING SYSTEM WITH CONTROL PANEL.</u>





### **CLMA** pneumatic wheel blocker

CLMA pneumatic wheel blocking system is made of <u>METAL CHOCKS INSIDE A METAL FRAME AND CAST IN A CONCRETE FOUNDATION INSIDE A TRUCK PARKING STREETSLOPE</u>. This system is powered by air compression system of the warehouse and activated through a control panel

Installation, connection and adjustments are much faster and more intuitive than the electro-hydraulic version, maintenance is cheap, thanks to its protected in-concrete fixing. Moreover, the system is <a href="COMPATIBLE WITH">COMPATIBLE WITH</a>
ALMOST ALL STANDARD TRANSPORT VEHICLES.

Available in TWO MAIN VERSIONS: model 8S = 8x single chocks Model 6+6 = 5+1 pairs of misaligned chocks





www.tmpedanesyl.com

## **TM PEDANE SRL**

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