

**b**® **brevetti**  
**stendaito**



**OIL & GAS**

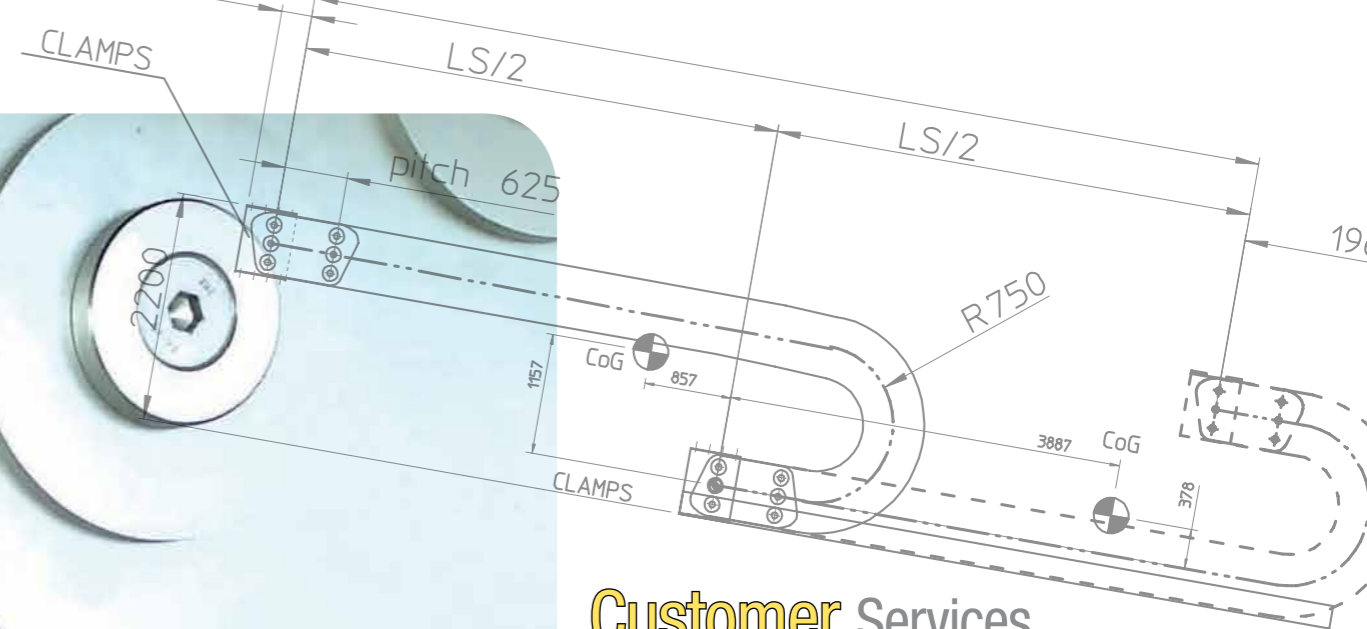
**DRAG CHAINS RANGE**

# Drag Chain Solution Provider

**S**ince 1968, Brevetti Stendalto has been a leading company in engineering and manufacturing drag chain solutions to carry and protect cables and hoses in dynamic applications.

Brevetti's 25-year experience in the Oil & Gas market and long track record of successful applications led to the establishment of a dedicated business division, with specific products and market strategies.

Customers worldwide recognize the outstanding quality of our products, appreciate our teamwork during all project phases, and value our technical support at installation, commissioning and maintenance. We win our customers' trust because our portfolio of tailored solutions is always able to meet application requirements.



## Customer Services

### PRODUCTS

We continuously test new materials, design new ideas and analyze the feedback from the various application fields to improve the performance of our products. Through this process, we design and produce excellent chains which can be considered a long-term investment with low total cost of ownership, for maximum customer satisfaction.

### PROJECTS

In accordance with customer requirements and application features we can offer full project management services, including:

- Consultancy
- Onshore and offshore site surveys
- 2D drawings and 3D models for easy integration into customer's design
- Calculations, including finite-element analysis
- Factory Acceptance Test (FAT), Site Acceptance Test (SAT), third-party verification
- Documentation according to international standards and customer's own specification
- Raw-material certification, declaration of conformity, certification of origin
- Plug-And-Play package: chain complete with hoses, delivered with lifting and installation frames
- Various special packing and installation devices
- Assistance at shipment and provision of shipping documents for any country
- On-site installation and commissioning
- Spare-part management

Our qualified staff can assist you in any region of the world



# OFFSHORE PLATFORMS

In the longitudinal movement of movable derricks, the travel distance usually overcomes the maximum self-supporting capacity of the chain, even if supported by rollers. **It is therefore necessary to use two chains in ring configuration, supported by a movable trolley.** Brevetti Stendalto is the undisputed leader in this kind of application. Our products are successfully used on Statfjord B, Statfjord C, Gullfaks B, Ekofisk K, Snorre A, and many other offshore platforms in the North Sea, under the most challenging environmental and work conditions.

## 2 POSSIBLE CONFIGURATIONS

Double, triple or multiple side bands.  
Every single crossbar can be opened for easy installation and maintenance of hoses and cables.

## 3 DESIGN

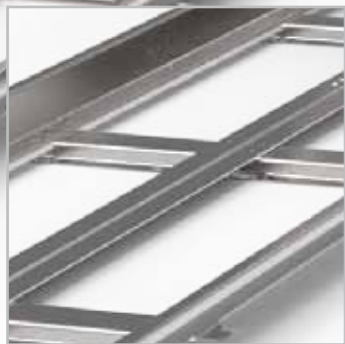
Our chains are maintenance-free.  
Every component is designed to guarantee performance for the whole work life of the chain – at least 25 years.

## DIFFERENT SEPARATION OPTIONS

With our new V<sup>®</sup>, X<sup>®</sup>, and M<sup>®</sup> vertical separators, maintenance and installation time is reduced by up to 50%.

## 1 DIFFERENCE IN DETAILS

Stainless-steel parts are insulated from carbon steel in order to avoid electro-galvanic corrosion.



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# JACK-UP RIGS

Specifically conceived for each rig design, our cantilever hose and cable drag chains are installed, among other jack-ups, on Friede & Goldman's Super M2 and JU-2000, Gusto MSC's CJ46, CJ50 and CJ54, and LeTourneau's Super116 Series. **From concept to installation, our systems are designed to be fully integrated into customer's design, and to minimize installation and maintenance operations.** Drag chains can be delivered in **Plug-And-Play package**, with transport and lifting frames, **ready to be installed onboard**, already equipped with HP and deck hoses.

## FLEXIBLE CONFIGURATION

Bespoke vertical and horizontal separation models, based on hose and cable features. Cavities sized according to hose expansion and contraction properties.

## 1 SUPPORT ROLLERS

Full protection of bearings against dust and dirt. Lubrication and maintenance-free. Highly wear-resistant construction material. Customized understructure design.

## CABLE AND HOSE PROTECTION

Fully edge-free design for maximum preservation of cables and hoses. Revolving pipes placed around crossbars and horizontal separators, with independent movement in each cavity, to reduce pulling stress during installation and frictional wear under operation.



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IN COMBINATION WITH DRAG CHAINS, WE CAN SUPPLY HP MUD AND CEMENT HOSES, VARIOUS DECK AND HYDRAULIC HOSES, POWER AND SIGNAL CABLES WITH CONNECTORS, FIBER-OPTIC CABLES, AND INTEGRATED CABLE-CLAMP FRAMES.



APPLIICATIONS  
OFFSHORE PLATFORMS • JACK-UP RIGS



# CRANES & LONG TRAVEL

**B**revetti Stendalto offers the most complete range of sliding-chain systems available on the market. We can suggest you the right solution for your specific long-travel application (gantry or VPH cranes, catwalk, star-racker, X-Mas tree, BOP, etc.), with no material or environmental constraint. Nylon or steel, also available for potentially explosive environments.

## 1 OPENING FRAME

Frame stays can be opened from both the inner and outer-radius sides of the chain.

## SEPARATION SYSTEM

Maximum flexibility of vertical and horizontal separation inside the chain.

## 2 TOW ARM

Equipped with an anti-misalignment device to guarantee a straight performance.

## 1 EASY MAINTENANCE

Pins and sliding skids can be easily removed in case of maintenance. No need to change the whole chain.

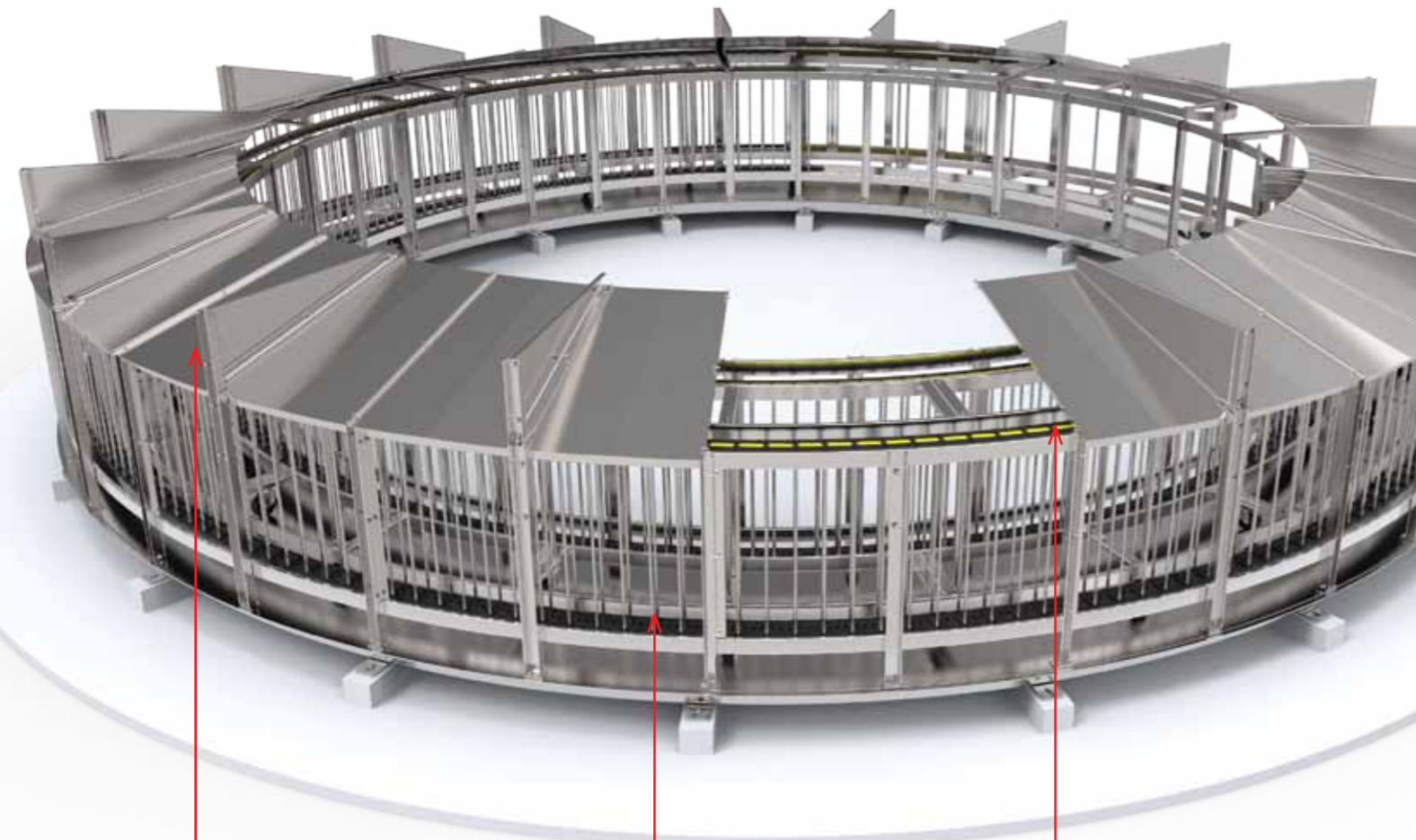
## 3 GUIDE CHANNEL

Completely made of stainless steel 316L. Special reinforcements and compact design for easy integration into your system.



# HEAVY LIFTING

**B**revetti's rotary solutions are always designed for full integration into customers' machines, and match the specific technical requirements of every application. We can deliver our rotary systems either with mono-block frames or with concentric moving frames. A movable trolley is usually provided for a more stable and safer guidance of the chains under operation. A rotation range up to  $\pm 270^\circ$  is reachable with standard systems; greater rotations up to  $900^\circ$  are possible with multi-layer modules. We are the proud suppliers of world-famous companies like Huisman, Heerema, Tenova, and many others.



## 1 STEEL FRAMES

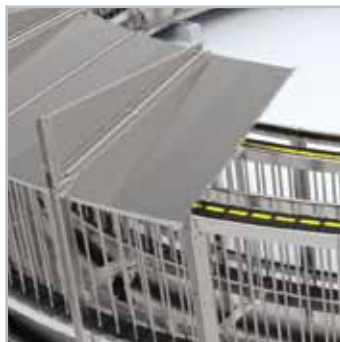
We can design fully-enclosed systems against falling objects.

## 2 GUIDE HOUSING

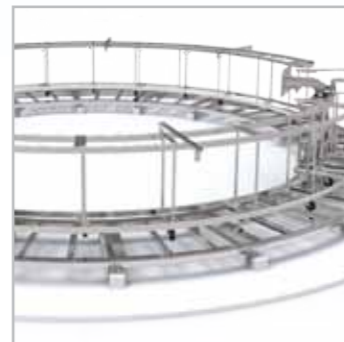
Wheels guarantee smooth, low-friction movement of the system between the trolley and the chains.

## 3 ROTATIONAL NYLON CHAIN

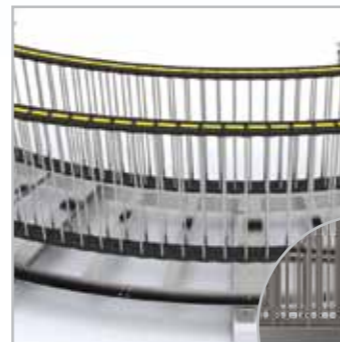
Nylon side bands in combination with stainless-steel crossbars for maximum load capacity.



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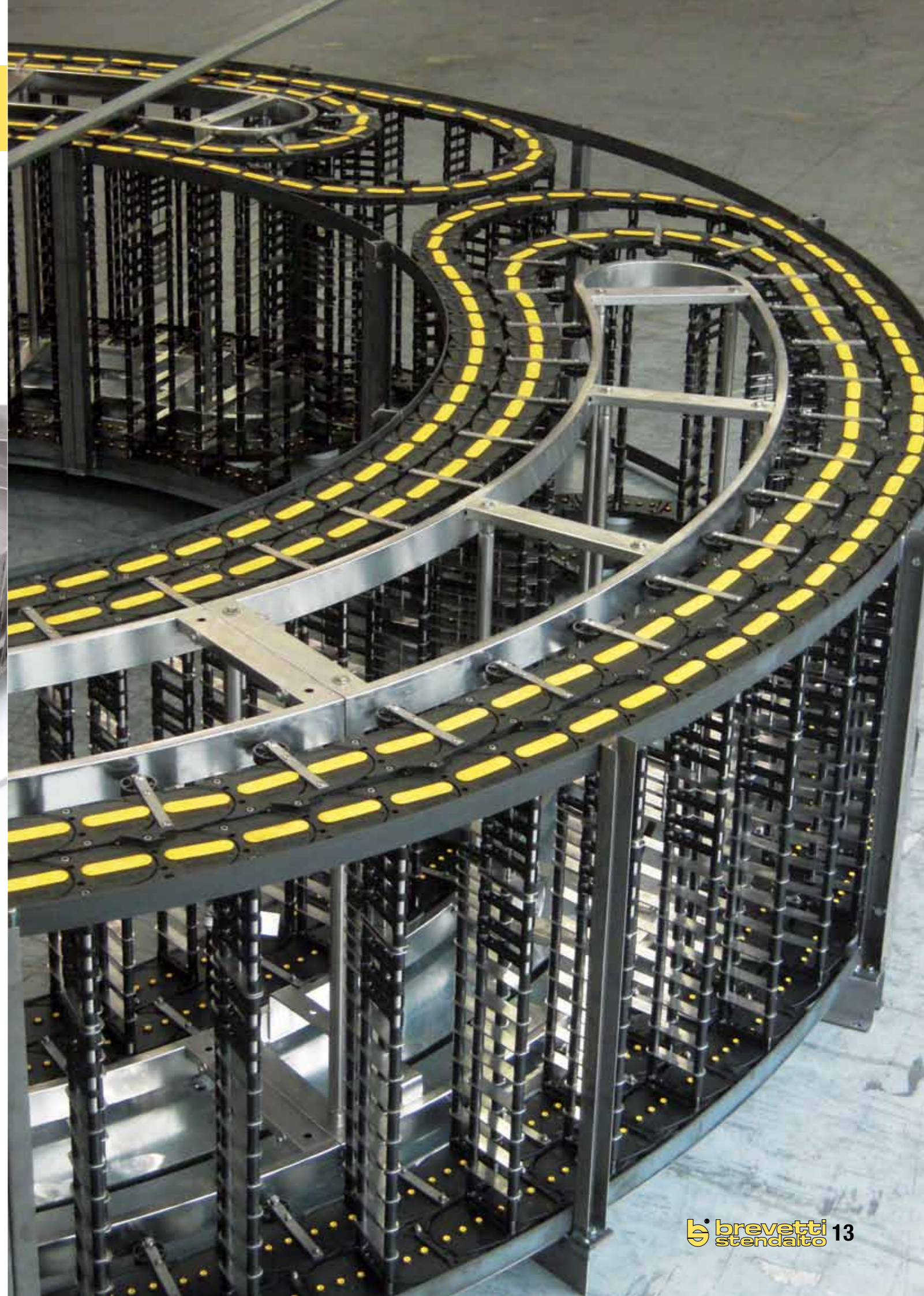
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PIVOTING WHEELS

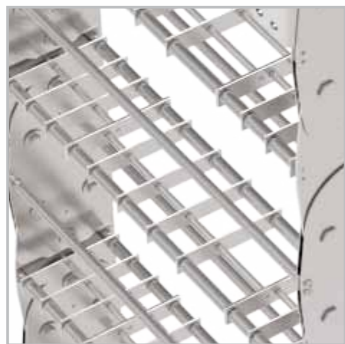


# DRILLING

**D**ebris, stones, mud, acids, powders, ice, vibrations, high-pressure hydraulic hoses, harsh or tropical climates, vertical or slanted work directions: conditions that make drilling the heaviest of all heavy-duty applications. That's why drag chains for this sector must be designed to achieve the strongest and most reliable performance level. **That's why Brevetti Stendalto is a global leader, with thousands of successful installations supplied in more than 40 years.**



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## 1 END BRACKETS

Standard or tailor-made end brackets designed to withstand the highest tensile and compression forces.

## 2 SEPARATION SYSTEM

The widest range of low-friction rolling spacers and round-edge horizontal and vertical separators on the market allows to create any customized layout, to protect hydraulic and pneumatic hoses, as well as electric cables, from unexpected wear.

## 3 BEND RADIUS

A large choice of standard bend radii to match hose and cable needs at the best. Heavy-duty design of chain components to bear stress induced by heavy added weight, polygonal effect and torque.





# PIPE HANDLING

No matter where cable chains are applied, either on vertical rackers or on horizontal pipe-handling cranes, they must be built to endure the worst marine environments all along their long working life. Moreover, although safety is a must wherever a cable chain is required, the strict safety rules of the Oil & Gas sector go beyond any other standard and can be fulfilled only by a few trustworthy proof-experienced cable-chain manufacturers. **Brevetti Stendalto's expertise, along with the best product design and the most accurate choice of raw materials, grants to satisfy the most demanding performance requirements** for those applications.

## 1 END BRACKETS

Carbon or stainless steel, standard or tailor-made, end brackets are designed to withstand the highest tensile and compression forces.



## 2 TRIPLE-PIN JUNCTION

Solid triple-pin connection to obtain the smoothest link rotation and the best fatigue limits under the most severe pulling and pushing forces.

## 3 ALUMINUM FRAME

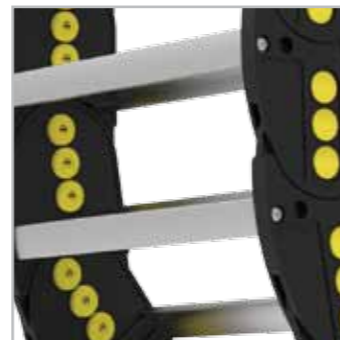
Edge-free design to minimize friction on cables and hoses. The frames bolted to the links make the chain resistant even when it is charged with heavy added weight and pressurized hoses, and travelling over a long distance at high speed.



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# APPLICATIONS

CRANES & LONG TRAVEL • HEAVY LIFTING • DRILLING • PIPE HANDLING



# STEEL CHAINS

# CUSTOM CHAINS

Over more than 40 years, Brevetti Stendalto has developed the most complete drag-chain product range in the market. It includes both steel and nylon chains, as well as custom chains for specific applications. The following series are best sellers for the Oil & Gas market. Many others are available by visiting our website or contacting our technical office.

With the new patented "L" Series, Brevetti Stendalto has launched second-generation state-of-the-art steel chains into the market. Developed from experience, and boosted by the technical and commercial requirements of today's market, "L" chains combine superior performance with a brand new design.

TYPE	W		C		D mm	Pitch mm	Radius	
	from mm	to mm	from mm	to mm			from mm	to mm
20L	111	336	79	304	32	75	115	305

TYPE	W		C		D mm	Pitch mm	Radius	
	from mm	to mm	from mm	to mm			from mm	to mm
30L	140	540	106	506	52	95	150	535

TYPE	W		C		D mm	Pitch mm	Radius	
	from mm	to mm	from mm	to mm			from mm	to mm
35L	148	548	104	504	65	125	200	600

TYPE	W		C		D mm	Pitch mm	Radius	
	from mm	to mm	from mm	to mm			from mm	to mm
40L	208	558	150	500	112,5	180	250	850

TYPE	W		C		D mm	Pitch mm	Radius	
	from mm	to mm	from mm	to mm			from mm	to mm
42XLP	208	558	150	500	138	180	250	850

TYPE	W		C		D mm	Pitch mm	Radius	
	from mm	to mm	from mm	to mm			from mm	to mm
45T	390	690	300	600	182	250	400	1500

W= outer width • C = inner width • D = inner height

Steel chains series 6000 and 8000 are specifically designed for offshore applications where HP hoses, deck hoses and a large number of various electric cables are carried.

SERIES	W		C		D		Pitch mm	Radius	
	from mm	to mm	from mm	to mm	from mm	to mm		from mm	to mm
6000	550	1350+	500	1300+	300	500	350+	700	1500+
8000	670	1670+	600	1600+	500	950	400+	1000	2000+



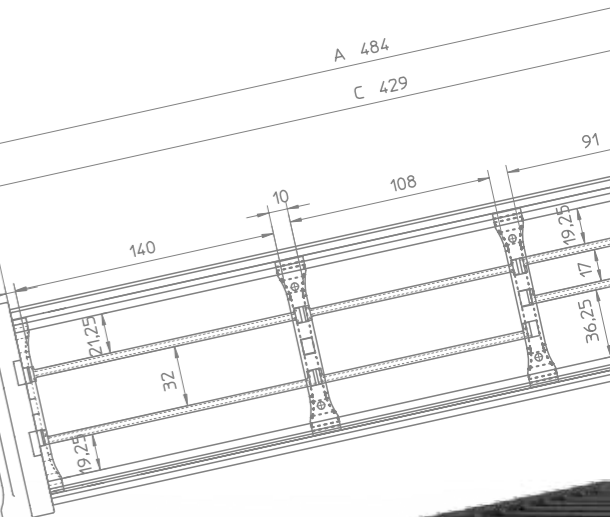
# NYLON CHAINS

Brevetti Stendalto's new "H" Series is specifically designed for the most challenging applications. The self-supporting capacity is remarkably higher than any other Brevetti nylon chain. The reinforced link allows the use of "H" chains in long-stroke applications, as it creates a perfect sliding surface. The double external reinforcements bring forth greater stability under operation of the chain. "H" chains can be supplied with a wide range of configurations, including nylon or aluminum stays, stainless-steel crossbars, aluminum covers, and machined frame stays.

TYPE	W		C		D mm	Pitch mm	Radius	
	from mm	to mm	from mm	to mm			from mm	to mm
H57	88	400	50	362	57	90	150	400

TYPE	W		C		D mm	Pitch mm	Radius	
	from mm	to mm	from mm	to mm			from mm	to mm
H80	129	553	74	498	80,5	120	200	600

TYPE	W		C		D mm	Pitch mm	Radius	
	from mm	to mm	from mm	to mm			from mm	to mm
H110	129	553	74	498	115	160	200	750



**B**revetti Stendalto has operated in the Oil & Gas market for more than 40 years, with installations all over the world. We know very well what customers expect from us, not only in terms of product.

**PROJECT MANAGEMENT**

We team up with our customers along the entire project at various level, from consultancy to on-site intervention, and from installation to commissioning supervision.

**TURNKEY PACKAGE AND COMPLETE PRODUCT RANGE**

In combination with our drag chains, we can supply high-pressure mud and cement hoses, deck hoses, hydraulic hoses, power and signal cables with connectors, fiber-optic cables, and integrated cable-clamp frames.

**REDUCED INSTALLATION TIME**

We can provide our systems reeled around drums, or secured to transport and lifting frames, in Plug-And-Play package, for a fast and easy installation.

**FLYING SQUAD TEAM**

A team of skilled technicians and engineers, certified to operate onshore and offshore anywhere in the world, is available around-the-clock to provide assistance with our products.



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The logo features a stylized yellow 'b' with a registered trademark symbol (®) to its upper right, followed by the words 'brevetti' and 'stendalto' in a bold, yellow, sans-serif font.

[WWW.BREVETTISTENDALTO.COM](http://WWW.BREVETTISTENDALTO.COM)