



**PACO
SPIRALIFT**

ADJUSTABLE HEIGHT SKID
SKILLET LIFTER
AUTOMATED GUIDED VEHICLE

AUTOMOTIVE |
SOLUTIONS

ABOUT

PACO GROUP is a privately owned company headquartered in St-Hubert, a suburb of metropolitan Montreal, Canada. As a technical engineering company, PACO GROUP strives to continuously innovate and provide creative solutions to our clients while maintaining sensibility to costs and responsibility to the environment.

Established in 1960, PACO GROUP specializes in the development of high-tech electromechanical equipment and has distinguished itself through constant technological innovations. Initially focused on the fields of mining and concrete handling systems, PACO GROUP built on the know-how obtained in these industrial sectors and increased its range of products to include high endurance lift actuators for the automotive industry, theatrical over-stage and under-stage machinery, as well as underwater lifting technology utilized in the private and public aquatic sectors.

Today PACO GROUP has delivered some 2000 projects in 65 countries through its subsidiaries PACO SPIRALIFT (industrial applications), GALA SYSTEMS (scenic equipment and multipurpose halls) and AKVO SPIRALIFT (movable pool floor systems). **The focus of PACO SPIRALIFT is for the design and manufacturing of equipment for Automotive/industrial material handling.** One of its greatest strengths has always been the SPIRALIFT®, a stainless steel ultra-compact mechanism designed to handle large loads with ease.

The Spiralift is featured in lift tables used in some of the most efficient production plants in the world. More than 60% of the automotive OEM use the Spiralift technology in their production plant in one form or another. PACO SPIRALIFT designs and manufactures, on demand, a wide range of turnkey lifting solutions with structural elements and guides to fit specific applications such as automotive assembly skillet lifts, AGV lifts, adjustable height skids and vertical lifts.

GLOBAL NETWORK

With over 30 years of experience providing lifting technology solutions, PACO GROUP products and services are of proven quality and dependability. We are a global network of certified partners who share our vision for flexibility and efficiency. Wherever you are in the world, our engineers can customize a solution for your specific project.



AMERICAS

GENERAL MOTORS
FORD MOTOR CO
FIAT CHRYSLER AUTOMOBILES
CUMMINS MOTOR
TESLA

EUROPE

RENAULT
FERRARI
PEUGEOT
CITROEN
AUDI
JAGUAR
VOLVO
VOLKSWAGEN
FIAT CHRYSLER AUTOMOBILES

ASIA

HYUNDAI/HYUNDAI BUS MOTOR
KIA MOTORS/KIA BUS
RENAULT/SAMSUNG MOTORS
SSANGYONG MOTORS
NISSAN
GM DAEWOO
SAIC
BYD
DONGFENG AUTOMOBILE
GREAT WALL AUTOMOBILE
NANJING AUTOMOBILE

YOUR CHALLENGES DRIVE OUR MOTIVATION

ADJUSTABLE HEIGHT SKID (AHS): TRIM AND CHASSIS ASSEMBLY LINE

CHALLENGE:

Our client wishes to retain a production line with an overhead and ground conveyor system that is still efficient and reliable. In order to improve ergonomics for their operators, our client wants to install variable lift tables to assist with the vehicle trim line assemblies. The cost of implementing a traditional skillet system requires the dismantling of the current conveyor systems which is both too costly and time consuming.

SOLUTION:

The Adjustable Height Skid system is an independent lift table that could be placed on the steel conveyor. The AHS also acts as a temporary holding fixture for the Body-In-White which adds significant efficiency and eliminates product manipulation. With this system, our client was able to implement variable height lift tables at minimal costs and maximum flexibility. In fact, this solution is the perfect answer to any OEM who would like to add the flexibility of variable height lift tables without incurring the high costs of refurbishing their entire production line.



SKILLET LIFTER: TRIM AND CHASSIS ASSEMBLY LINE

CHALLENGE:

Our client would like to develop/refurbish a production line and wishes to employ variable height lift tables in the vehicle assembly line to improve the ergonomics for the operators. The traditional hydraulic system is not environmentally friendly and the screw jack solution is too cumbersome for a modern production line. As with all automotive application, durability is key and our client wants to have lifters that can perform for decades.

SOLUTION:

A Spiralift skillet table removes the unclean oil of the hydraulic systems while significantly reducing the weight of the scissor lift table compared to the screw jack solutions. Furthermore, the Spiralift is very efficient therefore reducing the power consumption/requirement of a typical skillet table. The Spiralift solution also provides superior lift accuracy, minimal maintenance, and large flexibility desirable to all OEM manufacturers.



AUTOMATED GUIDED VEHICLE (AGV): ENGINE/CHASSIS MARRIAGE

CHALLENGE:

Our client wishes to employ an Automated Guided Vehicle in the engine/chassis assembly process. In order to do so, they would like to use a lift actuator that is compact, lightweight, clean, and with very high accuracy. Furthermore, due to the small space available, an important element to consider is the lift open vs. closed ratio.

SOLUTION:

The Spiralift allows our client to work with the smallest foot print in the industry as well as the best lift open vs. closed ratio. Furthermore, with an integrated non-electrical magnetic brake, the lifter will not drift during power off situations. Finally, the use of a Spiralift allows significant weight reduction of the scissor lifter critically important to ensuring efficient use of electrical/battery power.



SPECIFICATIONS

ND6

Maximum lifting capacity:	2500 kg
Maximum travel:	3.58 m
Retracted height:	200 mm and more*
Lifting speed:	Up to 7 m/min.*

- Low maintenance
- Light & compact
- Direct coupling of electrical motor for up to 0.75 kW. Higher power available through the use of a driveshaft coupling



HD6

Shown with optional magnetic brake

Maximum lifting capacity:	3000 kg
Maximum travel:	3.58 m
Retracted height:	200 mm and more*
Lifting speed:	Up to 7 m/min.*

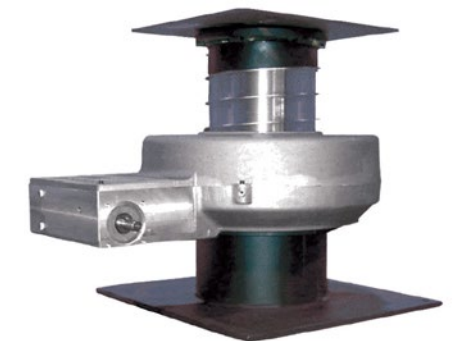
- Low maintenance
- Light & compact
- Capable of one + million cycles
- High capacity
- Direct coupling of electrical motor for up to 0.75 kW. Higher power available through the use of a driveshaft coupling



HD9

Maximum lifting capacity:	4550 kg
Maximum travel:	6.1 m
Retracted height:	240 mm and more*
Lifting speed:	Up to 6.1 m/min.*

- Low maintenance
- Light & compact
- Direct coupling of electrical motor for up to 7 kW. Higher power available through the use of a driveshaft coupling



ND18

Maximum lifting capacity:	11325 kg
Maximum travel:	12.2 m
Retracted height:	400 mm and more*
Lifting speed:	Up to 12.2 m/min.*

- Low maintenance
- High travel capacity
- High lifting capacity
- Design flexibility



* Depending on required travel



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