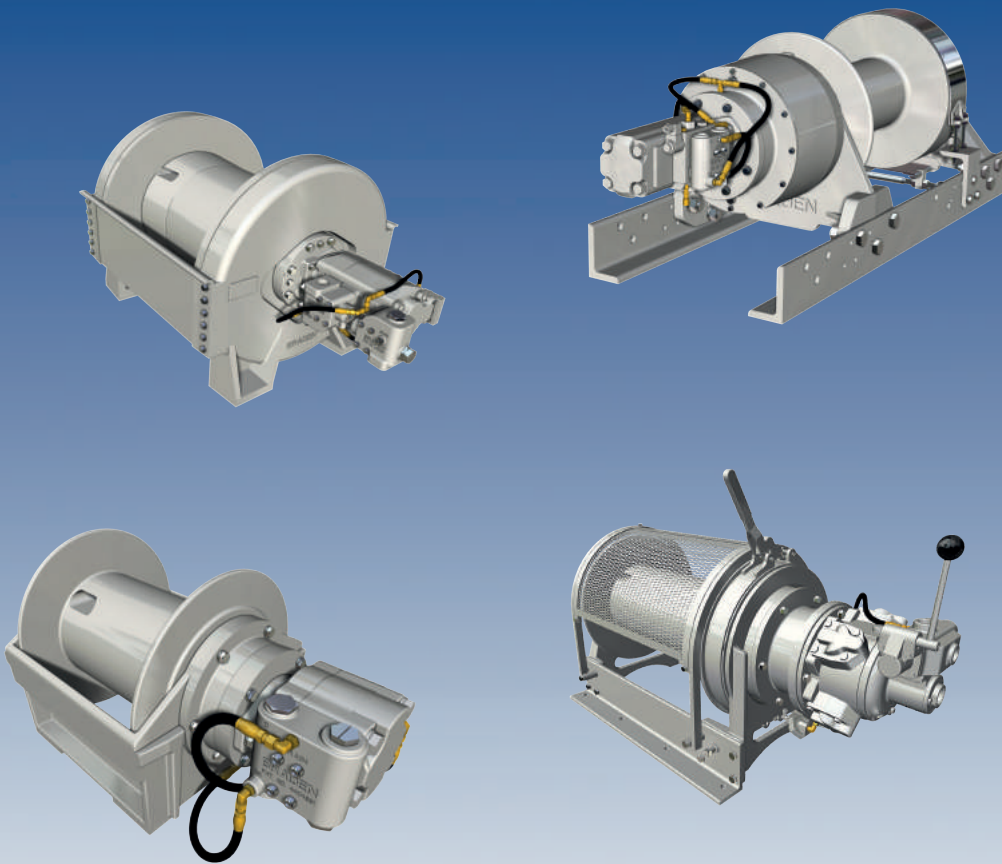




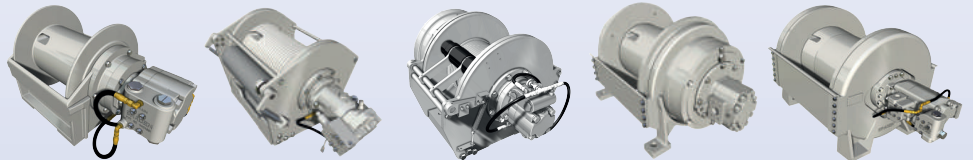
**BRADEN<sup>®</sup>**  
**CARCO<sup>®</sup>**  
**Gearmatic<sup>®</sup>**  
**PACCAR WINCH**

**esco-Delivery program**



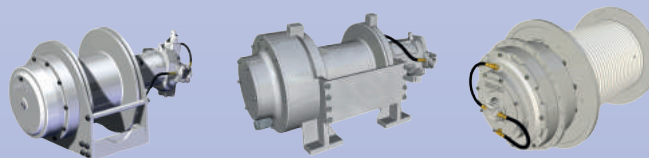
# Hydraulic Planetary Hoist

- Spring-applied and hydraulically released wet multi-disc brake
- Patented brake valve for smooth lowering of the load
- Overrunning clutch preventing fall-back
- High efficient computer-aided gear design
- Anti-friction bearings throughout, all parts running in oil
- Full load rope wedge for additional safety
- Large selection of high efficiency motor options (low / high flow)
- Durable and innovative design for longevity and ease of maintenance.



Series			BG	PD	PD12C-CW DNV Type Approval	GH	CH
Max. Line Pull	1. Layer	kg	1.360 - 4.080	2.508 - 6.800	4.535	4.536 - 19.960	2.250 - 29.095
Maximum Pressure		bar	97 - 197	165 - 207	200	159 - 207	120 - 241
Max. Line Speed	1. Layer	m/min	11 - 115	12 - 68	30	17 - 91	12 - 141
Maximum Flow		l/min	38 - 246	76 - 284	114	151 - 579	114 - 1.135
Maximum Drum Capacity		m	8 - 134	19 - 292	16 - 427	9 - 393	24 - 571

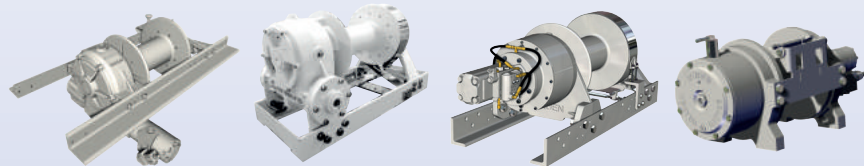
- Precision gearing designed per ISO 6336, for optimum life and efficiency
- Fail-safe parking brake holds load in event of hydraulic supply loss
- Dual two stage drag brake for recovery applications
- Spring loaded tension roller available on select units
- Grooved drum for positive wire rope
- Pneumatic or hydraulic freespool on select units
- Oil-cooled, multi-disc free-fall clutch rated at 50% hoist capacity available on select units



Series			SB	HRD	DRH
Max. Line Pull	1. Layer	kg	4.610 - 11.370	8.505 - 18.144	20.435 - 22.020
Maximum Pressure		bar	255 - 276	207	300
Max. Line Speed	1. Layer	m/min	40 - 89	15 - 30	61
Maximum Flow		l/min	227 - 257	159	530
Maximum Drum Capacity		m	53 - 143	10 - 49	30 - 234

## Hydraulic / Mechanical Pulling Winch - Recovery Products

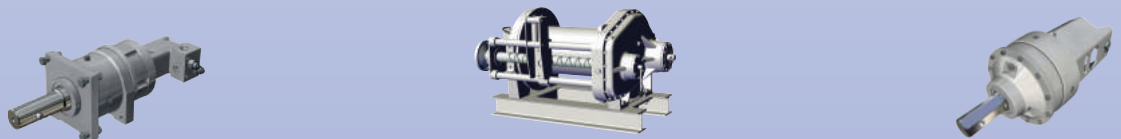
- Internal drag brake reduces back spinning when drum is disengaged
- Adjustable dry band type worm brake available on upright units
- Freespool clutch with negative draft jaws for positive engagement under load
- High Strength aluminium bronze worm gear for increased pulling power and long gear life
- Crowned and shaved gearing for smooth, quiet operation
- Air actuated sliding drum clutch
- Gear or vane motor available on some models



Series			Worm Gear Winches -Low Mount-	Worm Gear Winches -Upright-	Planetary Winches HP-Series	Planetary Winches TR-Series
Max. Line Pull	1. Layer	kg	3.629 - 15.876	2.000 - 68.040	9.555 - 72.730	9.123
Maximum Pressure		bar	117 - 193	86 - 193	172 - 186	203
Max. Line Speed	1. Layer	m/min	4 - 8	3 - 15	4 - 17	9
Maximum Flow		l/min	6 - 189	68 - 320	151 - 322	76
Maximum Drum Capacity		m	6 - 90	5 - 186	11 - 110	51

## Hydraulic Pulling Winch and Drives / Utility Products

- High efficiency planetary gearing
- High capacity output bearings
- Multiple motor options for optimal performance
- Specifically designed for the utility industry
- Manual disconnect for level wind assembly
- Versatile mounting
- Two-speed „stop & shift“ gearbox
- Multiple motor options for optimal performance
- Heavy-duty gearing for max. reliability



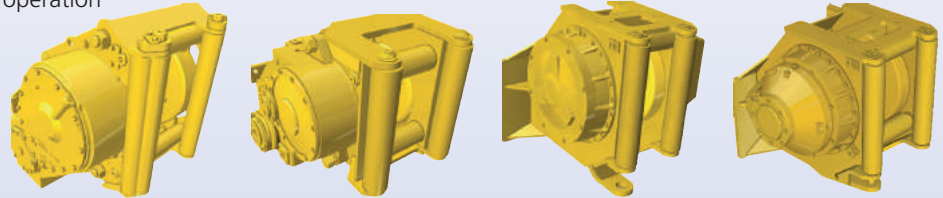
Series			PCD
Output Torque		Nm	1.356 - 2.712
Speed		U/min	42 - 106
Option Drum (other drum sizes on request)			7" Capstan Drum
Max. Line Pull	1. Layer	kg	1.361 - 2.722
Maximum Pressure		bar	166 - 193
Max. Line Speed	1. Layer	m/min	27 - 68
Maximum Flow		l/min	76 - 114

Series			BP200B
Max. Line Pull	1. Layer	kg	2.814 - 5.700
Maximum Pressure		bar	172
Max. Line Speed	1. Layer	m/min	13 - 27
Maximum Flow		l/min	114
Maximum Drum Capacity		m	45 - 468

Series			BD
Output Torque	Nm		16.270
Maximum Pressure	bar		203
Motor Mount	-		SAE'C' 2-bolt
Output Shaft	mm		63,5 or 66,8

## Hydraulic / Mechanical Pulling Winches - Tractor Winches

- Optional slow speed gear
- Optional freespooling drum
- Optional 3 or 4 roller fairleads for increased wire rope life and winching from side angles without vehicle alignment
- Adjustable cabledrum drag minimizes overrun or „bird-nesting“ during freespool operation
- Triple reduction planetary
- Variable speed piston motors
- Integral heavy-duty drawbar



Series			CARCO H40-H50	CARCO 50B-H60-70A-H85	CARCO H90	CARCO H110-H200
Max. Line Pull	1. Layer	kg	18.100 - 22.700	27.200 - 40.700	40.800	49.900 - 90.700
Max. Line Speed	1. Layer	m/min	32 - 41	12 - 45	22	9 - 15
Maximum Drum Capacity		m	67 - 80	66 -86	55	63
Application model			<b>CAT:</b> D3K, D4K, D5K, D6K <b>John Deere:</b> 450J/K, 500J/K, 650J/K, 700J/K <b>CASE:</b> 1150L	<b>CAT:</b> D6K, D6N, D6T <b>John Deere:</b> 700J/K, 750J/K, 850J/K <b>CASE:</b> 1150H, 1150K, 1650L, 1850K <b>KOM:</b> D65-16, D65-17, D65-18	<b>CAT:</b> D6T, D7E <b>John Deere:</b> 750J/K, 850J/K <b>KOM:</b> D65-16, D65-17, D65-18	<b>CAT:</b> D7E, D8T, D9T <b>John Deere:</b> 750K, 850J/K, 950J/K, 1050J/K <b>KOM:</b> D85EX-15, D155-6

## Drives & Special Gears - Other Products

- Integral multi-disc static brake
- Optional piston motor mounting inputs
- Planetary gearing provides high mechanical efficiency
- Available in double or triple planetary configurations
- Multiple planet gear options for drive units provide compact size
- Compact design suitable for track, wheel and drum drive applications
- Speed reducer version available for swing and winch drive applications
- Exclusive overrunning clutch prevents fall-back on Air Winches
- Dual rating for Utility and Personnel on Air Winches



Series		HD	TD	WD	SD	Series		Air Winches BA	
Maximum Output Torque	Nm	80.000	50.000 - 110.000	101.700	2.260 - 175.376	Max. Line Pull	1. Layer	kg	3.080 - 6.886
Continuous Output Torque	Nm	-	-	-	1.130 - 6.214	Maximum Pressure		bar	6
Gear Ratio Ranges	i	76,7 - 110,9:1	125,7 - 173,9:1	72,0 - 189,0:1	25,5 - 36,0:1	Max. Line Speed	1. Layer	m/min	11 - 28
						Maximum Flow		l/min	20
						Maximum Drum Capacity		m	33 - 315

## Winches - Applications



For further product information, technical configuration, calculations, drawings and attachments contact us at:

E-Mail: [info@esco-antriebstechnik.de](mailto:info@esco-antriebstechnik.de)

Phone: +49 (0) 2241 / 4807-0

# Service and Support

## esco - Excellent service for excellent brands

By service, we – the esco team – mean far more than maintenance and repair. That's why our service already starts with the first phone call. Our experienced experts advise you on choosing the appropriate components and offer technically and economically convincing solutions meeting your requirements. In constructive collaboration with you and our suppliers we realize the solution concepts efficiently and give you our support throughout the whole project phase until the start-up on site. Engineering and consulting service, products of leading manufacturers and first class support – esco offers optimum performance at an economical price.

## Personal consultation

At the Troisdorf offices, our field experienced engineering team answers in detail all questions regarding conception of complete drives or customization to the requirements of the application. Close cooperation and personal consultation provide confidence – and this is now more important than ever.

## Service activities

We know how cost-intensive production losses resulting from machine downtime are. So, we do our utmost to make your equipment ready for operation again as fast as possible. Short reaction times due to best organized service processes and an extensive stock at the Troisdorf location with 24/48 hours delivery of all important spare parts guarantee safe operation of your machines and minimum downtimes.



For more information on clever drive solutions from esco please refer to [www.esco-antriebstechnik.de](http://www.esco-antriebstechnik.de)

Or simply call us! Our sales team will be pleased to help you.



esco antriebstechnik gmbh · Biberweg 10 · D-53842 Troisdorf

Tel. (0 22 41) 48 07 - 0 · Fax. (0 22 41) 48 07 - 10

E-Mail: [info@esco-antriebstechnik.de](mailto:info@esco-antriebstechnik.de) · Internet: [www.esco-antriebstechnik.de](http://www.esco-antriebstechnik.de)