

DRIVE TECHNOLOGY

PIVOTING · LIFTING · MOVING · TELESCOPING · ROTATING



POWERFUL IN EVERY ENVIRONMENT

- ✓ Durable, reliable and safe
- ✓ Complete solutions for all requirements
- ✓ Competent on-site service



RUD Conveyor & Drive technology

High performance for all environments

Irrespective of whether one is interested in horizontal, curved or vertical drive concepts - RUD conveyor and drive systems provide a variety of system solutions with round steel chains for various applications in bucket elevators, power generation, onshore and offshore, underground mining and in the industrial and hoist chain sectors.

Numerous internationally acclaimed companies show confidence in RUD Drive technology:





RUD PROVIDES **COMPLETE SOLUTIONS**

TECDOS offers intelligent modules and complete systems customised to your specific application.

Systems p. 8

RUD GUARANTEED **QUALITY**

TECDOS components and modules succeed where other systems fail. A malfunction-free operation is also possible under harsh weather conditions.

Product overview p. 19

RUD MEANS **INNOVATION**

TECDOS offers drive innovations for industrial, harbour and offshore applications. Always searching for perfection.

Examples of applications p. 22

RUD PROMISES **COMPETENT CONSULTING**

Our sales and marketing team comprises worldwide, competent contact partners who can advise you with technical matters and are always willing to face up to new challenges.

Service p. 48

Symbol Legend



Round link chain



OMEGA drive system



PI / GAMMA



Chain guide



End fixing



Chain wheel



Attachments / Gearmotor

Index

1. RUD TECDOS® systems and products.....	06
1.1 TECDOS® PI / GAMMA drive Pocket wheel blocks.....	08
1.1.1 System applications for TECDOS PI-GAMMA.....	10
1.1.2 Multiple system applications for TECDOS PI-GAMMA.....	11
1.2 TECDOS® Heavy Duty Line PI- / GAMMA drive Pocket wheel blocks	12
1.3 TECDOS® OMEGA DRIVE Innovative drive system.....	14
1.3.1 TECDOS® complete system Versatile drive systems	16
1.3.2 TECDOS® OMEGA DRIVE modular system for maximum flexibility	17
1.4 TECDOS® systems overview	18
1.5 TECDOS® products overview.....	19
2. RUD TECDOS® branches at a glance	20
3. RUD TECDOS® drive solutions	24
3.1 Lifting	26
3.2 Telescoping	28
3.3 Process	28
3.4 Rotating	31
4. RUD TECDOS® spare parts and components.....	32
4.1 TECDOS® round link chain	34
4.2 TECDOS® pocket wheels	36
4.3 TECDOS® chain end fixing	37
4.4 TECDOS® lift limiter.....	38
4.5 TECDOS® chain connector	38
4.6 TECDOS® chain guide	38
4.7 RUD foolproof high dynamic shackle	39
4.8 RUD PowerPoint fixing point.....	39
4.9 RUD Cobra fork head hook	39
5. RUD TECDOS® Information & services.....	40
5.1 Technical charts	42
5.2 RUD TECDOS® service	48
5.3 In the world at home. RUD locations	50
5.4 Technical questionnaire	51





1. RUD TECDOS® systems
and products

**SAFE THROUGH
DAILY LIFE.**



HANDY RISKFREE FLEXIBLE

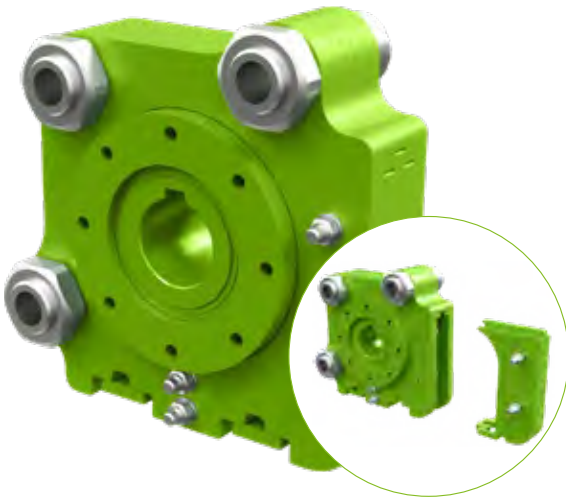
Our systems and components guarantee sustainable solutions, even under difficult conditions. TECDOS systems are user friendly and can be combined flexibly.

1. RUD TECDOS® systems and products

1.1 TECDOS® PI-GAMMA drive | Pocket wheel blocks



TECDOS PI-GAMMA pocket wheel blocks are particularly suitable for horizontal / ascending and vertical use with a fixed 180 degree (PI) or flexible 90 to 180 degree deflection (GAMMA).



Attachements TECDOS® PI-GAMMA:

Along with TECDOS end fixings, many attachment solutions are available from the VIP lifting means* program.



Find accessories on page
→ **36**

*The VIP standard bolt must be replaced by a TECDOS special bolt when combining TECDOS chains.

TECDOS® PI-GAMMA drive principle

The system can be used as either drive or deflection modules with integrated roller bearings. This means the drive shaft is free from any additional forces and does not need a shaft if used as a deflection module. Integrated chain guide and straightener. PI and GAMMA drives are available in sizes to suit TEC6 - TEC65 TECDOS dimensions.

Vorteile:

- Flexible, durable, reliable and safe
- Complete solutions for all requirements
- Galvanized surface (doesn't apply to the entertainment area)
- Small sizes & heavy loads | quiet running | also in black
- Competent on-site service
- The TECDOS drive unit with insert enables a 180° redirection
- When the insert is removed, the drive unit enables a redirection between 90° and 180°
- Integrated bearing
- Chain guide and stripper integrated
- Drive shaft without any additional forces
- Shaft not required when utilising redirection module



Technical data
→ **p. 46**

TIP

We can also provide special paintwork according to maritime specifications on request.



1. RUD TECDOS® systems and products

1.1.1 System applications for TECDOS® PI-GAMMA

Modular design for highest-possible flexibility when selecting electrical, hydraulic or pneumatic motors. Also available in black: perfect for use in stage and event technology.

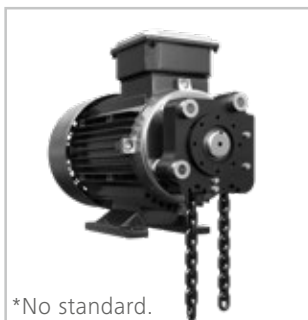
Horizontal TECDOS® PI-GAMMA drive

Horizontal (fixed 180 degrees) drive in a double arrangement with two parallel PI drives. Also in 3 and 4-way arrangement possible depending on the application.



Vertical TECDOS® PI-GAMMA drive

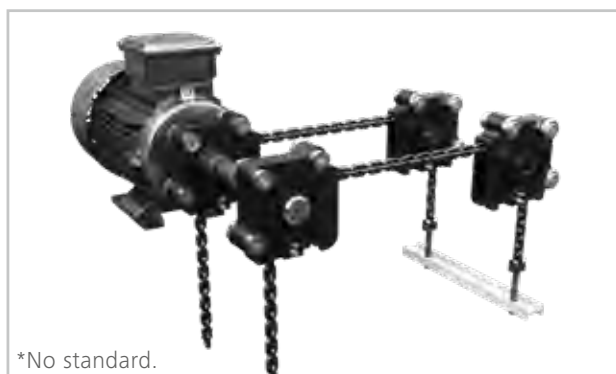
Vertical (fixed 180 degrees) drive in a double arrangement with two parallel PI drives. Also in 2-, 3 and 4-way arrangement possible depending on the application.



1.1.2 Multiple system applications for TECDOS® PI-GAMMA

Double strand with TECDOS® PI-GAMMA drive

Flexible (90 to 180 degrees) drive in a double arrangement with one drive.
Also in 3 and 4-way arrangement possible depending on the application.



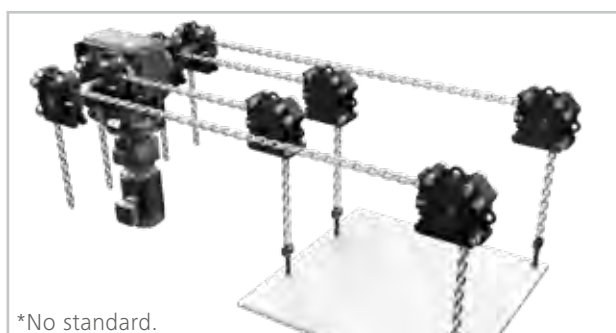
3-way arrangement with TECDOS® PI-GAMMA drive

TECDOS PI-GAMMA 3-way arrangement with chain drive.
(With round link chain for TECDOS drive technology and systems)



4-way arrangement with TECDOS® PI-GAMMA drive

TECDOS PI-GAMMA 4-way arrangement with chain drive.
(With round link chain for TECDOS drive technology and systems)



1. RUD TECDOS® systems and products

1.2 TECDOS® HEAVY DUTY LINE PI & GAMMA drive | Pocket wheel blocks



The large PI pocket wheel blocks enable vertical and horizontal drives with 180° chain redirection to be used. Large GAMMA pocket wheel blocks are used for drives with a 90° deflection.

PI-wrap angle 180°



GAMMA wrap angle 90°-180°



TECDOS PI & GAMMA equipment:

Along with TECDOS end fixings, many attachment solutions are available from the VIP lifting means* program.



Find accessories on page
→ **36**

*The VIP standard bolt must be replaced by a TECDOS special bolt when combining TECDOS chains.

TECDOS® PI & GAMMA drive principle

Versatile module for drive and idler application. Integrated roller bearings. Drive shaft free of additional forces. No shaft required when used as idler module. Integrated chain guide and stripper. TECDOS PI & GAMMA drives are for all TECDOS Dimensions available.

Advantages:

- Versatile application possibilities as drive unit module & redirection module
- Integrated bearing
- Chain guide and stripper integrated
- Drive shaft without any additional forces
- Shaft not required when utilising redirection module



Technical data
→ **p. 46/47**

TIP

We can also provide special paintwork according to maritime specifications on request.

1.2 TECDOS® HEAVY DUTY LINE PI & GAMMA drive multiple chain strand systems

Modular design for highest-possible flexibility when selecting electrical, hydraulic or pneumatic motors.



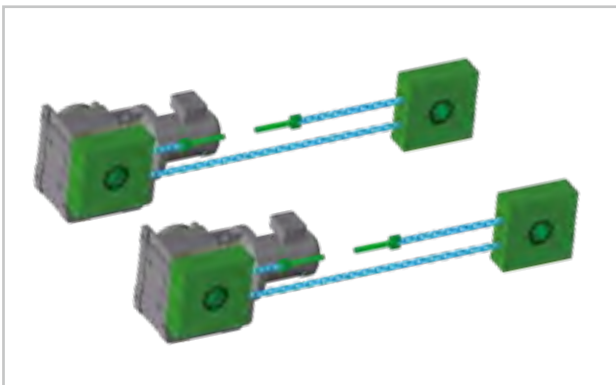
System applications for TECDOS® PI & GAMMA:



Vertical PI drive

Vertical PI drive unit.

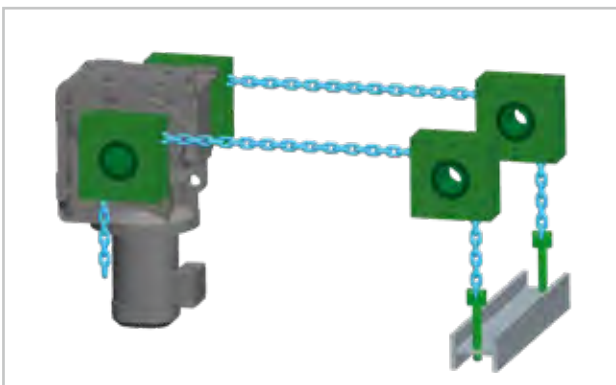
Also possible in 2, 3 and 4 fold arrangements with drive units depending on the application.



Horizontal PI drive

Horizontal drive unit as double arrangement with two parallel operating PI drive units.

Also possible in 3 and 4 fold arrangements with drive units depending on the application.



Double strand with GAMMA drive

Vertical GAMMA drive unit as double arrangement with one drive units.

Also possible in 3 and 4 fold arrangements with drive units depending on the application.

TECDOS ADVANTAGE:

ALL FROM ONE MANUFACTURE

1. RUD TECDOS® systems and products

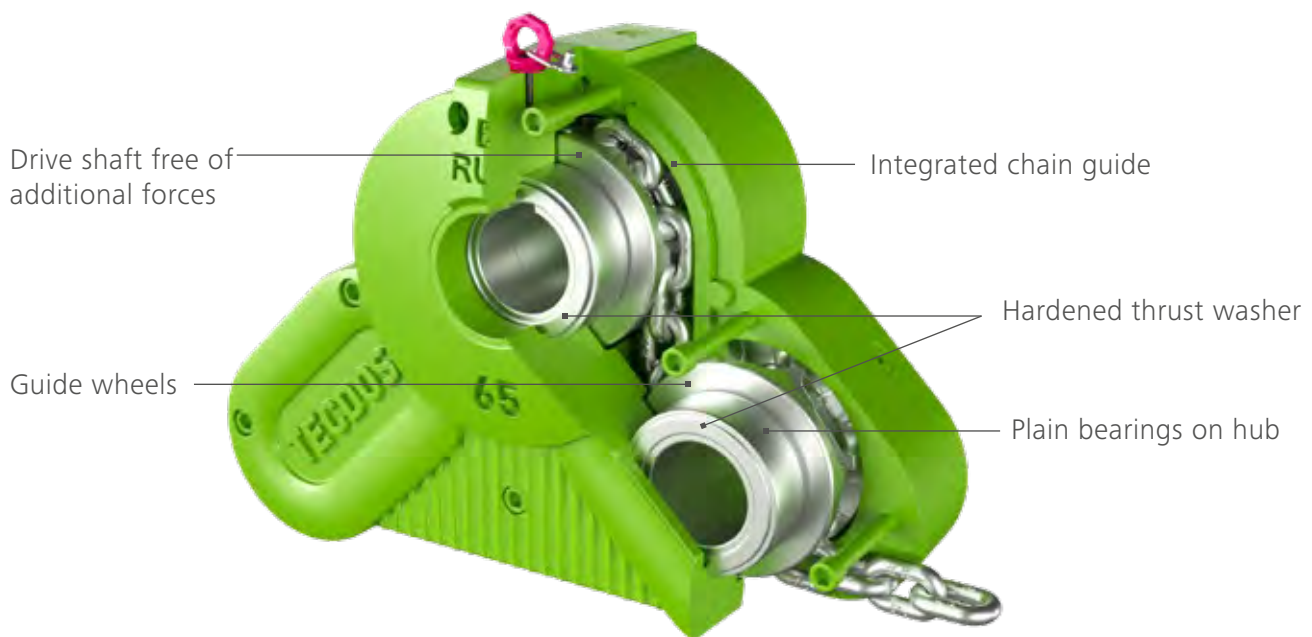
1.3 OMEGA DRIVE | Innovative drive system



OMEGA DRIVE is the ideal drive solution for linear or rotating movements. In order to process a running crane trolley on a carrier, ship cranes on a rail or for skid application. The OMEGA DRIVE is superior to comparable rack and pinion and sprocket wheel solutions.

In comparison it is less sensitive to dirt, sand, ice, etc., is easier to mount and tolerates deviations of alignment. The modular concept allows the drive through electric, hydraulic or pneumatic motors, at order point electric motor can be supplied.

OMEGA DRIVE principle



OMEGA DRIVE complete system

This innovative drive concept also runs smoothly when rack drives, spindle drives or roller chains reach their limits. Dirt, rain, aggressive media and even ice do not stop the RUD OMEGA DRIVE.

This drive concept has proven itself in numerous applications around the world. References on request.

OMEGA DRIVE applications

Moving cranes on ships, tracking solar panels in the sun or simply moving a machine - RUD OMEGA is the perfect, innovative drive solution.

Attachments for flanging motors on request.



1. RUD TECDOS® systems and products

1.3.1 TECDOS® Complete system | Versatile drive systems for linear & curved motion

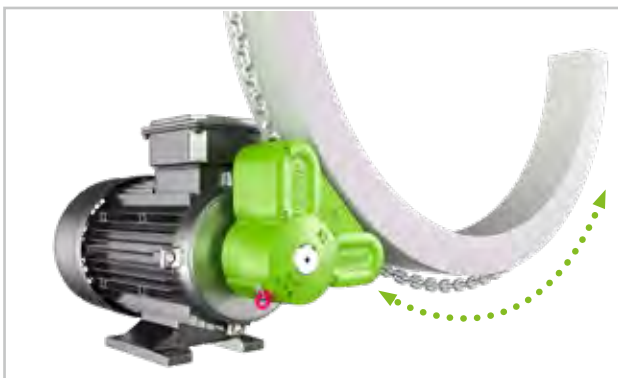
1. Linear travel, fixed drive and moving chain / equipment



2. Moving drive and fixed chain / equipment



3. Fixed drive and rotating chain / equipment



4. Fixed chain, drive / equipment moving along curved path



Your perfect companion for various systems:

- Moving harbour and ship cranes
- Aligning and adjusting ship loading and unloading
- Opening and closing sliding doors in the holds
- Rotating and lifting platforms
- Propulsion for ferries on rivers and lakes
- Moving wagons for unloading
- Extending telescopic booms for ship loaders and cranes
- Moving sea posts (spud pole)
- Traversing Skidding Systems

TECDOS® OMEGA DRIVE

Approval by major maritime classification societies possible



Spezifikationen:

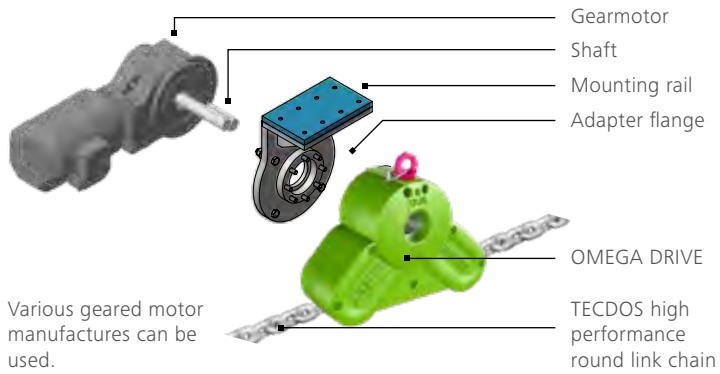
- Operating force 6 – 260 kN
- Mobile or fixed drive
- OMEGA DRIVE - Weight 20 – 2.163 kg
- Chain speed 1 - 6 m/minute with full load, up to 12 m/minute with part load



Technical data

→ p. 47

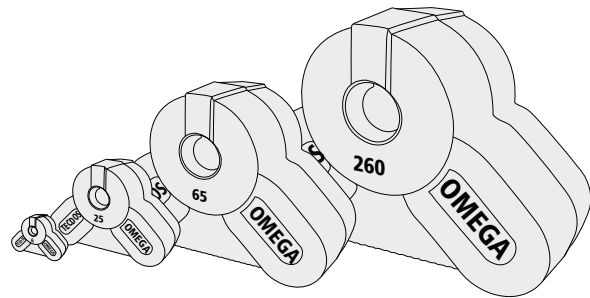
1.3.2 TECDOS® OMEGA DRIVE modular system | for maximum flexibility in the choice of an electric, hydraulic or pneumatic motor



TECDOS® OMEGA DRIVE is available in 7 various operational forces:

Product advantages:

- less sensitive to dirt, sand, ice
- easy to mount
- tolerates alignment and measurement deviations, such as temperature elongation
- does not generate reaction forces
- can be used in all directions
- weather and corrosion resistant



TECDOS OMEGA DRIVE Hotline:
+49 (0) 7361 504-1457



More information:
www.youtube.com/user/RUDKetten



You Tube

1. RUD TECDOS® systems and products

1.4 TECDOS® systems overview | 1.5 TECDOS® products overview

For the construction of a complete TECDOS drive solution, based on the TECDOS high performance round link chain, we can provide the most diverse components and systems for every requirement. All TECDOS round steel chains are stamped and this ensures traceable evidence to the melt over standard 3.1 certificates.

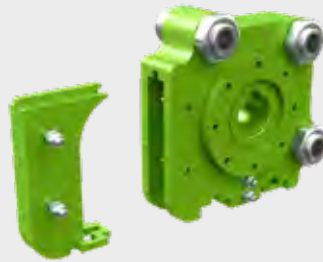


TECDOS® PI-GAMMA drive

Complete system with insert including pocket wheel for chain redirection of 180°.



Complete system without insert including pocket wheel for chain redirection from 90° to 180°.



→ S. 8



TECDOS® HEAVY DUTY LINE

PI (180° chain redirection) and GAMMA (90-180° redirection) pocket wheel blocks for big sizes. For vertical and horizontal drives.



TECDOS® OMEGA DRIVE

Drive solution with SEW electric motor. Adapter flange, TECDOS high performance chain and OMEGA DRIVE

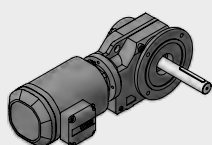


→ S. 12
→ S. 14

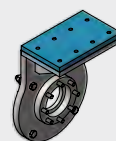


Attachements & Motors

Drive unit / motor and shaft



Mounting rail and adapter flange





Discover now **RUD TECDOS chains drivers and components** on CADENAS. RUD product-download simplifies design!
[Click here](http://www.cadenas.de/en) or search www.cadenas.de/en for **TECDOS**.



Discover now **RUD TECDOS chains drivers and components** on traceparts. RUD product-download simplifies design!
[Click here](http://www.traceparts.com/en) or search www.traceparts.com/en for **TECDOS**.



ROUND LINK CHAIN



CHAIN GUIDE



END FIXING



CHAIN WHEEL



OMEGA DRIVE



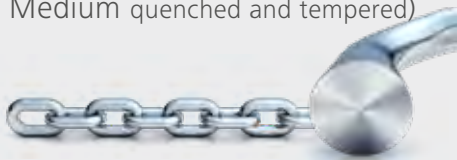
ATTACHEMENTS /
GEARMOTOR



PI / GAMMA DRIVE



TECDOS® round link chain
 Medium quenched and tempered



premium (case hardened)



→ S. 34



TECDOS® pocket wheel



TECDOS® chain guide



→ S. 36
 → S. 38



Chain end fixing



**PowerPoint
fixing point**



Cobra fork head hook



→ S. 37
 S. 39

**Foolproof high
dynamic shackle**



**TECDOS®
Lift limiter**



**TECDOS®
chain connectors**




→ S. 39
 S. 38

The background image shows an offshore oil rig on the left and a supply vessel with a large crane on the right, both on the ocean. The entire image is overlaid with a semi-transparent green filter. The text is white and positioned in the upper left quadrant.

2. RUD TECDOS® branches
at a glance

**HIGH
PERFORMANCE
IS OUR DRIVING
FORCE.**



PIVOTING LIFTING MOVING TELESCOPING ROTATING

Whatever direction you want to move something in, the combination of TECDOS components provides suitable solutions for the most diverse fields of industry.

2. TECDOS® Branches at a glance

Maritime & inland waters



Steel construction for hydraulic engineering



Building dynamics





Stage and event technology



Handling solutions



Automotive

3. RUD TECDOS®
drive solutions

**ROBUST, EFFECTIVE,
SPACE-SAVING.**





MOVE ADJUST DRIVE

Innovative and high-performance drive systems
for linear and rotating movements.

3. TECDOS® drive solutions

3.1 Lifting



Quelle: Eisenmann



Lifting equipment for final vehicle assembly

Variable height for ergonomic working

Vehicles attached to load frames must be traversed variably in height to enable ergonomic working during final assembly. The load frames must not hereby swing in the horizontal axis and only limited installation space is available for the drive unit.

RUD Solution

- TECDOS premium chain, tensioned all round as crisscross
- 4-fold pocketwheel-drive shaft
- pocketwheel deflection wheels
- Chain guide
- End fixing

Gangway

Robust, variable and compact

Gangways and ship access systems must be adjustable in longitudinal and transverse directions as well as for the height for different models and sizes of vessels so that safe access for passengers and crew is ensured.

RUD Solution

- TECDOS medium chain
- Pi-drive
- End fixing
- Lift limiter





Wagon unloading equipment

Rapid and safe material unloading

A shunting transshipment port for bulk goods requires a facility with which railway wagons could be unloaded rapidly and safely. Loads of up to 100 tons could not should be lifted and tipped in this case.

RUD Solution

- TECDOS medium chain
- Pocketwheels



Sectional door drive units

Moving doors with weights of several tonnes

Doors which weigh several tons e.g. in hangars or industrial halls must be reliably opened and closed, so neither people may be injured nor objects may be damaged. A combination of diverse technical drive components provides a trouble-free application.

RUD Solution

- TECDOS premium chain strands for lifting and lowering
- RUD lifting means and aids as linkage for counterweights
- TECDOS chain wheels: weather resistant, corrosion resistant and robust
- End user can combine roller chain with round link chain



→ Scan the QR code and watch the video!

3. TECDOS® drive solutions

3.2 Telescoping



Ship Loader

Flexible ship loading

Mobile ship loaders with mobile booms are utilised for loading of bulk goods on cargo ships. This equipment enable the cargo to be evenly distributed in the freight hold.

RUD Solution

- TECDOS premium chain
- Pocketwheel in OMEGA arrangement
- Chain guide
- End fixing



→ Scan the QR code and watch the video!

3.3 Process



Moveable roof solutions

For flexibility & freedom overhead

If you want maximum freedom, choose a sliding roof! Massively heavy roof coverings, which you can slide back when necessary, are just as commonly found in industrial production halls as in sports stadia, swimming pools, spa pools or event venues.

RUD Solution

- TECDOS round steel chain (premium)
- PI pocketwheel blocks



→ Scan the QR code and watch the video!



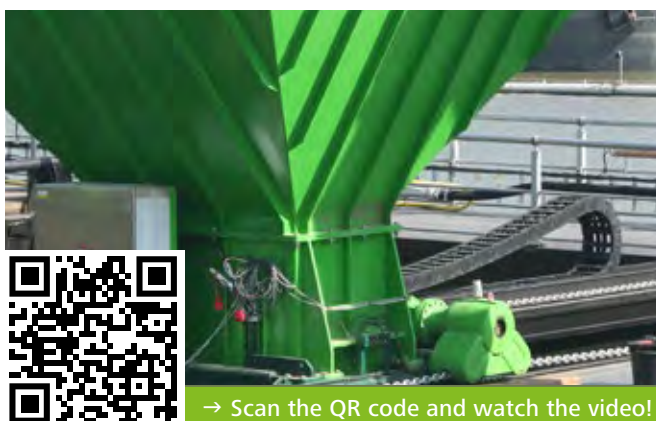
Skidding

Reliable solution for moving loads from one point to another

For bulk material handling on a dredger, a robust and easy-to-install solution was sought, which is particularly resistant to sand or gravel blocking.

RUD Solution

- OMEGA drive concept
- TECDOS premium chain
- End fixing



→ Scan the QR code and watch the video!



Spud Pole Skidding

Anchoring and positioning system for dredgers

Dredgers must be positioned safely and moved forward step by step in order to expand and dredge canals.

The 9 m long travel route is therefore executed at a speed of 5m/minute. The tensile forces on the chains normally amount to 90kN although they can increase up to 130kN.

RUD Solution

- TECDOS premium chain
- End fixing
- TECDOS OMEGA Drive



→ Scan the QR code and watch the video!

3. TECDOS® drive solutions

3.3 Process



Spooling

Equipment for cable winches and double drum winches

For a hydraulically driven double drum anchor towing winch with a cable pull of 500 tons, a winding device was needed.

RUD Solution

- TECDOS medium chain
- End fixing for round link chain
- Double strand pocketwheel



Steel construction for hydraulic engineering

Effective grille cleaning always pays for itself

The grille cleaning systems manufactured by the Austrian company BRAUN have been clearing grilles and disposing of the debris very effectively for many decades. Every job needs its own special approach to ensure maximum cost-effectiveness and customer satisfaction. Durability of construction and ease of maintenance are critical factors. Thanks to their all-round toughness, TEC round steel chains and the innovative TECDOS OMEGA DRIVE drive solution can easily withstand the very worst weather conditions (heat, cold, ice) to ensure the grille cleaner always moves freely and easily.

RUD Solution

- TECDOS round link chain
- OMEGA DRIVE
- End fixing



3.4 Rotating



Blade Turning Device

Transporting bulky, sensitive rotor blades

Assembling and erecting turbines requires handling equipment with which the long rotor blades [up to 80 Mtrs] can be secured, aligned horizontally and rotated around the longitudinal axis.

RUD Solution

- TECDOS medium chain
- Pocketwheels



→ Scan the QR code and watch the video!



Rotating & Turning Equipment

Rotating rotor blades

Rotor blades for wind turbines are laminated in half-shells during manufacturing. To ensure that the multiple layers of glass-fibre or carbon-fibre-reinforced plastic can be inserted with millimetre precision and without wrinkles, the half-shells must be rotated around the longitudinal axis during moulding.

RUD Solution

- TECDOS premium chain
- Pocketwheel in OMEGA arrangement
- End fixing



→ Scan the QR code and watch the video!

4. RUD TECDOS®
spare parts and components

**A WELL-ROUNDED
RESULT.**





ROBUST DURABLE SAFE

For all TECDOS drive solutions always the optimum chain selection for pivoting, lifting, handling, telescoping and rotating.

4. TECDOS® spare parts & components

4.1 TECDOS® round link chain | Material and application benefits

The core component of each TECDOS system application is a highly wear-resistant RUD round link chain for maximum service life – even with wear-resistant media. Extremely dynamic strength therefore ensures maximum operational safety.

TECDOS is always the best solution:

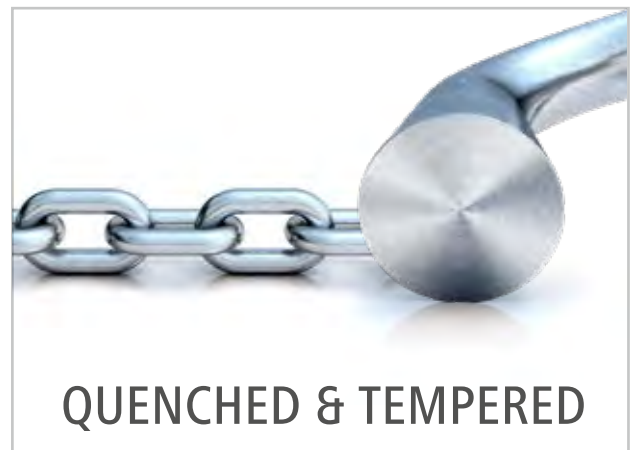
- when high forces have to be transmitted within limited space
- when three-dimensional mobility is required
- under severe environmental conditions
- when exposed to weather
- in offshore, underwater and harbour applications
- when the means of traction has to have optimized storage capacity

TIP

Lubrication enables you to achieve up to 10-15 fold service life.



- when frequent use is required



- when infrequent use is required

Corrosion protection for TECDOS® high performance chain

Surface	Short description of surface coating	New condition	After 100 hours salt-spray test
Electrolytic galvanised *topcoat silver	electrolytic metal deposition (6-10 µm)		



Technical data

→ p. 40

Designed for all environments

High robustness



3D-mobility



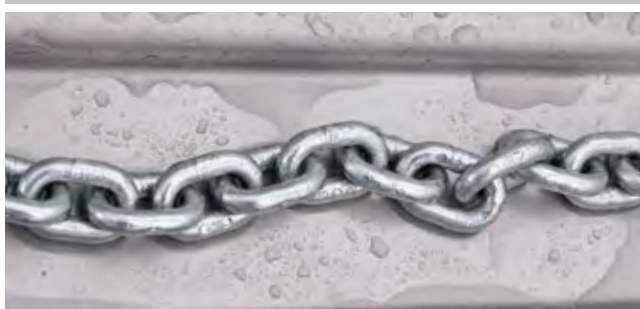
Small deflection radius



Easy storable



Trouble-free maintenance



Simply end fixing



Reliable with low actuation



Reliable with more frequent actuation



4. TECDOS® spare parts & components

4.2 TECDOS® pocket wheels



TECDOS pocket wheels are optimally designed to work with TECDOS chain and guarantee long life and silent running.

Features:

1. All TECDOS chain wheels are made of low-alloy steel, completely mechanically processed and tempered o.r. hardened
2. Chain wheels available for loads from 6 kN up to 260 kN
3. Geometry of the pockets is perfectly coordinated to the TECDOS round steel chain
4. The bore and hub designs can be designed as customer-specific requirements (toothing possible with specification from DIN standard)
5. Rust resistant and acid resistant drive and redirection wheels available on request



Technical
data

→ p. 42

TECDOS® chain wheels for drive units and redirection can be manufactured for single and multiple chain strand configurations. Available on request for all chain sizes from TEC 6 to TEC 260 for loads from 6 up to 260 kN.



TIP

All TECDOS components can be delivered as rust resistant and acid resistant.

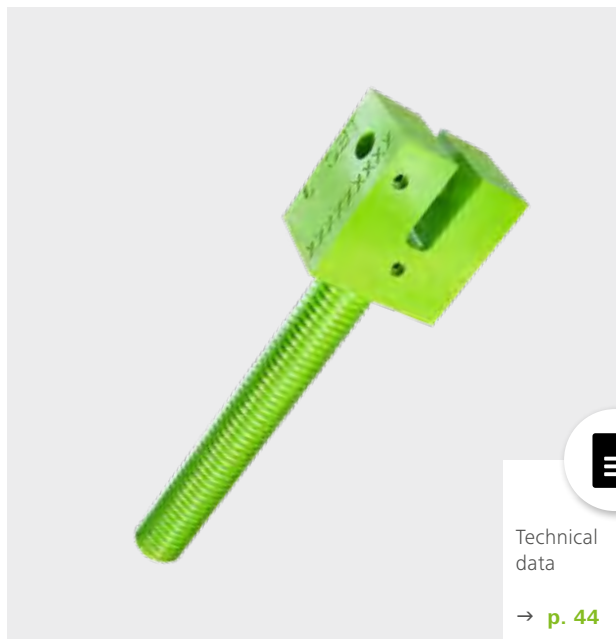
4.3 TECDOS® chain end fixing

The chain end fixing for linking the chain and load-supporting structures transfers 100% of the TECDOS chain operating forces. Thanks to its adjustable axis, it ensures the greatest possible flexibility during use.



Characteristics:

- transfer 100% of the TECDOS chain operating forces
- axially adjustable
- suitable for all TECDOS systems



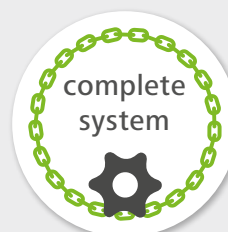
Technical data

→ p. 44



TECDOS® Application

1. Pi-GAMMA pocket wheel block
2. PowerPoint fixing point
3. Chain guide redirection unguided
4. Round link chain medium/premium
5. End fixing



4. TECDOS® Spare parts & components

4.4 TECDOS® lift limiter



The lift limiter prevents the chain from “passing through” i.e. it serves as a travel route limiter on the unloaded sides of the chain.

Features:

- Limits the lift of a TECDOS drive system and
- Prevents the chain from being pulled through by the PI/ GAMMA or chain guides units



Technical data → [p. 43](#)

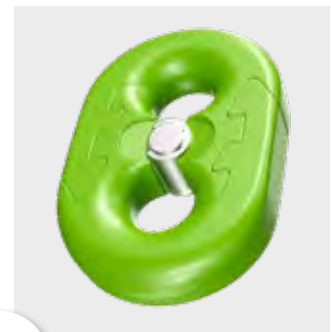
4.5 TECDOS® chain connector



TECDOS chains and connectors form a reliable system. Both components perfectly fit in combination with the OMEGA DRIVE or chain wheels.

Features:

- Connects the chain to an endless chain loop
- Attention: Operating forces are limited to maximum power of the chain connector



Technical data → [p. 44](#)

4.6 TECDOS® chain guide



Chain guides are used under severe environmental conditions, when one chain strand is not loaded, when the chain is prone to jumping off the sprocket wheel, to ensure smooth running of the chain over the sprocket wheel.

Features:

- Machined chain guide heat treated for optimal wear resistance
- Chain guide laser cut, without heat treatment
- radially divided for simplified assembly



Technical data → [p. 43](#)

The selection of the chain guide depends on the application and the operation environment.

4.7 RUD foolproof high dynamic shackle

High tensile version with an integrated safety thread in the shackle bracket.

Features:

- Smooth bolt support in the shackle on both sides.
The bolt is turnable
- No bending strength in the thread (only a securing function)
- Optimal adaptation - max. mouth width with the smallest shackle bolt
- Owing to the turned clevis connection, it is extensively resistant to bending
- Long term securing by driving in the pre-assembled tensioning sleeve
- Special thread, thus distinctive in comparison to other shackle bolts
- Pre-assembled connecting bolt and tensioning sleeve



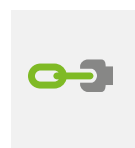
Technical data → p. 44

4.8 RUD PowerPoint fixing point

RUD fixing points are easy to rotate and always the right connection

Features:

- Rotating 360°, pivoting 230°
- Universal, unmistakable VIP connection for chain, hook and eye
- Double ball bearing for turning/rotating operations
- completely pre-assembled with TECDOS connecting bolts and clamping sleeve



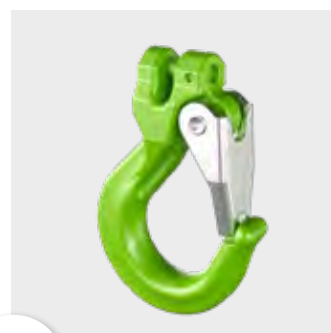
Technical data → p. 45

4.9 RUD Cobra fork head hook

The Cobra hook with a ring connection and of course all the advantages of a RUD - clevis hook.

Features:

- Very robust design without a protruding hook tip
- The forged safety latch engages in the tip of the hook and is thus protected against lateral bending
- With a triple coiled corrosion protected double leg spring
- Thickened tip of the hook to prevent misuse
- Wear marks on both sides
- Gauge marks for measuring the width of the hook opening
- Completely pre-assembled with TECDOS connecting bolts & clamping sleeve



Technical data → p. 45

5. RUD TECDOS®

Technical informations & services

**SO EVERYTHING
MOVES, WHICH
HELPS YOU TO
MOVE FORWARD.**





COMPETENT RELIABLE REACHABLE

Our expert knowledge enables us to reliably support you during and after the optimisation of your processes. In order to fulfil this demand, we can provide you with extensive offers and services.

5. RUD TECDOS® informations & services

5.1 Technical charts



TECDOS® round link chain

Medium

quenched and tempered
chain HV approx. 360

Premium

case hardened chain
HV 580 – 600

Sizes

round link chain is available in 7 sizes



Chain	Working load [kN]	Weight approx. [kg/m]	Breaking force [kN]	Medium (part no.)	Premium (part no.)
TEC 6	6	0,59	34,0	7905137	7905146
TEC 12	12 ²	1,13	65,1	7905102	7905113
TEC 25	25 ²	2,24	126,0	7905093	7905068
TEC 43	43 ²	3,80	212,3	7905057	7905040
TEC 65	65 ²	5,70	322,0	7904959	7905020
TEC 140 ¹	140 ²	12,30	694,0	7904948	7905015 ³
TEC 260 ¹	260 ²	22,6	1315,0	7904947	–

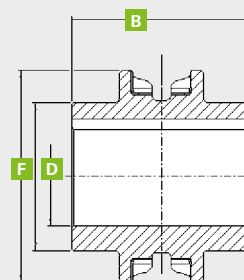
¹ topcoat silver ² When using with TECDOS chain connectors the operational force of the chain has to be adapted according to the specification of the connectors. ³ max. 44 m length per strand

Product information → p. 34



TECDOS® chain wheels

chain size	No. of pockets*	Pitch circle diameter ø (mm)	Hub length B [mm]	Bore ø D [mm]	Outer ø F [mm]	No. of Keyways DIN 6885 P9 [mm]	Weight [kg]	Part no.
TEC 6	6	58,4	45	30 H7	63,5	1	0.5	7905327
TEC 12	6	82,3	70	40 H7	89,5	1	1.5	7905328
TEC 25	6	108,0	100	50 H7	118,0	1	3.8	7905329
TEC 43	6	139,2	120	70 H7	152,0	1	7.1	7905330
TEC 65	6	174,5	150	90 H7	190,5	1	13.0	7905331
TEC 140	6	256,2	200	130 H7	279,5	2**	42.6	7905332
TEC 260	6	347,8	250	180 H7	379,5	2**	101.0	7905333



*) Standard 6 pockets
other sizes on request
**) Keyways at 120°
offset

Product information → p. 36



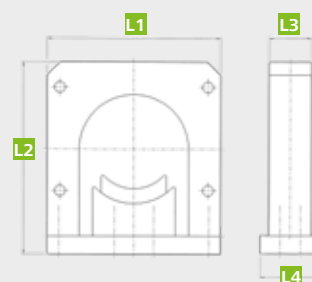
Discover now **RUD TECDOS chains drivers and components** on CADENAS. RUD product-download simplifies design!
Click here or search **www.cadenas.de/en** for **TECDOS**.

TECDOS® chain guide

Milled chain guide, radially divided

Chain	Pockets	Weight [kg]	L1	L2	L3	L4	Part no.
TEC 6	6	1.6	114	118	25	37	7906322
TEC 12	6	4.2	145	161	35	50	7906186
TEC 25	6	9.6	190	209	50	60	7902719
TEC 43	6	18.3	239	263	65	80	7902294
TEC 65	6	31.7	284	322	80	100	7902289
TEC 140	6	97.0	404	463	118	142	7902320
TEC 260	6	206.6	525	621	193	150	7902038

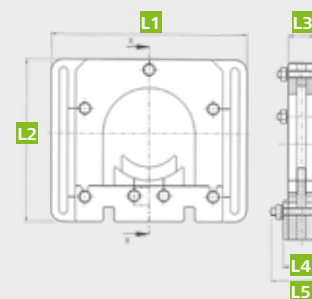
Product information → [p. 38](#)



Laser cut chain guide, radially divided

Chain	Pockets	Weight [kg]	L1	L2	L3	L4	L5	Part no.
TEC 6	6	2.1	164	120	22	30,4	44	8504484
TEC 12	6	3.5	195	162	24	32,4	49	8504465
TEC 25	6	8.3	248	210	36	46,	65,3	8503920
TEC 43	6	–	–	–	–	–	–	on request
TEC 65	6	–	–	–	–	–	–	on request

Product information → [p. 38](#)



TECDOS® lift limiter

Chain	Weight [kg]	Part no.
TEC 6	0.14	7906314
TEC 12	0.5	7907126
TEC 25	0.4	7906460
TEC 43	1.7	7906401
TEC 65	4.0	7906315
TEC 140	8.0	7906316
TEC 260	–	on request

Product information → [p. 38](#)



Discover now **RUD TECDOS chains drivers and components** on traceparts. RUD product-download simplifies design! [Click here](#) or search www.traceparts.com/en for **TECDOS**.

5. RUD TECDOS® informations & services

5.1 Technical charts



TECDOS® chain connector

Part no.	Chain size	Working load [kN]	Load cycles to failure	Max. allowed chain speed	Weight [kg]	Surface
7908978	TEC 12	9	20.000	8 m/min	0.035	painted
7908986	TEC 25	18	20.000	8 m/min	0.095	painted
7908995	TEC 43	30	20.000	8 m/min	0.2	painted
7908990	TEC 65	45	20.000	8 m/min	0.38	painted
7906522	TEC140	100	20.000	8 m/min	1.15	painted

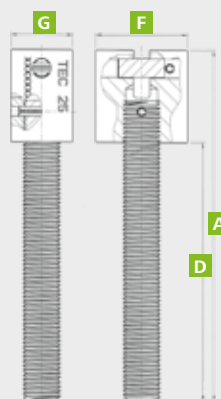
Product information → [p. 38](#)



TECDOS® end fixing

Designation	Chain	Working load [kN]	A [mm]	D [mm]	F [mm]	G [kg]	Weight [kg]	Part no.
HEBG-M12	TEC6	6	114	84	30	20	0.3	7996526
HEBG-M16	TEC12	12	145	105	40	30	0.6	7993561
HEBG-M24	TEC25	25	229	169	60	40	1.9	7997341
HEBG-M30	TEC43	43	287	217	70	45	3.2	7997329
HEBG-M36	TEC65	65	379	279	100	54	5.8	7997326
HEBG-M42	TEC140	140	567	447	120	75	11.5	7997385
HEBG-M48	TEC260	260	592	442	150	100	20.5	7997420

Product information → [p. 37](#)



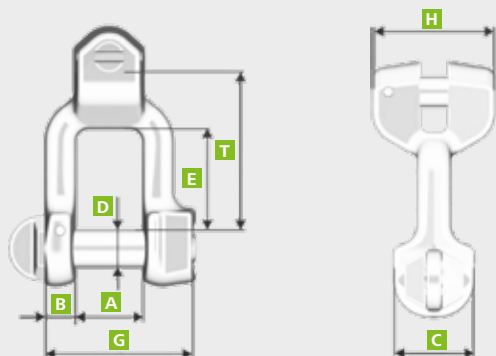
RUD foolproof high dynamic shackle

Attention, this component has been modified for TECDOS applications.

Standard components from the RUD VIP Family are suitable for TECDOS drive chains.

Designation	Chain	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	G [mm]	H [mm]	T [mm]	Weight [kg/Stk.]	Part no.
Shackles - VV-GSCH 6	TEC 6	17	8	22	10	21	40	28	36	0.13	7909779
Shackles - VV-GSCH 8	TEC 12	21	10	26	12	32	48	39	48	0.27	7909780
Shackles - VV-GSCH 10	TEC 25	27	13	34	16	35	62	44	60	0.6	7909781
Shackles - VV-GSCH 13	TEC 43	33	17	42	20	41	81	59	78	1.3	7909782
Shackles - VV-GSCH 16	TEC 65	38	21	49	24	49	95	69	96	2.25	7909783
Shackles - VV-GSCH 22	TEC 140	53	30	76	36	72	130	95	132	6.43	7909784

Product information → [p. 39](#)



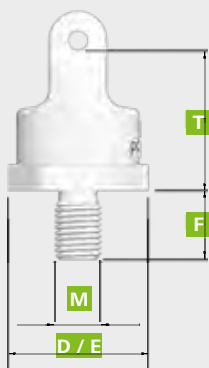
RUD PowerPoint fixing point

Attention, this component has been modified for TECDOS applications.

Standard components from the RUD VIP Family are not suitable for TECDOS drive chains.

Designation	Chain	D [mm] corner dimension	E [mm] wrench width	F [mm]	M [mm]	Md [mm]	T [mm]	Weight [kg/Stk.]	Part no.
PP-VIP M16	TEC 6	46	41	25	16	17.5	50	0.42	7909768
PP-VIP M20	TEC 12	61	55	30	20	22	61	0.94	7909769
PP-VIP M24	TEC 25	78	70	36	24	26	77	1.82	7909770
PP-VIP M30	TEC 43	95	85	45	30	33	93	3.47	7909771
PP-VIP M36	TEC 65	100	90	54	36	39	102	4.69	7909772

Product information → [p. 39](#)



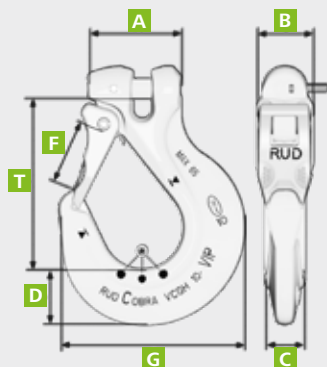
RUD Cobra fork head hook

Attention, this component has been modified for TECDOS applications.

Standard components from the RUD VIP Family are not suitable for TECDOS drive chains.

Designation	Chain	A [mm]	B [mm]	C [mm]	D [mm]	F [mm]	F _{max} [mm]	G [mm]	T [mm]	Weight [kg/Stk.]	Part no.
Hook VCGH 6	TEC 6	38	22	16	20	25	45	72	76	0.4	7909773
Hook VCGH 8	TEC 12	50	28	20	28	30	52	95	97	0.8	7909774
Hook VCGH 10	TEC 25	60	36	26	36	35	65	118	108	1.5	7909775
Hook VCGH 13	TEC 43	76	46	30	37	40	73	135	126	2.8	7909776
Hook VCGH 16	TEC 65	83	56	36	49	48	87	161	152	4.7	7909777
Hook VCGH 22	TEC 140	117	78	50	74	63	114	223	198	11.9	7909778

Product information → [p. 39](#)



5. RUD TECDOS® informations & services

5.1 Technical charts

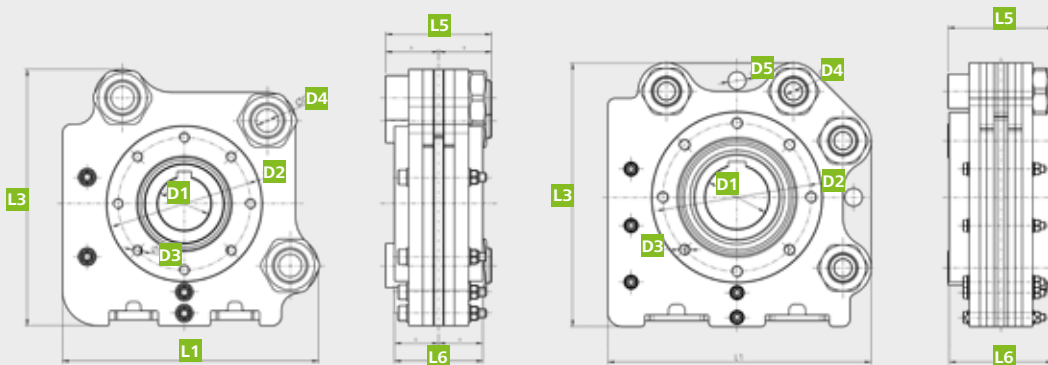
TECDOS® PI-GAMMA

The new generation - More efficiency through flexibility

Chain	No. of teeth	Pitch circle diameter [mm]	L1 [mm]	L3 [mm]	L5 [mm]	L6 [mm]	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	D5 [mm]	Work-manship	Weight [kg]	Part no.
TEC 6	6	58,4	145	145	60	50	30	75	M6 x 12	13	-	3 Hole	4,5	7910312
TEC 12	6	82,3	206	210	83	79	40	100	M8 x 20	14	25	4 Hole	12	7910647
TEC 25	6	108,0	256	265	110	105	50	140	M12 x 20	17,4	25	4 Hole	26	7910670
TEC 43	6	139,2	314	328	140	126	70	185	M16 x 30	22,5	25	4 Hole	55	7910702
TEC 65	6	174,5	373	373	150	146	90	210	M16 x 35	23,3	25	4 Hole	84	7910357

Product information → [p. 8](#)

TECDOS PI-GAMMA drives can be manufactured to match all chain sizes and numbers of teeth. Other sizes on request.



1. Notice: Chain lubrication

When running over the drive and reversing wheels, the chain links are unwound under load. In order to minimise the friction betweenlinks, the hoist chain must be lubricated regularly in relation to the operating conditions.

2. Notice: Noise level

Regular chain service provides the noise level up to 30db(A).

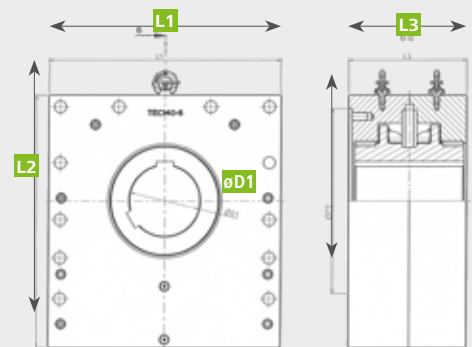
TECDOS HEAVY DUTY LINE PI and GAMMA

TECDOS® PI

Chain	No. of teeth	Pitch circle diameter [mm]	L1 [mm]	L2 [mm]	L3 [mm]	ø D1 [mm]	Weight [kg]	Part no.
TEC 140	6	256,2	426	463	216	130	251,0	7910452
TEC 260	6	347,8	550	620	258	180	521,0	7908714

Cross section & product information → [p. 12](#)

TECDOS PI drives can be manufactured to match all chain sizes and numbers of teeth.
Other sizes on request.



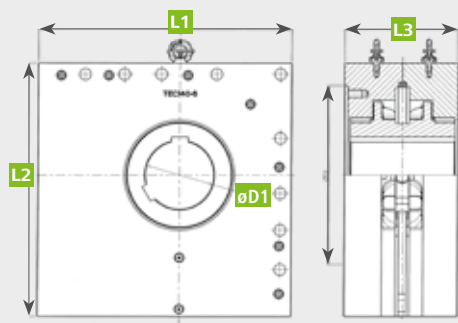
HEAVY DUTY LINE PI und GAMMA

TECDOS® GAMMA

Kette	Anz. Zähne	Teilkreis-Durchmesser [mm]	L1 [mm]	L2 [mm]	L3 [mm]	ø D1 [mm]	Gewicht [kg]	Art.-Nr.
TEC 140	6	256,2	482	482	216	130	277,0	7910457
TEC 260	6	347,8	640	640	258	180	573,0	7910741

Cross section & product information → [p. 12](#)

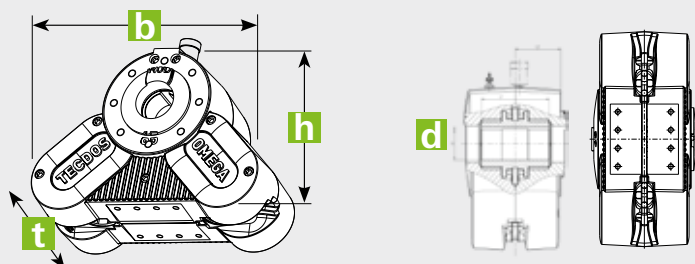
TECDOS Gamma drives can be manufactured to match all chain sizes and numbers of teeth. Other sizes on request.



OMEGA DRIVE

Designation	Height (h) [mm]	Width (b) [mm]	Depth (t) [mm]	weight [kg]	Diameter (d) shaft mounting [mm]	Number of keyways DIN 6895 [mm] P9	Part no.
OMEGA 6	157	219	147	20	25 H7	1	7907541
OMEGA 12	219	305	130	30	40 H7	1	7907542
OMEGA 25	290	405	188	76	50 H7	1	7907543
OMEGA 43	372	520	219	140	70 H7	1	7907544
OMEGA 65	468	649	296	297	90 H7	1	7907545
OMEGA 140	685	953	444	991	130 H7	2 (120°)	7905364
OMEGA 260	920	1293	547	2163	180 H7	2 (120°)	7905371

Product information → [p. 24](#)



5. RUD TECDOS® informations & services

5.2 RUD TECDOS® service



TECDOS high performance chains are extremely robust and require very little maintenance due to their simple construction. The following points are our support for a improved operating safety:



The RUD service concept



Measure, document, maintain

- Consultation and recommendation for spare parts
- Maintenance
- Replacement of competitors products with RUD products
- On-site consultation
- Measuring and testing
- On-site installation
- Fault elimination
- Inspection
- Retrofitting



The RUD engineering concept



Calculation, Construction & Consultation

- Product development and further development
- Dimensioning of the best components for your individual requirement
- Technical consultation, if needed on-site
- Synchronisation of all components to your individual requirements
- On request provision of CAD files
- Problem solving in case of difficult cases of operation



Discover now **RUD TECDOS chains drivers and components** on CADENAS. RUD product-download simplifies design! [Click here](#) or search www.cadenas.de/en for **TECDOS**.



Discover now **RUD TECDOS chains drivers and components** on traceparts. RUD product-download simplifies design! [Click here](#) or search www.traceparts.com/en for **TECDOS**.

Start benefiting from our Remote Service. This service, which requires no human contact, enables us to provide remote support and identify faults. With it, we can implement and support measures to resolve faults and errors instantly. We can also help you install our components and ensure that your systems work properly from the start.



Increase productivity

The real-time fault analysis functions enable problems to be resolved more quickly. Your machine downtimes are reduced and productivity increases, boosting your ROI.

Available anywhere

No matter whether you are outdoors or in your office or workshop, our experts can provide you with sound advice anywhere that has a basic Internet connection.

Reduce your costs

The remote support provided by our experts can now reduce inspections and maintenance or repair work, without any need for time-consuming, expensive visits to site.

Contact-free live contact

You can now benefit from the audio-visual support provided by our experts, and increase the efficiency of your daily operations.

Our services in detail:

- Analysis and evaluation of the error and fault data and descriptions sent to us
- Error and fault identification and diagnosis
- Support during commissioning, repairs and fault/error resolution
- Support while operational systems are running
- Staff training
- Provision of relevant operating manuals

Tel.: +49(0)36074-36642

Fax: +49 (0) 7361 504-1450

tecodos@rud.com

5.3 In the world at home. RUD locations



Users around the globe appreciate our innovative strength and our intelligent RUD TECDOS drive solutions for lifting, moving, slewing, telescoping and turning loads. In order to be as close as possible to our customers, we are constantly expanding our worldwide sales network. With a large number of RUD subsidiaries, associated companies and specialist trade partners, we ensure that our consulting partners expertise and products network are available worldwide.

5.4 Technical questionnaire for TECDOS drive systems

Please copy and fax or send to:

tecdos@rud.com (Fax +49 (0) 7361 504-1450)

RUD Ketten

Rieger & Dietz GmbH & Co. KG

Tel.: +49 (0) 7361 504-1457

Fax: +49 (0) 7361 504-1450

tecdos@rud.com

www.rud-tecdos.com



CONTACT DATA

Firm:*	Responsible:*
Street:*	E-Mail:
ZIP / City:*	Tel.:
Date:	Preferred delivery date: * Pflichtfelder

PROJECT

Task:	<input type="checkbox"/> lifting	<input type="checkbox"/> pulling	<input type="checkbox"/> other:
Please also send a separate sheet for sketches			
Maximum tensile strength on the chain [kN]:	weight [kg]:	Friction factor [μ]:	
Roller friction 0 wheel / material parameter	Sliding friction: Friction factor*		
Max. speedup [m/s ²] / max. detension [m/s ²]:			
Speed[m/min] from:	to:		
Cycle operation??	<input type="checkbox"/> yes	<input type="checkbox"/> no	cycles per:
Duty and passive state per cycle::			
Total operating time daily [h]:	annually [h]:		
Lenght of traverse path [mm]:			
Number of load chain strands:			
<input type="checkbox"/> New project <input type="checkbox"/> Conversion Retrofit (specify housing dimensions)			
Drive pocket wheel - pitch circle diameter [mm]:			
Drive shaft diameter [mm]:			

Chain used before conversion, type and dimensions, max breaking load, operating time and reason for the break down:

Environmental influences:	<input type="checkbox"/> corrosive	<input type="checkbox"/> abrasively	<input type="checkbox"/> temperature	<input type="checkbox"/> others
Remarks:				
Drive system:	<input type="checkbox"/> Direct drive	<input type="checkbox"/> Gearmotor	<input type="checkbox"/> Pneumatic motor	<input type="checkbox"/> Hydraulic motor <input type="checkbox"/> Electric motor
Current situation:	Rotational speed:	Performance:	Type:	Protection cover IP:
Desired situations:				



RUD Conveyor & Drives



RUD conveyor technology

Combinable components & individual parts for conveyor technology, conveyor systems and mining. RUD offers you perfectly coordinated systems and components for horizontal, vertical and ascending conveyors.



RUD TECDOS drive technology

The RUD TECDOS team develops and produces drive solutions for rotating, lifting, moving, telescoping or pushing. In addition to the components range, TECDOS OMEGA and PI-GAMMA drives are also available as complete system drives.



RUD TECDOS mechanical engineering

Cool moves for heavy tools and bulky items: With the **RUD TECDOS TM TOOL MOVER** and the **RUD TECDOS TS TOOL SEPARATOR**, handling tools has never been so safe, efficient and effective in terms of costs or processing.



RUD industrial chains

RUD components are the first choice worldwide for leading hoisting equipment manufacturers. We also offer a wide range of round link chains for different industries and areas, such as food, fishing and awnings.